

Report of the  
THIRD REGIONAL CONFERENCE  
for  
ASIA and the FAR EAST



**FOOD AND AGRICULTURE ORGANIZATION  
OF THE UNITED NATIONS**

# **AGRICULTURAL DEVELOPMENT**

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FAO publications on problems of agricultural development include the following. Editions in English, French and Spanish are indicated by the letters E, F, S respectively.

## **FAR EAST**

### **Problems of Food and Agricultural Expansion in the Far East**

1955. 78 pp. (EF)

**\$ 0.75 or 3s. 9d.**

Contains the report of the FAO Regional Consultation on the Selective Expansion of Production and Consumption in the Far East held at Kandy, Ceylon, 20-24 June 1955, and the working paper prepared for the meeting.

## **NEAR EAST**

### **Selected Problems of Production and Trade in the Near East**

1956. 168 pp. (EF)

**\$ 1.75 or 8s. 9d.**

Contains the report of the FAO Regional Working Party on Selected Problems of Production and Trade in the Near East, Teheran, Iran, 1-10 October 1955 and a paper, prepared for the Working Party, on trends in Near East intraregional trade in food and agricultural products with statistical supplement.

### **Problems of Food and Agricultural Expansion in the Near East**

1955. 54 pp. (EF)

**\$ 0.50 or 2s. 6d.**

Contains the report of the FAO Regional Consultation on the Selective Expansion of Production and Consumption in the Near East held in Beirut, Lebanon, 13-16 September 1954, and the working paper prepared for the meeting.

### **Agriculture in the Near East - Development and Outlook**

1953. 78 pp., tables (EF)

**\$ 1.00 or 5s.**

## **LATIN AMERICA**

### **Report of the Fourth Regional Conference for Latin America**

1957. English and Spanish editions in preparation.

### **Report of the Third Regional Meeting on Food and Agricultural Programs and Outlook in Latin America**

1955. 100 pp. (ES)

**\$ 1.00 or 5s.**

### **Prospects for Agricultural Development in Latin America**

1953. 146 pp., tables, graphs (ES)

**\$ 1.00 or 5s.**

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REPORT OF THE THIRD REGIONAL CONFERENCE  
FOR ASIA AND THE FAR EAST





Report of the  
THIRD REGIONAL CONFERENCE  
for  
ASIA and the FAR EAST

Bandung, 8 - 19 October 1956

FOOD AND AGRICULTURE ORGANIZATION  
OF THE UNITED NATIONS  
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## *Chapter 1*

### **INTRODUCTION**

The Third FAO Regional Conference for Asia and the Far East was held at Bandung, Indonesia, from 8 to 19 October 1956. It was called in accordance with the recommendation of the Eighth Session of the FAO Conference in November 1955 that regional conferences of FAO should be held in Asia and the Far East, Latin America, and the Near East approximately a year in advance of the Ninth Session of the FAO Conference. The Conference hoped that these regional conferences would afford senior policy-making representatives of Member Governments an opportunity to discuss the future lines of development of FAO's work in each region; that they would provide a forum for an exchange of views on the action that needs to be taken by governments to implement the recommendations of the technical meetings on the various aspects of agriculture, agricultural economics and statistics, fisheries, forestry and nutrition that have been held in recent years; and would assist in the development of well-informed and well-integrated national agricultural policies and programs.

Member Governments represented at the Regional Conference were :

Australia	France	Pakistan
Burma	India	Philippines
Canada	Indonesia	Thailand
Ceylon	Italy	United Kingdom
Denmark	Japan	United States of America
Federal Republic of Germany	Laos	Viet-Nam
	Netherlands	

In addition there were observers from the United Nations, the UN Economic Commission for Asia and the Far East (ECAFE), the World Health Organization (WHO), the United Nations Technical Assistance Board (UNTAB) and the Holy See.

A full list of participants is given in Annex A of this report.

The Conference was opened by His Excellency Dr. Ali Sastroamidjojo, Prime Minister of the Republic of Indonesia, at the Gedung Merdeka on 8 October 1956.

Dr. Sastroamidjojo referred to the fact that this FAO Regional Conference for Asia and the Far East was being held at the same place as the Asia-African Conference of 1955, which had symbolized the spirit of co-operation and goodwill among countries. It was the considered opinion of all participants in that conference that the basic problem of the Asian and African countries was the fuller and more efficient utilization of their economic resources. While there had been no doubt that the development of the region is dependent above all on the efforts to be made by the people of the various countries themselves, the Asian-African Conference had recognized the valuable contribution to the implementation of development programs received from outside the region through international organizations or under bilateral arrangements.

FAO had established itself over a period of more than ten years as one of the most useful and active institutions of modern times. The reason for its usefulness was readily apparent, since food is the basic material need of mankind. In this region where many millions were still living on a marginal daily diet hardly sufficient to exist, food was in fact a paramount problem.

The Regional Conference of FAO would serve an excellent purpose, offering an opportunity to concentrate on the special needs and interests of a region which contained more than half the world's population and badly needed the fullest attention of FAO. Dr. Sastroamidjojo noted that the agenda contained a number of selected and highly important items and that it would be most useful to have a frank exchange of views on these matters.

Mr. W. H. Cummings, the Director-General's Representative in Asia and the Far East, expressed the appreciation of FAO for the attendance of the Prime Minister and for his understanding remarks on the role of agriculture which were indeed an inspiration to all to continue their efforts. Mr. Cummings tendered the thanks of FAO to the national and local Organizing Committee of the Conference, the local authorities in Bandung and the National FAO Committee of Indonesia for the splendid facilities which were placed at the disposal of the Conference, and for the excellent organizational preparations.

Mr. Cummings then read the following special message to the Conference from the newly elected Director-General of FAO, Mr. B. R. Sen :

" I feel it significant that my first message as Director-General should be to a Regional Conference for Asia and the Far East. That it should be held at Bandung, which symbolizes in a way the spirit of resurgence of Asia after long centuries of inaction, is no less significant. The main emphasis of FAO work, as we all know, must be directed toward such less developed areas as the Far East, the Near East, Africa and Latin America.

" I had wished to attend this important conference in person but pressure of other tasks has made that impossible. However, through my Regional Representative, I would like to extend to you my greetings

and my hopes for a fruitful and successful session. As the newly elected Director-General I need all the help and guidance that this conference can give and I hope that the delegations present will have this in mind while carrying on their deliberations.

"The preface to the agenda lays down some important working principles. I hope these working principles will be found to be acceptable. For now is the time for action — action which means something concrete in terms of better living for every man, woman and child in our member countries.

"I look forward to your advice and counsel in the very difficult task which is before me."

Their Excellencies, Abdul Aziz Bin Ishak, Minister of Agriculture of Malaya and leader of the United Kingdom delegation, and Noupbat Chounramany, Minister for Agriculture of Laos, thanked His Excellency the Prime Minister for his opening address.

At the first working session on the morning of 9 October, His Excellency Eni Karim, Minister of Agriculture and leader of the Indonesian delegation, was unanimously elected Chairman of the Conference. His Excellency Abdul Aziz Bin Ishak was elected First Vice-Chairman, and His Excellency Noupbat Chounramany was elected Second Vice-Chairman.

At the request of the Conference, the Chairman and the two Vice-Chairmen, assisted by representatives of the Secretariat, acted as the Steering Committee throughout the Conference.

The Conference also elected a Drafting Committee for preparation of the report of the Conference. Delegates of Ceylon, India, Indonesia, Japan and Pakistan served on the Drafting Committee, which was presided over by the Chairman of the Conference.

In his opening speech, the Chairman referred to the statement made by the Prime Minister of Indonesia at the opening session and emphasized the importance of recognizing the problems of underdeveloped countries. He hoped that the delegates would become more acquainted with the agricultural problems facing Indonesia during their stay in the country, and stated his belief that frank exchange of views and information by the delegates would be of great benefit to all the participating countries.

The Conference adopted the following agenda :

- |            |   |
|------------|---|
| Item 1     | Election of Chairman and Vice-Chairmen  |
| Item 2     | Adoption of agenda  |
| Item 3     | Recent developments in the food and agricultural situation in Asia and the Far East |
| Item 4     | The work of FAO in the region   |
| Item 5 (a) | Selective expansion of agricultural production and consumption                      |
|            | (b) ECAFE/FAO working party on problems of agricultural programming and planning    |
| Item 6     | The role of ministries of agriculture in community development                      |

- Item 7 Problems of agrarian reconstruction
- Item 8 Watershed management
- Item 9 The role of government in fisheries development
- Item 10 (a) World survey of living aquatic resources
  - (b) Survey of agricultural education in relation to needs
  - (c) Regional seminar on agricultural prices and costs and price support policies
  - (d) Regional working party on crop and livestock insurance
- Item 11 (a) Co-operatives as a means of fostering fishery development
  - (b) The 1960 World Census of Agriculture
  - (c) Implementation of the Plant Protection Agreement
  - (d) Livestock improvement, including rinderpest eradication
  - (e) Uses of domestic and imported agricultural surpluses for financing economic development
- Item 12 Future orientation of FAO's work in the region
- Item 13 Consideration and adoption of the report of the Conference.

In preparation for the Conference the FAO Secretariat had prepared a series of working papers on the various agenda items. These had been circulated to Member Governments in the region in advance of the meeting. During the Conference a number of delegations submitted written statements to the Secretary-General for circulation to all participants. The working papers and national submissions are listed in Annex B of this report.

During the course of the Conference the participants took part in two study tours arranged by the courtesy of the host Government. Visits were paid to farms and fish culture and forestry projects in the vicinity of Lembang and Bandung, and also to the General Agricultural Research Station and the Botanical Gardens at Bogor.

The Conference held its closing session in the morning of Friday, 19 October 1956, when the report was adopted.

After the adoption of the report, all delegations joined in expressing their appreciation of the outstanding services and facilities that had been made available by the Government of Indonesia and their appreciation of the stimulating Chairmanship of His Excellency Eni Karim, Minister of Agriculture of Indonesia. These had contributed greatly to the success of the Conference, which would assist both Governments and FAO in the formulation and carrying out of their programs. The Conference concluded with the adoption of a vote of thanks to the Government of Indonesia.



## Chapter 2

# RECENT DEVELOPMENTS IN THE FOOD AND AGRICULTURAL SITUATION IN ASIA AND THE FAR EAST

### Regional Review

The Conference recognized that there have been notable changes in the food and agricultural situation since the last Regional Conference for Asia and the Far East was held in 1953. At that conference, countries were deeply concerned about the low levels of production and consumption of agricultural and especially of food products, and plans were set forth to improve this situation. Since then countries have devoted great efforts to this end, often within the framework of comprehensive economic development plans. In the region as a whole, agricultural production has increased roughly 15 percent since the years before the last Conference to levels well above those prevailing before the Second World War.

However, population also has been increasing steadily in the region, although not as fast as agricultural production. Since the years just preceding the last Regional Conference, production per person has increased about 6 percent, reversing a declining trend which prevailed until then ; but unfortunately it still remains substantially below the levels that existed before World War II. Furthermore, it must be noted that even in that relatively more favorable period, a great many people in the region did not have enough to eat. In short, agricultural production has increased substantially since the last Regional Conference, but there is a great need still for even larger increases.

Production of *cereals* in postwar years, and especially in recent years has increased at a greater rate than the growth of population in the region, so that on a per caput basis gross supplies for domestic use resulting from domestic production have increased measurably since 1953. The *rice* produced has been largely retained in the region for seed, consumption and for stocks ; foreign trade with countries outside the region continued to amount to only a very small proportion of total regional rice supplies. Production of *wheat and coarse grains* has been supplemented by relatively large imports from outside the region. Production of these cereals in recent years has increased more rapidly than rice production, and in the last two years stood at 20 percent over the average 1948-52 level. As a

result, net cereals imports into the region have been sharply reduced, while per caput gross supplies were maintained at significantly higher levels.

In the last few years, increases in both production and net imports have resulted in increased per caput gross supplies of *sugar* in the region. Exporting countries have increased production substantially, but exports have shown little change since 1953, partly because of the limitation on exports under the International Sugar Agreement. Although stocks have increased, especially in the last year, available data suggests that there has also been a steady rise in per caput supplies in these countries since the years before the last Regional Conference. In importing countries sugar production in 1953/54 declined, but per caput supplies in 1954 were generally maintained by a marked increase in net imports. The high level of imports continued in 1955 following larger production in 1954/55 so that per caput gross supplies showed some upward trend.

The Conference recognized that *oilseeds and vegetable oils* are important in the region not only as earners of foreign exchange, but also for the growing domestic food and other industries which in postwar years have absorbed an increasing share of production. Both production and per caput gross supplies have been significantly above average 1948-52 levels, while exports have remained about the same. The high level of production in 1955 made possible a much larger volume of exports than in 1954 without a reduction in per caput supplies, which continued an upward trend. The gross per caput level of supplies was expected to be maintained in 1956 despite a decline in over-all production, while exports were expected to decline.

These encouraging trends in production seem to be well reflected in per caput *food consumption levels*, as indicated by the calorie content of national average food supplies in those countries for which necessary data are available. The slight improvements in average diets, however, seem to have been attained mostly through larger consumption of basic staple foods such as rice and other cereals. No general improvement seems to have taken place in the quality of the diets, as indicated by the consumption of protective foods such as animal products, fish, fruits and vegetables, although a tendency to increase their consumption is noticeable in a few countries. In this connection, the Conference noted with interest the most recent finding of the FAO/WHO Nutrition Committee for South and East Asia that, throughout much of the region, there is now no acute shortage of food, but diets are still defective in quality and malnutrition is still prevalent. Thus the conclusion reached by the previous Regional Conference that average diets were seriously unbalanced, due to a shortage of protective foods, was almost as valid now as it was three years ago.

The region as a whole has become a substantial net importer of food-stuffs taken as a group, in marked contrast to the position before the war when large net exports were the rule. However, net imports have been

declining in recent years, reflecting the increases in production in the region, reinforced by the efforts of many countries to conserve scarce foreign exchange needed for economic development.

The years since the last Regional Conference have seen marked changes in international markets for agricultural products. At that time, a previous scarcity of exportable food supplies had changed to a position of relative balance, although unsaleable surpluses were being felt in some countries of the world. This tendency subsequently became more pronounced, and affected some of the major rice-exporting countries of this region. This situation had recently eased somewhat as price reduction facilitated the clearing of accumulated rice stocks, and as new foreign markets were found or expanded.

In addition to those commodities for which unsaleable surpluses have existed, agricultural prices in world markets had generally been under downward pressure in the last few years, with individual exceptions for a few commodities. The general downward trend in prices for agricultural products had occurred despite the expansion of world economic activity during this period.

The Conference noted that the relationship between economic activity and world trade in agricultural products had been the subject of recent investigation by the FAO Secretariat, which had observed a certain pattern in the way the (real) value of world trade had developed in recent years. Commodities which showed the greatest increase in purchasing power over the interwar period were those which could not be produced economically in the main industrial countries, including commodities produced in the region for export such as pepper, coffee, bananas and rubber ; while those which could be fairly readily produced in the main industrial countries showed a decline from the interwar period. Similarly the growing world economy had an expansionist effect on international trade in the first group of agricultural commodities, while growth of trade in the second group had been slow or declining. Countering this expansionist effect were recent efforts by many countries to attain a greater degree of national self-sufficiency, and also the substitution of synthetic products for natural ones such as rubber and fibers. This had already affected some of the region's export products, and prospects for any rapid expansion in the near future did not appear too favorable, except for a relatively few tropical commodities such as those mentioned above. The continued growth of the world economy, and also growing requirements within Far Eastern countries themselves and the development of intra-regional trade, could offer some scope for further development of trade in these products.

## Country Reviews

### *Burma*

Agricultural production in general has been increasing for the past three years, and reached a postwar high in 1955-56. Production of paddy, groundnuts, sesamum, pulses and sugar cane all registered increases ; however cotton production declined slightly in 1955-56 due to unfavorable weather conditions.

Efforts were continued to increase the production of groundnuts, cotton, jute, coconuts, Virginia tobacco and sugar cane.

The Land and Agricultural Planning Commission was appointed in 1955 to conduct investigations into all aspects of agriculture of the country, and submitted its report in May 1956. The report gives a comprehensive survey of Burma's agricultural resources and provides a framework for agricultural development. It also contains specific recommendations for bringing together various existing programs into an integrated agricultural plan, both long term and short term.

Due to financial stringency, certain projects included in the Five Year Plan have been curtailed, and a new Four Year Plan has been drawn up containing those projects which are of immediate necessity and promise more immediate returns.

Under this Four Year Plan, a Paddy Expansion Scheme was initiated in the middle of 1956. Production targets call for reaching the prewar production of 7½ million tons of paddy by 1960 which will allow export of over 3 million tons of rice and rice products.

Long-term projects for expansion of irrigation facilities were under consideration and a vigorous irrigation program is being initiated in 1956-57.

Under the Land Nationalization Act of 1953, distribution of resumed lands to cultivators has been started. Plans have been formulated to follow up land distribution with a program for establishing mutual aid groups and co-operative organizations.

### *Ceylon*

The delegate of Ceylon emphasized that the rate of population increase in his country heightens the urgency of increasing agricultural production. With regard to export crops, the Government has concentrated attention on aid to small holders, since the large plantations are already operating efficiently. Research on crops is maintained by an export tax. Tea production has increased substantially since 1953 because of good husbandry and the stimulus of good prices. Rubber production has been maintained at about the 1953 level ; a subsidized replanting scheme has been instituted to improve quantity and efficiency of output.

Coconuts are used extensively for home consumption as well as for export. Sixty percent of the area in coconuts is held by small holders, whom the Government is helping by research, by the subsidization of replanting and manure, and by the provision of cheap credit.

With regard to food crops, the Government wants to increase the country's degree of self-sufficiency, and also to provide greater employment opportunities. Rice is characteristic of peasant agriculture; the Government is helping to increase both area and yields by agricultural extension services to the peasant on better methods of cultivation, by improved seed, the establishment of agricultural schools and by price support schemes. The present support price of rice is double the world market price. Rice production is also aided by the sale of manure at subsidized prices through co-operative societies, by large irrigation projects, and by the assisted resettlement of people from the more densely populated parts of the country. As a result of these measures, both the area and yield per acre of rice have improved since 1953, rice imports have been reduced as a result, and consumption per person has increased somewhat.

The Government Marketing Department purchases crops that receive price support through co-operative marketing and sales societies which, with co-operative credit societies, have grown in number and membership in recent years. The Department also disseminates information on current market prices, the location of collecting centers, and other marketing information to farmers by means of special publications and radio. Peasants on new farms have been protected by legislation on land tenure, which provides that the land cannot be sold or mortgaged.

Fisheries have also been helped to increase production. The output of inland fisheries has been boosted by fish stocking. Mechanization has brought up to a five-fold increase in the output of sea fisheries where it has been applied, although to date this has been on a relatively small scale. Improved fish handling facilities are also being provided.

## ***India***

The delegate of India reported that the production targets set up in the first Five Year Plan (1951-1956) for grains and oilseeds were exceeded in the third year of the plan period, those for cotton in the fourth year, but jute production did not reach planned levels, although production has increased. These production increases were achieved by land reclamation, by bringing more land under irrigation, and enlarging fertilizer production and use. In addition, the community development program has been very influential in extending the use of improved cultural practices.

In the second Five Year Plan targets for agricultural production have been further increased. Consideration is being given to revising these targets to even higher levels, because implementation of the plan

may cause inflationary pressures. The first plan emphasized increased food grain output, while in the second plan more stress is placed on increased output of protective foods, so that a better quality diet would be available to raise the nutritional levels of the people. As foods rich in high-quality protein are in short supply, particular emphasis is laid on livestock improvement. Great achievements are possible in under-developed countries in boosting the output of meat, fish and milk.

## ***Indonesia***

The Indonesian delegate reported that a new spirit has arisen among the people to make greater efforts to improve their own conditions. This has been especially effective in improving irrigation systems, with guidance and some financial aid from the Government. Food production in recent years has increased rapidly, at a greater rate than population.

The Government is trying to improve production on both estates and small farms, which is made easier by the new spirit of self-help among the people. Besides efforts to increase the production of rice and corn, due attention is also given to other foods rich in vitamins and proteins, such as fruits and vegetables, fish, meat and milk.

There has never been a sound balance between agricultural and industrial activities ; 70 percent of the population earn their living directly from agriculture. Practically all Indonesian farmers are small holders, each with limited arable land holdings not exceeding 0.5 hectare.

Like other Asian countries, Indonesia shook off a colonial regime only about a decade age. The main task of the Indonesian Government is to accomplish the transformation of the colonial economic system into a national economic structure with the objective of obtaining a higher standard of living for the people. To obtain general welfare for the Indonesian people the Government will have to improve the distribution system based upon the age-old principle of mutual assistance.

For this purpose the Government now has formulated a Five Year Plan covering all sectors of the economy. In the field of agriculture the Five Year Plan provides for the following :

- (a) improvement and increase of the production of foodstuffs ;
- (b) improvement and increase of the production of textile and domestic industrial requirements ;
- (c) improvement and increase of the agricultural production for export ;
- (d) improvement of the distribution system ;
- (e) transfer of people from densely populated areas ;
- (f) increase of social knowledge of the rural population in particular ;
- (g) improvement of credit systems for the benefit of farmers and fishermen ;
- (h) improvement and extension of agricultural science and research.

## *Japan*

The delegate of Japan reported that postwar agricultural production (including forestry and fisheries) has been rising year by year, with a few temporary setbacks caused by natural disasters, and in 1955 reached the highest level in history. This was achieved not only by favorable weather conditions, but also by untiring efforts to adjust agricultural production patterns to farm land and soil conditions, as well as to improve farming techniques.

The record-breaking crop in 1955 greatly improved the food situation. It allowed decreased imports of food, which had been increasing continuously until 1954. However, Japan is still far short of self-sufficiency in food, and the proportion of food imports to total imports is much higher than in prewar days.

In spite of the good crop, agricultural prices did not decline substantially because of price supports, direct or indirect, for rice and other major farm products. Farm income in 1955 was 10 percent higher than in the preceding year, but it is still much lower than average income levels in nonagricultural sectors of the economy. Accordingly, it is necessary to continue agricultural development with due consideration to the following conditions :

1. Agricultural surpluses in certain areas of the world are affecting Japanese agriculture through lower import prices for food. Consequently, it is essential for Japan to increase agricultural productivity and reduce production costs.
2. The pattern of Japan's food consumption is changing.
3. Financial limitations prevent large public investment in agricultural development.

To cope with these limitations, future agricultural development will tend to place more emphasis on so-called "selective expansion", rather than on mere quantitative expansion of production.

The Five Year Plan for Economic Self-support was formulated and implementation was started in 1955. In the agricultural sector, the aim is to advance agricultural productivity commensurately with the increase in productivity of other industries, making the best use of agricultural resources in response to changes in the food consumption pattern. Interference with the development of trade with the countries in southeast Asia is to be avoided. The Conference for Agricultural, Forestry and Fishery Techniques has been established to integrate the activities of the existing agricultural, forestry and fisheries research institutes and stations, and to extend their findings to farmers.

Japan's rice control policy has been improved in the last three years. The system of advance sales of rice by farmers was initiated in 1955, in lieu of the delivery quota system, to encourage farmers' voluntary delivery of rice for rationing. The price to consumers of imported rice has

been reduced. These and other revisions of rice control policy are intended to increase the demand for imported rice as a substitute for domestic rice, thereby securing price stabilization for the latter.

These measures have permitted the reduction of government outlays for agriculture. Government support for the Agriculture, Forestry and Fishery Finance Corporation was shifted from direct financing to the extension of loans, and a new agricultural improvement fund has replaced the ineffective grants-in-aid system. Expenditures for agriculture have been increased for such projects as experimentation, research and extension service ; development and improvement of pasture ; encouragement of demand for raw silk ; and processing of livestock products.

### ***Laos***

The delegate of Laos observed that he came from a small landlocked country. It was essentially self-sufficient in agricultural products, but their quality needed improvement. Agriculture must be developed not only to improve home consumption, but also to develop industrial crops for export. Laos was especially interested in several regional projects, such as the development of the Mekong River basin to provide more food, especially fish, and forest products. Laos also had a shortage of people with technical training in agriculture. The development of agricultural co-operatives was started in 1954. The livestock of the country had suffered heavily from the war, and also from disease. However, it was felt that the low population density of Laos had kept these problems from becoming severe.

### ***Pakistan***

The delegate of Pakistan recalled that at the time of the last Regional Conference, Pakistan was facing an acute shortage of food grains, which provide 80 percent of the calories in the diet. Production since then has fluctuated but has not increased substantially. The crop in 1955/56 was far from satisfactory, and heavy imports are still required. Yields of food grains have generally been low since 1953 because of climatic factors and attacks of insects and pests, and also because of serious floods. The population of Pakistan has increased by 2.2 million but the availability of food grains per person has remained about the same. Per caput supplies of home-grown food grains went down to about 14.5 ounces per day in 1954/55 and the deficiency could be met only by imports and the release of official stocks.

Pakistan's policy is to increase cereal production by increasing both area and yields. The latter will be done by more extensive use of fertilizers, which has already increased in recent years. Plant protection measures are being intensified ; the Central Plant Protection Department is doing useful work and is well known in other countries for its campaign



against locusts and other pests. Improved seeds are being made available to cultivators and extension services are being intensified through the village AID organization.

Fisheries output has increased by about 8 percent during the last three years and efforts are being made for further improvement, including the construction of a harbor, the mechanization of fishing craft, exploration of inshore and offshore fishing, fish culture, and the introduction of an extension service through the village AID program.

The draft plan for over-all economic development was published in May 1956. Although the targets in the plan are short of the needs of the country, they are ambitious in relation to the technical personnel available. Notwithstanding the fact that the population is still increasing, availability of cereals per person from home production will increase 6 percent if plan targets are met.

An Agricultural Finance Corporation was set up in 1953 to meet the credit needs of the cultivator, but requirements are still very great. Pakistan is contemplating the establishment of an agricultural bank to help meet these needs, especially to supplement the activities of the co-operatives.

## ***Philippines***

The delegate of the Philippines reported that production goals for food crops for the past three years were not fully attained, but satisfactory progress was made. In the case of rice and corn, the 1955-56 crops were adequate to meet the recommended nutritional requirements. Production targets for the next five years provide for self-sufficiency in food, and lay special emphasis on increased production of pulses, vegetables and fruits.

In the case of export crops, principally sugar, coconut, abaca and tobacco, production continued to increase, but declining prices for these commodities in world markets are discouraging further expansion. Moreover, serious diseases are adversely affecting coconut and abaca plantations.

In spite of the increases in fish production, the fish catch during 1955 was still 200,000 tons short of requirements.

The new Five Year Plan calls for higher goals which are expected to be attained by increasing the catch from inshore and inland fisheries and the development of offshore fisheries.

Planned increases in meat and milk production have not been achieved in the past three years due to a shortage of breeding stock and to the indiscriminate slaughter of available livestock for food. During the next five years, a more vigorous expansion in meat and milk production is planned. To attain the targets, drastic measures are to be adopted, such as the total prohibition of the slaughter of carabaos and breeding cows. The importation of live cattle for meat is now permitted so as

not to reduce the already limited meat supply. The purchase of breeding animals from foreign sources is strongly supported by the Government.

Planned increases in poultry production have been attained. However, the prevailing high prices for poultry feed concentrates, particularly fish meal, may prove to be a deterrent to the further expansion of the poultry industry.

The next Five Year Plan (1957-61) aims at self-sufficiency in the crops which can be produced profitably in the Philippines. It calls for the opening up of new land (400,000 hectares each year), and makes provision for additional large irrigation schemes ; improved methods of production, warehousing and milling ; subsidies in the use of fertilizers ; distribution of improved seeds ; control of pests and diseases ; expanded agricultural education and research facilities ; an expanded agricultural extension service ; liberal credit to cultivators, fishermen and livestock raisers ; and much greater support for the organization of co-operatives. The land reform program initiated this year, it is hoped, will also serve as an incentive to increased production.

### ***Thailand***

The delegate of Thailand observed that rice was the staple food and also the basis of the economy of Thailand. Increased production to satisfy both domestic demand and export goals is made possible through the technical improvement of rice culture, particularly the extension of new improved varieties superior in quality and yield to old native varieties. These improved varieties will be further promoted.

Other technical improvements include pest, disease and weed control, better cultural practices, fertilization, mechanization, and storage, all of which contribute to higher productivity of present rice acreage. Thai farmers are learning quickly the benefits of using fertilizers in their paddy fields and their use is growing, aided by a government-subsidized price. Irrigation projects under construction will supply nearly one million hectares of paddy land. In addition, large numbers of mobile pumps are available to the rice growers when emergency arises. The expected gradual increase in Thai rice production, however, will not materially affect other rice-exporting countries of this region, unless present markets are supplied from new sources outside the region.

Exports of other commodities have increased substantially. Rubber is second only to rice in export value, and the area under improved clonal seeds is being rapidly extended. The quality of rubber is gradually being improved by the widespread demonstration of proper methods of preparation. Renovation of pepper gardens and the initiation of coffee planting are under way.

Thailand's fish exports have also been increasing. The introduction of modern techniques and equipment for sea fishing has increased the catch threefold over older methods. In addition, the rearing of fresh-

water fish has become a common practice among rice growers throughout the country.

Thailand is also exporting a large number of cattle and swine to foreign markets. Rinderpest and cholera have been completely eradicated by proper control measures. Vaccines and serums are produced for domestic use as well as being supplied to neighboring countries. The introduction of an improved breed is made regularly to improve the local animals, and the service of artificial insemination is available to the farmers.

Forests in Thailand produce valuable teak and indigenous lumber, and reforestation is under way in all regions.

A need for more technical men in all agricultural fields is keenly felt. The number of graduates from Kasetsart University has not been able to satisfy the requirements of all phases of agricultural development.

### ***United Kingdom***

The delegate of the United Kingdom stated that the policy of Malaya was to move toward a more balanced economy, with greater emphasis on self-sufficiency in food. However this will take several years to achieve, and is made more difficult by the growth of the population at the rate of approximately 3 percent per year.

Rice is second only to rubber in the economy of Malaya ; and 30 to 45 percent of gross supplies of rice must now be imported. Many efforts are being made to grow more rice, both by expanding the area under cultivation and by increasing yields. New pilot schemes for rice marketing are being undertaken, and there is a guaranteed minimum price for rice.

The area of other food crops has increased, especially tapioca and sweet potatoes, which are used mainly for fodder for pigs. The area under market gardens has increased and efforts are being made to increase fruit cultivation.

With respect to non-food crops, the area under rubber has remained unchanged, but production has increased since 1953. Replanting of low-yielding trees is under way both on estates and small holders' properties. Oil-palm production has remained constant. The area of coconuts and the production of copra and oil has increased ; a replanting scheme is also under consideration for this crop. The cultivation of cacao has just been introduced, and its prospects are believed good.

The Government plans to increase the production of fish by safeguarding the economic and social welfare of the fishermen. Several means will be used to this end, including financial aid through co-operative societies to avoid unscrupulous middlemen.

Paddy production in Sarawak has remained unchanged in recent years. Declines in the prices on international markets for pepper and sago have discouraged production. A replanting scheme for rubber was recently introduced.

## *Viet-Nam*

The delegate of Viet-Nam reported that since the last Regional Conference, there have been two important events in Viet-Nam — the end of hostilities and the influx of one million refugees. At the end of the war, production was at its lowest ebb. Rice fields were no longer cultivated, livestock was depleted, destruction was widespread, and the refugees needed resettlement as well as food supplies. Under these circumstances rice exports had to be reduced.

After two years of hard work, and with the help of friendly nations, a general equilibrium has been reached between production and consumption, with some surplus available for export. Many refugees have been resettled on the new farms which were added to the cultivated area. Livestock numbers have increased substantially since 1953, both through imports and natural increase.

The agricultural policy of Viet-Nam is to increase production by extending crop areas and improving the yields of both crops and livestock. In addition, improvement of the human level of living will be sought by improving the quality of the diet. There is a need for protective foods rich in proteins and vitamins to supplement the rice diets. Consequently diversification of production will be undertaken. Sugar, cotton and jute will be grown for domestic use, and tea, coffee and rubber are planned for export.

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The delegates of Australia, Canada, Denmark, the Federal Republic of Germany, France, the Netherlands, and the United States, as well as the observers from the United Nations and the Holy See, respectively expressed their deep interest in the agricultural development and economic growth of the region, and their gratification upon hearing of the progress that has already been made.

### *Chapter 3*

## **THE WORK OF FAO IN THE REGION \***

### **Introduction**

One of the purposes of the Regional Conferences is to advise the Director-General in shaping the program of FAO. For several reasons it is extremely difficult to give a synthetic picture of the work of FAO in the region. For one thing the activities of the five technical Divisions have become so complex that only some aspects of their work can be highlighted in this brief statement. Secondly, no reference can be made to the work carried on by governments in the field of FAO, and I submit that this part of FAO's activities is much more important than that of the Secretariat, if FAO is really to be successful. The Secretariat is a service body. It has a catalytic function and serves as a useful platform where government representatives may meet for the exchange of experience and the shaping of common policies. But it is in the countries themselves that things must be made to move forward.

Another difficulty is the great variation in the natural conditions and the stage of economic development of the countries here represented, which implies a different approach to many agricultural problems.

### ***The Phasing of FAO's Program of Work***

It is useful to remember that the 1957 Regular Program has already been approved by the Eighth Session of the Conference in 1955, and again in more detail by the FAO Council at its recent session in September 1956. The Technical Assistance Program for 1957 is prepared in draft form and will be considered by the Technical Assistance Board and the Technical Assistance Committee of ECOSOC shortly. Any suggestions for the Regular Program will therefore have to refer to the period 1958-59, and while it is obviously too late for governments to make any alterations in their submissions for technical assistance activities in 1957, it is not too early to give serious consideration to their plans for 1958.

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\* Abbreviated version of a statement made by Dr. F. T. Wahlen at the Third FAO Regional Conference for Asia and the Far East at Bandung, 8-19 October 1956. It is to be noted that this paper does not make more than passing reference to work covered elsewhere in this report.

## **World-wide Activities of FAO which are of Interest to the Region**

Some of these activities are covered by specific items of our agenda and will be dealt with in detail later. They are :

- Policy development for production and consumption patterns (selective expansion) ;
- Quarantine measures for checking animal diseases, plant diseases and pests ;
- 1960 Census of Agriculture ;
- Use of surpluses for economic development.

In addition, many other FAO activities of a global character are of interest to the region. This applies to the publications program, and to most activities in the field of economics, some of which are referred to below.

### ***Work in the Field of Commodities***

A great deal of information on commodities is assembled at Headquarters, and made available to Member Governments directly, or through the Committee on Commodity Problems (CCP), which is a Council Committee composed of representatives of 24 Member Governments. The CCP has set up a number of study groups, e. g., on rice and on cacao, and a subcommittee on surplus disposal which meets regularly in Washington. Ad hoc meetings are planned to consider the desirability of setting up further groups for the study of other commodities, such as grains, coffee and coconut. Of special interest to the region is the CCP Consultative Subcommittee on the Economic Aspects of Rice, which is to meet in Rome for the first time shortly after this Regional Conference. Brief reference should be made also to the FAO studies on World Food Reserves, which extend over a number of years and have culminated in a very substantial document recently submitted to ECOSOC at the request of the United Nations General Assembly.

Under the heading of global activities I should like to make brief reference also to some new projects which have been sanctioned by the Eighth Session of the Conference in 1955, most of which are of interest to all technical divisions of FAO.

### ***Survey and Appraisal of the World's Agricultural, Fisheries and Forestry Resources in relation to Needs***

This is a very large and long-term undertaking which can only be carried out with the active co-operation of Member Governments. The Forestry and Fisheries Divisions had already started some work in their fields prior to the Conference decision. (See Chapter 5-A of this report).

Ultimately, the project should provide a more accurate answer to the disturbing question as to how many people the world can feed. In the meantime, it will provide essential basic information for the planning of development projects and the establishment of priorities in this field. In the immediate future, work will be started on the basis of one pilot project in each region. For this region, the vast delta of the Ganges-Brahmaputra with its adjacent watersheds has been selected as a pilot area.

### ***More Milk and Better Child Nutrition***

This project consolidates and expands work which had already been started by the Agriculture, Economics and Nutrition Divisions, partly in close co-operation with UNICEF and WHO. Since it aims in the first place at the increase and improvement of milk production and distribution in the tropics, it is of special interest to this region. It includes such projects as the Bombay and Calcutta city milk schemes, (removal of milk animals out of the city area by developing dairy colonies, processing of milk, including the manufacture of toned and reconstituted milk in suitable milk sheds and the establishment of dairy co-operatives) and the establishment of a soya milk plant in Djokjakarta by the Indonesian Government with the help of UNICEF and FAO.

In this connection, reference should also be made to the improved use of pasture and fodder resources in the region, which is treated in more detail in Chapter 6 of this report.

### ***The Use of Atomic Energy in Agriculture***

FAO is particularly concerned with the use of radio-active isotopes in fundamental studies of plant and animal nutrition and in other fields where the use of such tracer elements holds great promise, and in the application of irradiation in plant breeding (inducement of mutations), and in food preservation. Scarcity of funds prevents active work in this field in all regions at this stage, but the results of the work of a European working party on this subject will be made available to all Member Governments.

### ***Regular Program Fellowships***

Implementing another decision of the Eighth Session of the Conference, the Director-General has recently written to all Member Governments inviting them to submit applications for the newly created André Mayer FAO Research Fellowships. Though only available in very limited numbers, it is hoped that these fellowships will make a contribution toward the furthering of much needed research in the fields covered by FAO.

## Regional Projects

I should now like to pass to regional projects, and I shall first mention those which are carried out by specially created Commissions, Councils or Committees.

### *The International Rice Commission (IRC)*

The fifth session of this well-known Commission will take place in Calcutta next month. The first phase of its oldest project, the hybridization scheme, has recently come to an end. The resulting crosses have been distributed to member countries for testing, and much depends on the care with which the comparative trials are carried out by national experiment stations. There is much promising material which should make bigger yields per unit-area possible, particularly since the stiff straw imparted by the *japonica* parent will allow larger applications of fertilizers.

Under the aegis of the IRC work will be continued by the Working Party on Rice Breeding (meetings are scheduled for 1957 in Pakistan and 1959 in Ceylon), the Working Party on Fertilizers and the ad hoc working party on soil-water-plant relationships. An ad hoc working party has also been formed on the possibilities and limitations in the use of mechanized rice equipment, including the farm management aspects. All these groups will place their recommendations before the forthcoming Calcutta meeting.

Increased attention will be given to grain storage problems, particularly in connection with the prevention of losses during storage.

### *The Asia-Pacific Forestry Commission (APFC)*

No specific chapter on forestry appears in this report, with the exception of Chapter 4-D, Watershed Management, which is of joint interest to the Agriculture and Forestry Divisions. The reason for this is that the fourth session of the APFC will take place early next year, so that none of the projects under way have reached a stage for consideration at the policy level. This will be done at the next session of the Regional Conference. Nevertheless, reference to some of the more important activities of the FAO Forestry Division should be made. They include :

- Establishment of uniform grading rules for various categories of round and sawn timber ;
- Co-ordination of national research activities ;
- Initiation of a teak subcommission ;
- A group country project for the improvement of forestry statistics.

The Forestry Division also maintains co-operative activities with ECAFE, which include a regional timber trends study.



## ***The Indo-Pacific Fisheries Council (IPFC)***

In contradistinction to the lack of forestry activities, this report includes many items in the field of fisheries (Chapters 4-A, 5-A and 6-A). There is less need, therefore, to dwell here on the activities of the IPFC. Suffice it to say that this body is endeavoring to influence governments more and more to consider fisheries development in conjunction with their agricultural production plans. The two must be complementary anywhere, but first of all in this region whose economy and nutritional habits are so strongly based on rice.

## ***The Regional Nutrition Committee***

The fourth meeting of this committee has just concluded in Tokyo, and reference to its conclusions will be found in Chapter 2 of this report.

Nutrition can hardly be considered here abstractly. Nutritional problems pervade many of our activities, in fact all those relating to improved production and distribution of foodstuffs.

## ***Other Regional Activities***

The list of projects given below is not given as an exhaustive catalogue, but rather as examples.

Joint FAO/ECAFE activities include studies of agricultural price policies and their effect on patterns of production, investigations of the price and income elasticities of rice and other cereals, studies to evaluate and improve the efficiency of marketing.

A meeting on tropical horticulture, possibly to be held in Ceylon in 1957, will deal with both fruit and vegetable production.

The vast program in livestock management, control of animal diseases, breeding, including animal climatological work, and artificial insemination are treated in Chapter 6-D. Suffice it to say that as a result of the Brisbane meeting on livestock and the poultry meeting in India a Regional Working Party on Livestock is being organized.

## ***Agricultural Research Organization***

The Meeting on Land Utilization in the Tropics in Naurua Elyia, 1951, recommended that FAO assist in research organization and co-ordination. As a first step, the compilation of an index of agricultural research institutions of the whole region is almost completed. This work will be carried to further stages at an early future.

A catalogue of all existing coconut varieties is being established in order to make known the available genetic material of the whole genus *Cocos*.

It is hoped to establish an expert committee on methods of evaluating extension schemes.

Efforts in the fields of co-operatives and rural industries, particularly the processing of agricultural products (as an important step toward industrialization) will be continued and intensified.

Efforts are being made to intensify the study of shifting cultivation.

### **The Technical Assistance Program**

Many of the activities referred to above profit from Technical Assistance funds. I have not so far made any reference to technical assistance because it is the intention of the Director-General to integrate fully the two parts of the FAO program, that is the Regular Program and the Technical Assistance Program. There are two sources of funds, and unfortunately two different procedures in using them, but there should be one unified program of work. The recent reorganization of the headquarters staffing arrangements aimed essentially at this end.

Nevertheless, the Conference will be interested in some specific problems which present themselves under technical assistance procedures. Over the last three years, there has been a steady increase in the number of experts assigned to the region. It was 124 in 1954, 184 in 1955 and 207 in 1956. (These figures include experts assigned to regional projects and training centers.)

As to the problems we meet, it must be said that the best method of making the most of the co-operative effort involved in each technical assistance project has not yet been found in all countries and in all cases. In particular, I would draw attention to the need of providing permanent counterpart personnel to each expert. Ideally, this personnel should be selected even before the expert arrives in the country, so as to avoid the loss of precious time which often occurs, and should stay with the expert throughout his assignment. We all recognize the great need for training personnel in all fields, and working shoulder to shoulder with an experienced man provides one important opportunity to impart training which should not be missed. In addition, it remains FAO policy to link fellowships with technical assistance projects, and often counterpart personnel are the logical candidates for fellowships, either awarded individually or in connection with training centers to which we attach great importance. A brief reference to some regional training centers might be useful here. A regional center on agricultural financing and credit (in co-operation with ECAFE) is presently in progress in Pakistan. Soon to begin is a center on farm management in Tokyo, and special reference is made in Chapter 4-D to a watershed management farming center in India, scheduled for early 1957. A further training center for rice breeding will be held under the aegis of the International Rice Commission. Centers for nutrition and on fishing methods are planned in collaboration

with the South Pacific Commission, and an agricultural extension study tour, growing out of the training center on the same subject in Bhopal, India, is being organized.

It is hoped also to hold training centers on forestry inventory methods, and on land distribution and settlement, in the region. I say it is hoped, because of the limitations of funds for regional projects which has been decided by the Technical Assistance Commission of ECOSOC. This limitation strikes FAO more severely than some other agencies, because the nature of our work makes regional projects more desirable and more fruitful. We hope very much that TAC will see its way to make more generous allocations for regional activities.

I should like to refer to just one other problem. It relates to the responsibility of governments in planning, within the allocated country ceiling, the technical assistance they wish to receive. In some cases, we find that the requests do not fit into a well-conceived national agricultural development plan. Often this is not the fault of the ministries of agriculture. The fault lies much more with the fact that these ministries are not given sufficient weight and influence in forward planning. It is an undeniable fact that in some countries where the vast majority of the population is engaged in agriculture, the status of the ministries of agriculture is very low in relation to others. This is also reflected in the remuneration received by agricultural technicians, which is often lower than that received by their professional colleagues in other ministries. I very much hope that this state of affairs can be changed progressively.

I have taken much time without covering the program fully. The activities of the FAO in the region have grown so complex that it was impossible to do them justice in this summary. And yet, in relation to existing needs, our program is still woefully inadequate.

We have, — as governments of individual countries and as an organization of governments, — a long and hard pull ahead. It certainly can be made easier by mutually sharing experience and knowledge, be it at conferences such as this, at technical meetings or in joint field works, and in providing those opportunities FAO has an important role to play. We are glad to have the co-operation of its sister agencies in the United Nations family, of regional bodies such as ECAFE, and of the important organizations tendering economic and technical assistance, particularly the International Co-operation Administration (ICA) of the United States and the Colombo Plan. In fact, many of our most important technical assistance projects are carried out with their help.

If I were asked whether there is a common denominator for the FAO activities in this region, I would say that it is an effort to raise the productivity of the chief natural resources, land and water, and, more important, the productivity of human labor. It is a recognized fact that the insupportable differences in living standards of developed and under-developed countries stem chiefly from the differences in the productivity of human labor. If you examine closely the program I endeavored to

present, you will find that most projects are directly or indirectly geared to this end. I believe that in the formulation of future programs a great deal of attention should be concentrated on projects which have an impact upon productivity.

Mr. B. R. Sen, our new Director General, has made clear his deep interest in this region. You may be sure that he will do everything in his power to make FAO a still more efficient instrument to service our Member Governments. In this endeavor, he will be supported whole-heartedly by the staff of all ranks. The Director-General will be grateful for your suggestions and recommendations regarding future activities in the region, and subject to the decisions of the Ninth Session of the Conference in November 1957 on the budgetary level, and to the availability of technical assistance funds, he will be anxious to follow your advice.

May I conclude this statement with the expression of my confidence that when we meet again in two years' time this splendid co-operative of nations, which is the Food and Agriculture Organization of the United Nations, will have made great strides in furthering the accomplishment of its high goals in this region.

## *Chapter 4*

# **MAJOR POLICY QUESTIONS OF REGIONAL INTEREST**

## **A. Food and Agricultural Policies**

### ***(i) Selective Expansion of Agricultural Production and Consumption***

#### **INTRODUCTION**

It was recalled by the Conference that the concept of selective expansion of agricultural production and consumption was developed in the reorientation of agricultural policy that became possible and necessary around 1952/53. This was the time when prices on international markets fell and agricultural surpluses began to emerge and it became clear that the food shortage period of the immediate postwar years was over.

To counteract any tendency to consider that agricultural expansion had gone too far, the Seventh Session of the FAO Conference in November-December 1953 stressed the necessity of continuing expansion while directing it toward more selective aims. This was re-affirmed by the Eighth Session in 1955. The application of the principles of selective expansion to Asia and the Far East was explored at the Regional Consultation held at Kandy in June 1955.

In the light of recent developments in countries of the region based on these principles, the Regional Conference examined the concept of selective expansion at some length, and recorded the following views.

#### **SELECTIVE EXPANSION**

The term "selective expansion" should refer to the development of particular agricultural products, or systems of agriculture or patterns of consumption, to which special attention and even some priority should be given in a country.

A careful assessment should be made of the factors such as the agro-climatic and soil conditions, the economic, social, and national reasons and also the external considerations, which determine the products or systems that need special attention.

Selective expansion must be considered as a long-range process. Short-term fluctuations of demand, and the adaptations on the supply side to such fluctuations, are of great interest, but these short-term adjustments of supply are of a different character from selective expansion. For policy purposes it is desirable to regard the long-range agricultural development problem in terms of the economic growth of the economy as a whole. Selective expansion is a dynamic, not a static concept, and involves structural change in the economy.

Governments should consider the question of whether existing products or systems of agriculture which, after a survey, prove to be little suited to their countries or to certain regions of their countries, should not be discouraged, while those that have been selected should be expanded as rapidly as possible for maximum production.

The principles of the selective expansion of agricultural production and consumption, if they are to be successful, lead inevitably to the planning and programming of agricultural development, as an integral part of national development.

#### PRINCIPLES OF SELECTIVE EXPANSION

The delegates of Australia, Ceylon, France, India, Indonesia, Japan, Pakistan, Thailand and Viet-Nam spoke on this agenda item. There was general agreement concerning the importance of the subject as one deserving of full consideration by governments of the region. The course of the discussion brought to light a number of instances in countries of the region where the principles of selective expansion, as recommended by Conferences of FAO and the Kandy Consultation, were being applied.

##### (a) *Food and Nutritional Needs of the People*

The primary need is to ensure as far as possible that the food supply is adequate in quantity — later the emphasis of policy should shift toward securing improvement in quality. Thus a few countries in the region which are still faced with food shortages have to concentrate for the time being on the production of staple foods. For instance, in Viet-Nam efforts are largely concentrated on relieving a shortage of rice, although the need for protective foods is fully realized. Pakistan, in its first Five Year Plan, is placing the emphasis on securing increased production of food grains, including the building up of reserves against years of poor harvest.

On the other hand, most countries in the region have managed to secure their minimum needs for staple foods and are thus able to consider the possibility of improving the quality of diets. For instance, the first Five Year Plan of India concentrated on the production of food grains. With considerable progress achieved toward the objective of adequate supplies of food grains, the second Five Year Plan shifts the emphasis to

expanding the supply of protective foods like milk, meat, fish and fruits in order to improve the present unbalanced diets. Similar emphasis on protective foods, especially those rich in protein, can be observed in a number of other countries. Besides aiming at self-sufficiency as far as possible, and especially for rice, Ceylon is making efforts to expand the production of protein-rich foods, particularly milk. Protective foods of vegetable origin are also receiving due attention in many countries. Indonesia, for example, is trying to improve average diets by increasing supplies of pulses and their products, notably "saridele" (soya milk), as well as fruits and vegetables.

#### (b) *Expansion of Internal Demand*

Since efforts for increasing production will be useless in the absence of adequate demand, it is essential to take steps to stimulate consumption, including use in industry.

The most important factor which limits the consumption of protective foods in the region is their high cost in relation to the incomes of most people. Apart from reductions in the costs of production and marketing by various means, it is often necessary to reduce the costs to the consumers by direct means, so as to bring them within the reach of even the poorer sections of the population. Subsidies on retail prices are often found useful for this purpose. For instance, the retail price of rice in Ceylon is subsidized. Another example is the price policy of Japan which is designed to stimulate demand for imported rice.

Less generalized means of achieving the same objective of raising consumption by lowering consumer prices are the supplementary feeding schemes for various groups, designed to provide them with protective foods at subsidized low prices or even free of cost. Such feeding schemes are valuable, not only in raising the nutritional levels of the vulnerable groups, such as mothers and children, but also in spreading education in nutrition and home economics in the community. For instance, a scheme for distributing imported surplus milk to school children is operating in Karachi and a similar scheme is being organized in Ceylon. This scheme will be helpful in creating an adequate appreciation of the nutritive value of milk and, in due course, a demand for the extra supplies of milk which will be available in the future from various projects under way.

Education of the people in nutrition and home economics can often be successful in creating a demand for nutritious foods especially where their consumption is limited by prejudice or ignorance. Consequently, several countries, such as India, Indonesia and Japan, have large scale programs for spreading nutrition education among the people. Other countries like Burma and Thailand are planning to establish similar programs.

### (c) *Exploitation of Relative Advantages*

It is clear that certain geographical areas or subregions may have soil, climatic and institutional characteristics which make possible the relatively low-cost production of particular commodities. In working out a policy of agricultural development a country should give careful consideration to the possibility of expanding the production of those products with regard to which it enjoys, or by the application of known methods could enjoy, a comparative cost advantage.

Thus, on lands which receive plentiful rainfall and where drainage control is technically or economically not feasible, rice or jute may be produced very efficiently. In fact, the farmer finds it difficult to grow crops other than rice or jute. Burma, for instance, has vast areas of such lands, and the delegate of Burma announced that his Government had decided to increase its emphasis on rice production for export, aiming at the restoration of the prewar acreage by 1960. For the same reason the Government of Thailand, as the delegate of Thailand stated, has decided to base the future agricultural development of the country on the continuance of rice production for export.

Acting on this principle of exploiting a relative advantage, Malaya — the delegate of the United Kingdom reported — is placing the emphasis in agricultural expansion upon further development of the rubber and coconut industries, the aim being to reduce production costs by replanting with superior, high-yielding strains of plants. Likewise, the delegate of Pakistan pointed out that the scope for range management in West Pakistan will be more fully exploited.

It is possible that in relation to particular tracts of land, the principle of fullest exploitation of resources and relative advantages might lead to a permanent change in the pattern of agriculture, from a traditional to a new crop. In this sense the delegate of Thailand reported that efforts were being made to encourage the production of other crops such as soya beans and groundnuts in parts of his country where soil and water conditions were not well suited to rice, the traditional crop.

The delegate of Pakistan reported the introduction or expansion of new crops in various regions of his country, with a view to securing a better utilization of resources. Thus in East Pakistan it is intended to promote the cultivation of rubber, ramie, and cashew nuts, and in West Pakistan also tea, with walnuts in the northern parts of that Province.

### (d) *Diversification of Production*

The desirability of continuing efforts to accelerate the gradual transition from cropping systems based primarily on the production of basic foods, toward a more diversified and prosperous agriculture, was recognized at the Kandy Consultation as a principle for the guidance of governments as far as possible.



In this connection, a number of delegates, including these of Ceylon, India, Japan, Philippines and Thailand, reported an increasing emphasis in the agricultural policies of their countries upon the promotion of livestock production and the development of systems of mixed farming. Indonesia is promoting diversification of the economy of rice farms by the expansion of fish culture in paddy fields.

(e) *Intraregional or International Complementary Trade*

There was a consensus of opinion at the Kandy Consultation that the great diversity of climate, natural resources and population density offered to countries of the region considerable opportunities for the diversification of their economies and the expansion of their agricultural production along complementary lines. While individual governments themselves must decide which commodities or systems of farming are the most suitable for expansion, the factors to be taken into account should include the outlook, external as well as internal, for supply and demand in particular products, and the relevant current intentions of other governments. This could result for some countries in policies of national self-sufficiency in basic foods at all costs being replaced by policies of reliance upon other countries for a certain level of basic food imports. Questions of avoiding the emergence of surplus supplies and of making the best use of internal resources are also involved.

In this connection, the delegate of Japan informed the Conference that the policy of his Government did not involve self-sufficiency in food and that the policy of importing staple foods would be continued. In addition, the Japanese livestock industry would be developed on imported feeding stuffs.

The delegate of India also stated that his country would not aim at total self-sufficiency in foods, although the conditions in his country were diverse enough to permit production of various products to meet most cereal needs. A contract had been made with Burma to import two million tons of rice from that country over three years.

The delegate of Pakistan reported that his Government was adopting a policy of licensing the acreage of jute with a view to avoiding the possibility of a surplus developing beyond the level of demand at home and abroad.

#### DIFFICULTIES RECOGNIZED

In reporting on the steps being taken in their countries to expand agricultural production selectively along the lines mentioned above, many delegates referred to the problems being encountered. The principal difficulties recognized are mentioned below.

- (i) *Food habits.* Popular food habits cannot be changed easily or quickly.

- (ii) *Lack of nutritional services.* In many countries of the region adequate nutritional services are not yet available to conduct studies, render advice, implement programs, including nutrition education and home economics education, and undertake food planning. Where nutritional services exist, there is often insufficient contact between them and other services concerned with the planning of national food policies. In this connection the Conference endorsed the recent recommendations of the FAO/WHO Nutrition Committee for South and East Asia that nutrition services in each member country should be so organized as to be able to deal with nutritional aspects of food production and planning and that effective and continuous contacts should be ensured between the nutrition services and the other services responsible for the planning and development of national food policies.
- (iii) *Farmer resistance.* The traditional resistance of farmers to new crops or systems of farming can slow down the selective expansion of production. Most countries are strengthening their extension services to cope more effectively with this problem.
- (iv) *Markets and prices.* Too rapid diversion of effort to commercial crops at the expense of food crops could result in shortage and high prices of food grains. On the other hand diversification, if in advance of demand at prices consumers can pay, could result in unmarketable surpluses of new products. Moreover, if several export producers, in pursuit of the rational exploitation of similar resources, concentrate on the same crop, the result could be surpluses and price collapse. In any event, the market may change rather abruptly after new production programs have been initiated, leaving supply and demand out of balance.
- (v) *Selection of new crops.* In view of the complex of factors involved, many countries who favor selective expansion are uncertain regarding the method of selecting from possible new crops those best suited to local agricultural conditions and available markets. A related problem is how to determine the priorities in the emphasis to be placed on various new crops.
- (vi) *Balanced development.* For best results in terms of advancing the economic welfare of the whole population, it is important to maintain the right balance at any time between agricultural and non-agricultural development. It is not yet clear how to determine what is the right balance.
- (vii) *Lack of trained personnel.* In many countries of the region agricultural development and planning are handicapped by a shortage of technical and economic personnel who are trained in development aspects in relation to agriculture.
- (viii) *Lack of data.* In most countries of the region programs for national agricultural development have been drawn up, and are

being implemented, on the basis of the data currently available. There was general agreement in the Conference, however, that the formulation of more effective policies of selective expansion of agricultural production and consumption was dependent upon obtaining additional data. Further consideration was given to the question of the types of data required, and the conclusions are set out below.

#### INFORMATION REQUIRED

The Conference considered that countries desirous of formulating more effective policies of selective expansion would be greatly assisted by more complete and reliable information on the following aspects of their economies :

- (i) The present levels of food consumption and the patterns and variations in the consumption of available foods within different sections of the population. For the purpose of obtaining this information periodic surveys of food consumption and nutrition are required. Some countries such as Japan, Burma, and India have initiated such studies.
- (ii) The pattern of changes in demand, within the country, for food and agricultural products as income levels rise. Such information could be gained by inserting specific questions on expenditures and quantities of various foods consumed in the schedules of questions used for national family budget studies undertaken for cost of living enquiries. Japan, Ceylon and India have undertaken national studies to obtain information of this kind, and in the case of Japan and Ceylon the results are available.
- (iii) Long term trends in consumption per head of various foods.
- (iv) Expense-income data for farms in different regions of the country and having different main crops and systems of farming. The delegate of Japan noted that his country has found these data valuable, and the results can be made available. The delegate of Thailand reported that some pilot studies of this kind had given useful results in his country.

The Conference recommended that governments take all possible steps to improve the supply of such information to their agricultural planning authorities.

The Conference was informed that the joint FAO/ECAFE Agriculture Division had made some preliminary enquiries regarding the income and price elasticities of demand for rice and other cereals in countries of the region. The Conference hoped that these enquiries could be continued.

The Conference was aware of the commodity studies being undertaken by FAO under the guidance of the Committee on Commodity Problems, and considered that these studies and intergovernmental consultations contributed information of great value to governments in connection with their plans for expanding agricultural production and for intraregional and international complementary development.

In particular, the Conference was informed of the studies recently commenced by the FAO Secretariat on long-term trends in international trade in agricultural products in relation to trends in world economic development. It was agreed that the results of this work were promising and likely to be of value to governments in connection with agricultural policy. The Conference recommended that such studies should be continued with respect especially to those export commodities which are of importance to the countries of this region.

## CONCLUSION

While delegations were generally in agreement with the concept and principles of selective expansion, it was felt that something more specific was required to assist countries to a fuller understanding of the principles, and to a more effective application of them, in the circumstances of a particular national situation.

In this connection the Conference was pleased to learn that FAO hoped to start work in 1957 on one or two country studies in countries which were willing to co-operate and prepared to conduct the necessary field studies, with the aid of suggestions from the FAO staff. It was understood that the results of the studies would be published by FAO for the information of other countries facing similar problems. The Conference commended this project to countries of the region.

### **(ii) *Joint ECAFE/FAO Working Party on Agricultural Development and Planning***

The Conference was informed that the Economic Commission for Asia and the Far East (ECAFE), at its session in February 1956, approved a proposal for a working party on agricultural development planning, to be sponsored jointly by ECAFE and FAO.

Later, in September 1956, the ECAFE Working Party on Economic Development and Planning, at the conclusion of its second meeting in Bangkok, had recommended that its third meeting should be in collaboration with FAO and should examine the problems and techniques of agricultural development planning and implementation in relation to economic development as a whole and, more particularly, in relation to industrialization. The third meeting of the Working Party would most likely be held in September 1957.

The views and suggestions of the Regional Conference on this matter were solicited. At the request of the Chairman the observer from ECAFE explained to the Conference the composition and approach of the ECAFE Working Party.

The delegates of Australia, Burma, Ceylon, France, India, Indonesia, Japan, Pakistan and United States spoke on this question. All expressed warm support of the proposal for a jointly sponsored regional meeting by ECAFE and FAO on agricultural development planning in the context favored by the second meeting of the ECAFE Working Party on Economic Development and Planning. The necessity of carrying out agricultural development planning in this context, as the Indonesian delegate said, was widely understood by FAO.

It was emphasized by the delegate of France that collaboration between ECAFE and FAO was in itself a good thing, and in this instance it would have the advantage of providing economic ministries with an opportunity to acquire an appreciation of the problems of agriculture.

The Japanese delegate stated that his Government was already setting up targets for agriculture but desired to do so on an increasingly sound and rational basis. A number of countries, he said, had drawn up and were implementing detailed plans for agricultural development, and he believed that the further refinement of methods which might result from such a joint working party would assist such countries, as well as those which were at an earlier stage, or had not as yet embarked on planning.

The main points made in the discussion related to the appropriate context and techniques of agricultural development planning. Some suggestions were also put forward regarding the agenda of the proposed meeting.

#### CONTEXT OF AGRICULTURAL DEVELOPMENT PLANNING

There was general agreement with the view expressed by the Indian and Pakistan delegates that agricultural development and planning were an integral part of general economic development and planning. With the increasing emphasis on industrialization in countries of the region it was not possible to consider the problems of agriculture in isolation. In India, for instance, the impact of industrialization was being observed in the increasing rate of demand for food, which meant that the production of food would have to be stepped up much more than had been at first envisaged in the agricultural development plan. The growth of the whole economy, as the delegates of Japan, Indonesia and Pakistan emphasized, had to be balanced as between agriculture and industry, so that there was a mutual consistency in the various planned objectives. Departmental plans for development, when not integrated into a national program of development resulted in conflicting objectives, the Ceylon delegate stated.

The joint working party would entail the collaboration of agricultural experts — both technical and economic — with general economists experienced in national economic planning, and this was thought to be highly desirable.

#### TECHNIQUES OF AGRICULTURAL DEVELOPMENT PLANNING

It was recognized by the Conference that the best ways to analyze the inter-relationships between agriculture and other sectors of the national economy, and between agricultural and other objectives such as better nutrition and higher national income, had not yet been worked out. If the recently developed types of analysis such as the input-output method were not suitable under the conditions of the region, what other methods were appropriate? It was thought that the joint working party would have to examine other possible methods such as the preparation of commodity budgets and the study of changes in demand for agricultural products associated with changes in incomes and prices, i. e., income and price elasticities of demand.

#### SUGGESTIONS REGARDING AGENDA

It was realized by the Conference that the agenda for the joint meeting would have to be worked out by the two sponsoring organizations. The following suggestions were put forward by delegations, to be taken into account by the sponsors.

- (a) In view of the complexity and comprehensiveness of the subject, the agenda would have to be quite disciplined if good results were to be obtained from the meeting. A main line would have to be laid down when selecting items.
- (b) The problems of implementation should be included for discussion, since they were in close relationship with the plan itself.
- (c) The conflicts among objectives should be listed for discussion, although their resolution might often have to be along the lines of common sense in pursuit of concrete objectives, rather than of academic considerations.
- (d) Questions of techniques and methods would have to be examined.
- (e) The limitations of planning should not be overlooked, bearing in mind the shortage of reliable statistical data about agriculture in many countries of the region.
- (f) Attention should be given to the need for training personnel in the techniques of agricultural development planning, and to the desirability of having a center for the regular exchange of views and experience of governments in the field of agricultural development planning.

## **B. The Role of Ministries of Agriculture in Community Development**

Community development is a term which has been used in recent years to describe a process by which people, particularly in rural areas, are stimulated and assisted to improve their social and economic life by their own efforts and on their own initiative. This necessarily implies that they will be provided with adequate technical guidance and other assistance from government services and private organizations in order to enable them to make a maximum use of their local resources for their betterment. In short, it is a program to help people help themselves.

It was emphasized at the Conference that community development was not to be considered as a substitute for the regular government services to the people, such as agricultural extension and public health, but rather it was designed to co-ordinate them in such a way as to make them more effective in their approach to the local people and their problems and to avoid unnecessary duplication and wasteful competition.

During the past few years community development work has been taking place rapidly in various ways and under various names in many countries of the region. The Conference heard reports on recent developments from Ceylon, India, Indonesia, Japan, Pakistan and Thailand. The community development program started in India in 1952 is by far the largest ; it is carried out on a nation-wide scale and it is expected that by 1961, the end of the second Five Year Plan, the whole country will be affected. Pakistan intends to cover 25 percent of the country by 1960, and the rest by 1965.

It was reported by several countries, particularly India, that where community development projects existed, the local people were willingly contributing their labor, land and/or material for joint undertakings such as constructing village roads, sinking wells, putting up school buildings or community centers. Human labor is abundant in all rural areas. The Conference realized that national planning should provide for the mobilization of such labor for constructive purposes and that community development should be an effective means of achieving it.

In all the community development work agriculture invariably has received first priority. India and Pakistan reported that about 85 percent of their community development work was for the increase of agricultural production. This is, by necessity, to meet the urgent needs of the people in rural areas for economic development and to help increase their capacity to meet other needs. But life in the village is an organic whole and improvement must take place concurrently in agriculture, education, health, nutrition and home economics, and in other fields, if progress is to be achieved.

To carry out a comprehensive program of community development, however, requires the effective co-ordination of a number of government services on the ministerial level as well as on the village level. This co-

ordination is achieved in India by a separate Ministry of Community Development at the center and by Development Boards, with the chief ministers as the chairmen, in the States. In Pakistan, while co-ordination is achieved by an interministerial committee, the portfolio of community development is with the Prime Minister. In other countries varying degrees of co-ordination are achieved through interministerial or interdepartmental councils, or at the cabinet level. In Indonesia, the Ministry of Agriculture has taken the initiative in community development through the establishment of village education and training centers. More recently community development projects have been introduced involving a number of ministries and departments, in which the Ministry of Agriculture has a part.

A question was raised in discussion as to the role of traditional village institutions and local government in community development programs. The delegate of Japan reported that local mayors not only were consulted, but also actively participated in establishing the local organization for community development work. It has been found in other regions that the co-operation of already established organizations can be very valuable. They can be given local responsibility for such services as agricultural extension, if their objectives are in harmony with those of the service, and provided they are not involved in political activity and will give service to all members of the community without discrimination. Otherwise it is usually more satisfactory to establish a new organization for the specific purpose of community improvement.

The Ceylon delegation reported considerable success in the past in achieving co-ordination through the organization of rural development societies with emphasis upon self-help. These were voluntary organizations and served as media for the extension of technical information in agriculture, health, education and other fields. The societies concerned themselves with assuring that the felt needs of the villagers received attention.

Problems in interministerial and interdepartmental co-ordination were raised by various delegations. In some countries, a number of unco-ordinated services have been started such as independent extension services in agriculture, animal husbandry, rice culture, health, and fundamental education centers. Although each of these institutions serves a valuable purpose, overlapping has sometimes resulted, as well as confusion in the minds of the villagers. In Thailand a central board has been set up with the Prime Minister as chairman to study this problem and develop a plan for a co-ordinated system of community development.

The delegations of India and Pakistan reported the successful employment of large numbers of multipurpose village-level workers who live among the villagers and serve as the promoters of co-operative action and as liaison between the various government services and the people. A total of more than 50,000 such workers have been trained in India and 38,000 more are to be trained soon. It was emphasized that although



the use of multipurpose workers serves the purpose of local co-ordination of government services and is a means of bringing such services to the people quickly, it is only an interim measure. As the technical level of agriculture improves, as people come to realize the value of sanitation and adequate medical care, more highly trained specialists will need to be employed and to be in more direct contact with the villagers.

A number of important guidelines to the success of community development programs and the role of ministries of agriculture therein were emphasized during the Conference. The following were considered of special importance and were commended to Member Governments for consideration :

- (a) Community development should be considered as a valuable means of stimulating self-help among villagers and of channelling to them the technical services of government such as agricultural extension, public health, education etc.
- (b) In order to achieve co-ordination between ministries and departments concerned, it is highly desirable to have a high level co-ordinating body in which all ministries concerned with rural life are equal partners. The same should apply at each level of organization. The situation is extremely difficult, and usually unacceptable to other ministries, where one ministry is designated to co-ordinate others of equal rank. This is especially true where the co-ordinating ministry is involved in a field program of its own.
- (c) Multipurpose village-level workers can be used effectively as the organizers of villagers and to carry to them simple technical knowledge. But to be most effective they must have strong technical supervision. Such technical supervision should remain the responsibility of the various ministries involved.
- (d) Voluntary village development societies can be very effective as a means of stimulating programs of self-help and in expressing the felt needs of the people. However, an instance was cited where such societies became involved in political activities — and immediately became less effective.
- (e) The system of co-ordination adopted must depend to a large extent upon the stage of development achieved and the governmental structures in the country. In countries with a high degree of specialization in farming and technical advancement in agriculture, highly specialized services must reach the producer directly. In such instances, much of the required co-ordination can be achieved by informal co-operation in planning and implementation of programs at each level of government.
- (f) Since agriculture provides the economic foundation for most rural communities, community development can only be effective if ministries of agriculture are involved in the planning of such

programs from the beginning and carry a large share of responsibility for their implementation.

- (g) The supplies and services in the technical fields should be so developed as to meet the increasing demand created by the education accomplished by the village-level workers.

Although community development on a national basis is of recent origin, it has already demonstrated its usefulness in several countries of the region, especially in the matter of stirring the minds of the rural people and getting them together to do things for themselves. It is an effective means to bring about a change in the age-old conservative outlook of rural people. It is a people's program and is for their own betterment.

Since agriculture plays such an important role in community development, the Conference expressed the desire that FAO would continue its interest in community development and help the Member Governments in the strengthening of their agricultural services so that the cause of community development could be better served.

### **C. Problems of Agrarian Reconstruction**

The basic importance of agrarian reconstruction in agricultural and general economic development is recognized in all countries of this region. The Conference drew attention to the need for considering agrarian reconstruction, or more broadly speaking, the reform of agrarian structures, in the broadest connotation of these terms. This includes the provision of essential government services, such as extension, credit facilities, the creation of co-operatives and marketing services as a corollary to changes in tenure systems, tenancy improvement, settlement, consolidation of fragmented holdings and other measures generally included in the term agrarian reconstruction. Ideally, agrarian reconstruction should be accompanied and supported by well-conceived schemes of community development as treated in the preceding section of this report.

The discussion, in which the delegates of Burma, Ceylon, India, Indonesia, Japan, Laos, Pakistan, Philippines, Thailand, the United Kingdom and Viet-Nam participated, showed clearly that a great deal of attention is being given by all governments of the region to this important problem, and that progress is being achieved in many directions. It showed also, however, the many difficulties yet to be overcome, and was particularly valuable because difficulties and pitfalls which had been encountered were frankly and objectively discussed. These may be summed up as follows :

- (a) There is often a clash between the demands of social justice and those of economic development (e.g., inheritance laws, farm

sizes in consolidation procedures and settlement schemes, the immediate treatment and ultimate use of big estates and plantations etc.). Thus governments are often forced to choose the lesser of two evils.

- (b) Former efforts at the reform of agrarian structures, though well conceived at the time of their inception under the then prevailing circumstances, have become partly redundant or may even present obstacles to sound development under present-day conditions. This illustrates the fact that agrarian reconstruction is a continuing process, and therefore requires constant attention.
- (c) Mere land redistribution is no cure-all. Especially where land redistribution is to be undertaken on large scale, it may be advantageous to precede it with a tenancy reform which will allow the tenants a greater participation in the arrangement of the farms in order to prepare themselves for the responsibility of ownership. In addition, the auxiliary measures referred to in the introduction are necessary in order to achieve the desired end.

Since the FAO Center on Land Problems, held in Bangkok 1954, had provided an opportunity for a full review of this complex subject, the Conference was able to concentrate its attention on some specific subjects.

### ***Farm Size and Intensification***

It was recognized that in regions with high demographic pressure in rural areas, small units, even though of uneconomic size, must continue to prevail until alternative possibilities of employment are created. This points to the close connection between agrarian reconstruction and general economic development, particularly industrialization. It also shows that the need for optimum economic expansion may be overshadowed by the need for diversification on small production units, thus achieving the much-needed increase in productivity and consequently in farm incomes.

### ***Fragmentation and Consolidation***

In countries where considerable progress has already been achieved in land consolidation, particularly in India, it has become clear that this measure may well be the mainspring of agrarian progress. Fragmentation of holdings is one of the chief obstacles hindering the increase of productivity. Consolidation not only removes this, but through the construction of rural roads associated with it, creates better conditions of life. Also, the consolidated farmstead provides far more incentives for farm improvements of all kinds.

It was stressed that the availability of up-to-date land registers is an essential condition for land consolidation.

### ***Organization of Farm Enterprise after Land Consolidation***

The need for the introduction of farm management principles and for extension services in this field was stressed. As a whole, experiments with co-operative methods of farming had not been successful, in contradistinction to the encouraging results which had been obtained by other forms of co-operative undertakings (multipurpose co-operatives and many forms of specialized co-operatives, some of which are directly related to land use, such as irrigation ; also credit, cold storage, and plant protection co-operatives). It would be highly desirable for countries with practical experience in this field, such as India and Pakistan, to make their experience available to other countries of the region.

### ***Settlement and Resettlement***

Conditions for and the necessity of settlement vary greatly in the different countries of the region. Countries with over-congested areas, having at the same time extensive tracts of reclaimable lands, have embarked upon schemes of planned settlement, the outstanding examples being the repopulation of the dry zone in Ceylon, and the transfer of population in Indonesia. The chief obstacle encountered is the high capital investment required, which may well lead, inter alia, to the establishment of holdings of uneconomic size. It was suggested that FAO might help countries in this respect, and in this connection, attention was called to the desirability of organizing, as soon as possible, the planned center on settlement problems in the region.

In connection with difficulties which had been experienced in some countries, attention was drawn to the judicious selection of potential settlers' families, the need for a certain homogeneity in the newly established communities, the need for proper leadership in them, and for after-care through proper government services to these communities.

### ***General Conclusions and Recommendations***

The Conference recognized that most governments in the region had substantial programs of agrarian reconstruction under way, so that an organized exchange of information would be of very great value. It was suggested, therefore, that FAO be asked to organize periodic surveys of progress achieved, which would have to be of a critical and highly objective character if they were to achieve their purpose. The representative of the Director-General pointed out that a joint Indian/FAO Mission

would shortly consider the most appropriate means of evaluating the effects of agrarian reform measures in India, and that other countries might follow this example by asking for technical assistance in this field. The delegate of Pakistan announced that a technical assistance request would come forward from that country for a sample survey in this field, and also for technical assistance in related fields.

Attention was drawn to the need of soil surveys and of land classification for recommended use as a basis for many measures of agrarian reform, particularly settlement, and the importance of the FAO Survey and Appraisal of the World's Agricultural, Fisheries and Forestry Resources was underlined in this connection.

In some regions, the problems of shifting cultivation present great difficulties in agrarian reconstruction. The Conference noted with interest that FAO intends to intensify its work in this field.

Finally, it was brought out that for most countries economic development on a broad basis cannot be achieved without giving agricultural development a high priority. This illustrates the key position of agrarian reconstruction, and the Conference was gratified to note that all governments in the region had recognized this fact by giving it high priority in their planning.

#### **D. Watershed Management**

The Conference considered that the sound management of watershed areas was specially important in the region, as many countries have launched upon ambitious schemes for the construction of multipurpose dams for irrigation, power production, better navigation and flood control, the life and efficiency of which are dependent on how the headwater areas are treated.

Sound management of such areas however, poses many intricate administrative, technical and socio-economic problems. Forestry, agriculture, and animal husbandry are the three main users of land in such areas. It is not easy to harmonize the interests of these three different groups of users, consistently with the paramount need for the conservation of land and water resources, and it is possible only through education based on research. Watershed areas are often inhabited by nomadic people living by destructive shifting cultivation, for which an alternative has to be found before sound management can be planned. For proper understanding of the inter-relationship between ground cover and water conservation under varying ecological and climatic conditions, intensive research in the field of forest influences is needed. Management of headwater areas of rivers originating outside the country is possible only through a bilateral agreement between the countries concerned.

The Conference was aware that the complexities of the above problems had been discussed in various international meetings. The last

session of the Asia-Pacific Forestry Commission (APFC) and the Eighth Session of the FAO Conference made concrete proposals for action to be taken by FAO. Accordingly, the APFC had established a permanent working party on watershed management composed of members nominated by different Member Governments to study this problem, exchange information between the countries and co-ordinate research activities in this field.

To train the necessary technical personnel a regional FAO seminar is being organized in Hazaribagh, Bihar, India, in January-February 1957 at which all aspects of watershed management will be dealt with. Governments have been requested to nominate senior foresters and agriculturists for participation. It was proposed to follow up this regional seminar by national training centers, study groups, pilot field projects, etc., as may be requested by the governments. FAO is also preparing a handbook on watershed management which will provide a useful guide for technicians in the field. Knowledge by itself is not enough unless this is backed by adequate legislative and administrative measures at the national level to permit application of this knowledge in practice.

The very lively discussion in which Australia, France, India, Indonesia, Japan, Laos, Pakistan, Thailand, United Kingdom, United States and Viet-Nam participated, was in itself a clear indication of the recognition by the governments of the importance of this problem. Although no substantial progress was reported, the discussion brought out many important points, which can be summed up as follows :

- (a) For many areas, no sound plan of watershed management can be evolved without a proper solution of the problem of shifting cultivation. There is an obvious clash of interests between the nomadic people inhabiting the watershed areas and the people living down below in the valleys and alluvial plains. A compromise has to be found but this may not be easy in practice. The Conference was informed of the progress made in the FAO study of shifting cultivation. Because of the highly complex nature of this problem, the study has taken much more time than was anticipated. Fire, lumbering and grazing problems also have to be contended with. The Philippines delegation stressed the importance of examining the watersheds in detail to locate problem areas requiring urgent attention. This examination can be greatly expedited by aerial reconnaissance.
- (b) Intensive research and education are the necessary pre-requisites to provide a basis for sound planning of watershed management. Delegates of India, Indonesia and Pakistan gave an account of their research activities. A start has been made, but much remains to be done. The delegate of Australia suggested that as a first step there should be an assessment by respective governments of the extent to which catchment efficiency has been re-

duced, to determine the future line of action. There was also a suggestion for a regional study of the watershed management problems. The Indonesian delegate stressed the usefulness of a complete bibliography of the publications on forest influences. It was pointed out that a Working Party has been already established to deal with such matters.

- (c) The delegate of Indonesia reported the existence of various laws in his country for the protection of headwater areas, but these required co-ordination. Similar action has also been taken in India. The delegate of the United Kingdom, speaking of Malaya and Sarawak, informed the Conference that the policy for some considerable time has been to declare watershed areas as reserved forest where all actions detrimental to the interests of the forests will be prohibited. Some delegates pointed out that watershed management involves many socio-economic problems and that there was need for extension activities for the education of farmers, lumbermen and graziers inhabiting the watershed areas. Unless this was done, it was doubted whether legislation could be satisfactorily enforced.
- (d) There was need for co-ordination of the activities of various interests concerned with watershed management. In a federal form of government, as in India, Soil Conservation Boards composed of different agencies concerned with this problem have been constituted in various States, with a co-ordinating authority in the center. Similar action is under consideration by Pakistan.
- (e) There was some feeling that the financing of measures for watershed management would be facilitated if this were taken as the permanent responsibility of the authorities concerned with the administration of multipurpose river valley projects. Further, it was felt desirable that each catchment area should be treated as a separate unit of administration wherever possible.
- (f) The delegate of Laos asked FAO to undertake a study of the watershed management problems of the Mekong river which is of interest to no less than five countries. It was explained that the International Co-operation Administration of the United States is examining a project for harnessing this big river, and the Division of Flood Control and Water Resources Development of ECAFE is also taking an active interest. At some later stage FAO may co-operate on the watershed management aspects of this project when necessary.

The Conference commended the action taken by FAO, through the APFC, to organize the permanent Working Party on Watershed Management. It recognized the practical value of the proposed seminar in India in which it was desired that every government should participate.

The Conference also registered appreciation of the future activities of FAO in providing technical assistance in organizing national training centers, study groups and pilot field projects. The value of the proposed publication of the handbook on watershed management as a guide to technicians in the field was recognized, but some delegates felt that this should be supplemented by films as a medium of instruction.

Finally, the Conference recommended that the governments of the region should take note of the above discussion and adjust their legislative and administrative machinery, as found necessary, to organize watershed management on a sound footing. Further, the governments should recognize the importance of research in this field and assure the necessary financial support for such research activities. The organization of the Working Party on Watershed Management was a move in the right direction and governments were requested to provide adequate facilities for its satisfactory functioning.

### **E. The Role of Government in Fisheries Development**

In many countries of the region the fisheries are capable of considerable expansion and the Conference agreed that fisheries should occupy a significant and recognized place in general food development programs on economic, nutritional and social grounds. The Conference considered the problem of integrating fishery policy within over-all food policies, the magnitude of the tasks, the need for more adequately staffed and equipped central and local government services and the desirability of achieving a satisfactory balance in fishery development programs as well as effective co-ordination between the various agencies whose activities bear directly or indirectly on the operations of fish production and trade.

The delegates of Burma, Ceylon, India, Indonesia, Japan, Pakistan and the United Kingdom participated in the discussion.

#### ***Fishery Policies and Programs***

The delegate of India endorsed the need for balanced, co-ordinated programs and adequate public services, referred to India's food needs, and described the programs introduced by his Government under the First and Second Five Year Plans by which it was hoped to increase fish production from below 1 million tons in 1950 to 1,500,000 by 1961. The program embraced a wide range of activities comprising marine and inland fishery research, extension services, stocking of tanks and ponds, development of fisheries in multipurpose river valley projects, small craft mechanization, deep-water exploratory fishing, improvement of fishing harbors, processing, storage and transport, supply of requisites, training of fishermen and fishery personnel, and fishermen's education and financial



aid. Reference was made to external aid received from the International Co-operation Administration, the Norwegian Foundation and FAO and significantly to foreign investments in deep-sea trawling from Bombay and frozen shrimp exports. Some encouraging results had been achieved, notably in Bombay State where 680 craft had been mechanized and production had increased 400 percent since the war. However, production per fisherman was still low as a result of the limitations of craft and gear employed.

The delegate of Ceylon referred to the static fishing population, low production per fisherman and the increasing demand for fish, partly met by imports which it was hoped would be reduced through increased production. Following a period of strict control of distribution and prices (1940-50), a program of development was introduced with special emphasis on the mechanization and improvement of fishery operations by means of financial aid, the training of fishermen, co-operative marketing arrangements, including cold storage, transport and retail facilities, deep-sea trawling, exploratory fishing in inshore waters and the development of inland resources, especially through extensive stocking with herbivorous types of fish.

In this connection expert advice, equipment and facilities had been provided under the Colombo Plan and by FAO, while foreign investment had been attracted in the form of a joint Ceylon/Japanese venture engaged in long-lining for tuna. While the need for an appraisal of fishery resources was recognized, priority was given to social and economic measures to relieve immediate needs and to long-term research activities, directed toward increased production.

The delegate of Indonesia also endorsed the need for clear policy and co-ordinated planning. The fisheries industry made only a small contribution to national income, but the pressure of food needs, of which fish supplied 65 percent of the annual protein requirement, had called for a policy of active intervention by the government. At present the marine fisheries, due to the small-scale, scattered, and primitive nature of the operations, required considerable improvement and direction toward valuable marine stocks not yet under profitable exploitation, while much greater progress had been achieved in inland fisheries. He stressed the need for greater efforts in the field of extension, the provision of improved equipment and materials, education and training and research.

The delegate of Japan reviewed his Government's extensive program directed toward maintaining a very high level of fish production with due regard to the conservation of fishery resources. In this connection he mentioned the wide variety of services adapted to meet the different needs of highly industrialized long-range fishing and small scale inshore operations. A considerable increase of fish consumption had been achieved through improved facilities for storage and transportation, especially in rural areas.

The delegate for Pakistan described his Government's current Five

Year Plan which envisages an increase of fish production by 1960 of 30 percent above the 1955 level. Importance was attached to fisheries as a source of food, especially in rural areas, and as a source of foreign exchange through the export of dried fish and frozen shrimp. It was early yet to evaluate activities which had been promoted recently, in the form of a new fish harbor, which was under construction at Karachi to provide berthing, processing, marketing, storage and training facilities. The mechanization and improvement of marine operations, and the exploration of inshore and offshore fisheries were also in progress. For inland fisheries the derelict areas like tanks, ponds, bhils, etc., were being developed for increased production. In East Pakistan work had begun in connection with the great potentialities for increasing fish production from the extensive inland water areas.

The delegate of Burma expressed his interest in the subject under discussion with reference to the situation in Burma where, although the Government had a keen interest in the potentialities of Burmese fishery resources, various difficulties had so far prevented the execution of an adequate program of development. He looked forward to the promotion of the activities described by other delegations when available services and facilities could be provided. A start had been made and assistance had already been received from FAO in regard to the development of inland fisheries.

The delegate for the United Kingdom referring to the policies pursued in Malaya and Sarawak, stated their two-fold objective of increasing fish production to meet food needs while safeguarding the economic and social welfare of the fishermen. He described the highly successful program of small craft mechanization in Malaya and current biological research activities.

The delegate of the Philippines referred to the wide range of activities, current and proposed by his Government. These were designed to achieve self-sufficiency for the Philippines in the production and utilization of marine, brackish and freshwater fisheries products, and, where possible to produce surplus supplies suitable for export. Included in this program were plans for the promulgation of education and research in fisheries, the promotion of the co-operative system among fishermen and the development of fish-processing industries and the more efficient utilization of aquatic resources.

### ***Government Fishery Services***

A number of delegations referred to the small size of fishery departments in relation to their large programs of work and especially to the critical shortage of trained personnel. In India it was pointed out that the Central Government had responsibilities only in the matter of research, off-shore fisheries and the exploitation of extraterritorial waters, while

the main responsibility for the development of inshore and inland fisheries rested with the respective State Governments to whom, however, technical advice and financial aid were available from the central agency. Much progress had been achieved in the conduct of biological research based on various centers, and co-ordinated by the Central Fisheries Research Advisory Committee. The benefits had been limited by the lack of extension services, but since 1953 some very good results had been obtained in inland fisheries and the present six extension service units would be increased by ten under the second Five Year Plan. The shortage of trained officers in the fishery services generally was being partly relieved through established training centers where 114 officers had so far been trained and 35 were now under training.

In Ceylon the Fisheries Department first became an independent organization in 1940, and was re-organized in 1950. The problem of trained staff was still acute and was being partly met through training facilities provided under the Colombo Plan and by FAO.

In Indonesia strong extension services had been established for inland fisheries, but the marine fishery services were very short of trained personnel, in which connection the value of fellowships and international training centers was emphasized.

Pakistan set up a central fisheries department in 1950 to develop marine fisheries and to co-ordinate the work of the provinces. The Government was now expanding and staffing this department and those of the provinces. Advantage had been taken of opportunities for training abroad.

Burma at present had only the nucleus of a fisheries service and also lacked trained personnel.

In contrast to other countries of the region, Japan had a wide range of highly developed fishery services, conducting research, supplying assistance and advice in all phases of the industry and performing extensive supervisory and regulatory functions. Fishery education was highly advanced and ample facilities had been provided at all levels from research workers to fishermen. Referring to the shortage of trained personnel, the delegate of India described the facilities available in India for training in and management of marine and inland fisheries and expressed his Government's readiness to accept trainees from other countries interested in similar programs.

#### CO-ORDINATION OF GOVERNMENT SERVICES

A few delegations referred to the recognized need and scope for co-ordination of effort between fishery and other departments, and reported partial progress toward this aim, namely, in India, in the matter of planning, transport, river valley projects, river pollution, education and harbor facilities; in Ceylon, in the matter of roads, housing, co-operatives

and experimental fish-farming ; and in Indonesia, in the matter of inland fisheries in the rural economy. Japan also mentioned the integration of agricultural and fishery development plans, especially in regard to small-scale coastal fishermen requiring supplementary occupations. In this connection several delegations mentioned the desirability of regional co-operation and the benefits deriving from exchange of experience. The delegate of India referred to the need for joint investigation of species of common commercial interest — especially *Hilsa* and *Rastrelliger*, while Indonesia and Burma referred to the role of the FAO Indo-Pacific Fisheries Council in this connection.

## **Conclusions**

Discussion of the nature and extent of current fishery development programs reflected widespread agreement throughout the region as to the need to increase food production from the fisheries, mainly in the interests of improved nutrition and the social and economic welfare of fishery communities and in some cases, as a contribution toward improved balance of payments.

At the present time development programs must of necessity be restricted in scale and related to the limited means and staff available to fisheries departments, and there was general agreement that the fisheries services are in considerable need of strengthening in accordance with their responsibilities.

In some countries active development programs are well established and have been under way for some years, while in others governments are still in the process of formulating their programs and setting up the services required for their execution. In some cases the programs envisage the completion of certain stages over specified periods of time, with production targets in view, while in others the activities are of a more ad hoc character for the time being.

Some co-ordination of development activities occurs at planning level, but is often lacking at the interdepartmental level, although the fishery industries could undoubtedly benefit, because of their great dependence on other economic activities. The emergence in recent years of more comprehensive and well-defined plans represents movement toward a better balance in fisheries programs and also toward more co-ordination and economy of effort as the relation of these programs to other development activities becomes correspondingly more apparent.

## *Chapter 5*

### **ACTIVITIES REQUIRING CONFERENCE GUIDANCE**

#### **A. World Survey of Living Aquatic Resources**

The Conference agreed with the principle that a program for the most effective exploitation of a resource can be drawn up only on the basis of a reliable evaluation of that resource. It recognized that FAO, through its Fisheries Division, has embarked on a program relating to the measurement, description and appraisal of the living aquatic resources of the world, with the objectives of:

- (a) providing the widest and most effective dissemination of information systematically collected and compiled, concerning these resources ;
- (b) constantly developing and improving methods for the investigation of resources ;
- (c) promoting improvements in the planning and conduct of resources surveys ;
- (d) securing the best use of resources information for the fullest and most effective exploitation of these resources compatible with the general policy.

Statements from Ceylon, India, Indonesia, Japan, Pakistan, and the Philippines demonstrated that these Member Governments are giving serious consideration to developing an appraisal of their fisheries resources at the national level, but that there are grave difficulties to be overcome. It was pointed out that the work-load now being borne by the, in many cases, relatively small fisheries staffs is so great that any further diversification of activities would result in a diminution of work in other more immediately important fields in national fisheries programs.

It was emphasized that the most pressing problem is to ensure greater exploitation of the resources in order to improve the food supply situation and that fisheries programs tend to be heavily biased in this direction.

Efforts are being made to obtain production statistics and the delegate of Ceylon stated that the IPFC at its Sixth Session had recommended the collection of such data on a comparable basis throughout the region.

In India, some pilot surveys have been carried out, and a special fisheries survey unit has developed sampling techniques which enable the estimation of marine fish landings and their composition to help in assessing trends of catch by species ; a Fisheries Survey Unit has been established for the Ganges River system. Other steps are also being taken toward a survey of the living aquatic resources of the country.

In Pakistan a survey of the Mekran Coast has been carried out and development plans for fisheries production are under execution. In addition biological and planktonological surveys are in progress.

National surveys in fisheries statistics and biology and in oceanography are in progress in Japan. Owing to staff limitations, Ceylon is not yet able to undertake additional resources survey activities, but current research and statistical programs might contribute usefully to the world survey.

In Indonesia, it is thought that marine fisheries production could be considerably expanded, although there were indications of possible over-exploitation in parts of the Java Sea. Staff limitations made it impracticable at present to initiate surveys to determine the validity or otherwise of these qualitative assessments. A considerable body of information exists concerning the inland waters of Indonesia, their production and fisheries potential, and work on this aspect and on fish culture is continuing. The delegate of Indonesia urged the establishment of training centers in fisheries survey methods.

Biological and statistical surveys in the Philippines have demonstrated progressive deflation in some areas and efforts are being made to introduce a system of management involving control of fishing effort and the diversion of fishing effort to new areas. The Bureau of Fisheries has an extensive program for surveying the living aquatic resources of the Philippines.

The delegates of Japan, and the Philippines supported the world survey proposals, and intimated that their Governments would willingly co-operate with the FAO Fisheries Division in the task. The delegate of Pakistan supported the proposals in principle, but stated that his Government would wish to study the financial implications before making a final commitment.

## **B. Survey of Agricultural Education in Relation to Needs**

Expanding services of ministries of agriculture, extensive development projects and growing agricultural industries are creating an increasingly heavy demand for agriculturally trained personnel in countries of Asia and the Far East. There is a demand for personnel in many technical fields and at all levels of technical competence, although there is great variation between countries in the extent to which this need is being met in various fields, and the levels of training in which the shortage is most acute.

A basic problem in many countries has been a weakness in general elementary education in rural areas, since elementary education must serve as a foundation for secondary, vocational and university training. As a consequence, some delegations reported that many agricultural college students did not have an adequate preparation for college or university work of a high standard.

Although most delegations reported a need for additional personnel in all fields of agricultural development and at all levels, the Ceylon delegation reported some difficulty in finding job opportunities for farm school graduates. This was attributed to the land tenure situation which makes it very difficult for young men to establish themselves as farmers. The Philippines delegation reported that a survey of agricultural education in that country indicated that the prospective supply of agricultural students would about equal expected requirements in farming, government services, teaching, and private employment. On the other hand, one country reported that a large number of sanctioned posts both in agriculture and in animal husbandry are remaining unfilled, although efforts are being made to meet the shortage.

The problem of agricultural education is not only one of quantity but of quality and type of education to be provided. The conference recognized a need for training in many fields if government services, development programs, schools, research stations and private agricultural organizations are to be adequately staffed. Modern agriculture requires the services of personnel with training in nearly all of the natural sciences as well as specialized training in agriculture. Economics, sociology, education, psychology and other disciplines are also involved. Increasing attention is being given to the various branches of home economics, since it is realized that the health and wellbeing of the village family has a profound influence upon agricultural development. It is extremely difficult for many young and sometimes economically weak countries to provide adequate training in all of these fields and to channel students into such training proportionately to the needs for trained personnel which will be experienced several years hence.

Not only is personnel needed with various kinds of technical and scientific training, but a number of different levels of training are required. In most countries there is a severe shortage of highly trained scientists to carry on the necessary agricultural research and to serve as university teachers. A much larger number of degree and diploma graduates is required as secondary school teachers, extension workers and in other government services. This need is being met in varying degree by the expansion of existing facilities and the establishment of new colleges and universities. Nearly every country reported progress in this line, but indicated difficulty in staffing new and expanding institutions. The Colombo Plan, ICA, the Ford Foundation and the Rockefeller Foundation are rendering invaluable help on this and other related problems. Interuniversity co-operation, such as that between American and Asian

institutions, promises to be one of the most fruitful means of staffing teaching institutions under present conditions. FAO was asked to explore the possibility of developing a similar movement between universities within the region.

An interesting approach to the problem of shortage of veterinarians has been developed in India. Students are given a two-year course in practical veterinary training after which they are allowed to practice in such fields as vaccination, artificial insemination etc. Provision has been made for them to return to the university later and complete their degree course. A similar approach is being made in Pakistan where graduates in zoology or entomology are given short training for employment in plant protection work.

In addition to degree graduates, tens of thousands of lower echelon personnel are required to staff government services, to teach agriculture in elementary and secondary schools and to supply the multitude of technical agricultural services required by government and industry. It is probably in this area that the greatest present and prospective shortage exists. The countries of the region are all attempting to meet this need, by such measures as the establishment of training centers for village-level workers in India and Pakistan, the mass education centers in Burma and the agricultural schools for both men and women in Ceylon. Short courses in various technical fields are also used as a means of providing staff with elementary training in various fields.

A final category of agricultural education involves the training of future farmers. The farm schools of Ceylon and Indonesia and vocational agricultural schools in the Philippines and India are examples of this type of training, but great expansion is required to meet the needs of modern agriculture.

A number of problems, in addition to those already mentioned, were reported by the delegates as obstacles to the development of agricultural education. Shortage of buildings and equipment is a problem in many countries. Development plans in most countries provide for expansion of such facilities. In India, local communities, through the community development program, contribute to a solution of the building problem by supplying voluntary labor and some locally produced materials.

A shortage of text books printed in the national language and applying to the local conditions was mentioned by several delegations. It was recognized that translation of western publications was not always satisfactory.

Low earnings of agriculturally trained personnel were reported to discourage many of the most promising students from entering training in this field, and even from entering agriculture or other rural development services. As a step toward improving the quality of agricultural education and thus the prestige of agriculturally trained people, it was suggested that agricultural education needed to be upgraded and put on an equal standard with other fields of education in institutions where this



is not already the case. More careful selection and screening of students was also suggested as a means of improving standards. Systems of vocational guidance were suggested as a means of directing students to fields of training for which they are best suited and where greatest opportunities are likely to exist in the future.

Fellowships and foreign training programs were discussed by delegates of countries of the region and by representatives of countries where training takes place. Grateful appreciation was expressed for this type of technical assistance, but a number of problems were mentioned in connection with it. Some countries have had difficulty in releasing experienced personnel for long periods of training and, as a consequence, in some instances those selected are not qualified with the proper educational background. Language is often a problem and several months may elapse before the fellow becomes proficient in the language of the country of study. Indonesia was complimented for the special language instruction now being given to a group of fellows to be sent shortly to a foreign country. It was reported by the representative of Australia that fellowship holders may in some instances make a valuable contribution to knowledge in the country of study, thus making the program of mutual benefit to both countries. It was generally agreed that fellowship programs are a very valuable form of agricultural training and should be continued.

A number of suggestions were put forward as a means of improving agricultural education in the region. The establishment of a regional organization of agricultural schools and colleges was suggested as a mechanism for the exchange of ideas and information and as a voluntary body to develop standards for matriculation, courses of study, degrees, etc. Periodic regional conferences of agricultural teachers and administrators were also suggested as a means of exchanging information and ideas. Continuous evaluation of progress was recommended.

FAO was asked by some countries to assist in supplying staff for the training of agricultural teachers. It was suggested that such requests be considered by governments in developing their country technical assistance programs for submission to FAO and to the Technical Assistance Board.

A survey of agricultural education in relation to needs, proposed in the working paper on this subject, was considered by the Conference and supported by a number of delegations.

The FAO Secretariat reported that a World Directory of Institutions of Higher Agricultural Education is now in final stages of preparation and should be of value in planning such a survey. Some delegations reported the assembling of considerable information on their facilities for agricultural education and a few have assessed their total prospective need for technically trained personnel for a period such as five years. Completion of the assembly of this kind of information in all countries would provide a background for further planning and development of agricultural education in the region. The delegate of Laos suggested the desirability of

intercountry co-operation in developing facilities for agricultural training with special consideration being given to the grouping of countries on a language basis. A regional survey of agricultural education in relation to needs could form a basis for such co-operation.

### **C. Regional Working Party on Agricultural Prices and Costs and Price Support Policies**

The Conference was informed that the Government of India had proposed to FAO in 1953 that a regional meeting be held on cost of production surveys in agriculture, in view of the particular interest in the subject at that time. However, FAO had not been able to act in the matter.

In 1956, in talks between FAO and Indian representatives it had been agreed that the scope of the proposed meeting might very usefully be enlarged to cover, in addition to questions of cost of production in agriculture, the application of such cost data to the establishment of agricultural price support levels and to price policy generally. It had been anticipated then that this working party could be held in India sometime in 1957, and specialists in this field would be invited to attend from other countries in the Asia and Far East region, with possibly one or two from outside the region.

It had since become apparent, however, that the 10 percent ceiling imposed by the Technical Assistance Committee on Technical Assistance funds for regional projects would oblige FAO to omit this working party from its 1957 program. However, the FAO representative present informed the Conference that if governments of the region generally were in favor of this kind of meeting, high priority would be given to it by the Organization when drawing up its 1958 work program. The Conference was therefore invited to express its views on the matter.

The delegate of India affirmed the continued interest of his Government in the working party, and stated that he would welcome its being held in 1958.

The delegates of Australia, Burma, Ceylon, France, Japan, Pakistan, the Philippines and the United States then spoke in support of the proposal to hold such a working party. The delegates of Ceylon and the Philippines illustrated from the experience of their countries some of the difficulties that could arise in connection with price policies. These experiences led them to believe that the opportunity to exchange information about price policies, methods and results which such a working party would afford would be of value to governments. The delegate of the United Kingdom stated that he was unable to support the proposal, but recognized that other governments of the region might be in a position to apply directly the conclusions of such a working party.

The delegate of Australia drew attention to the danger of overlapping with the FAO Expert Working Party on Systems of Price Support scheduled to take place in Rome in December 1956.

On this point the delegate of Japan considered that there was little danger of duplicating the work of the Expert Working Party since the two meetings would require different types of personnel. The Indian delegate was of the same opinion. However, to assist collaboration it was thought desirable, on the initiative of the delegates of Australia and Pakistan, to inform the Director-General of the interest of the Regional Conference in the Rome meeting, and to request him to invite the Expert Working Party to give attention to price policy formulae appropriate to countries of Asia and the Far East.

The interest of the discussion centered upon the subject and agenda of the proposed regional working party. It was generally agreed, on the initiative of Japan, that cost of production of agricultural products was too narrow a basis for the working party and that its scope should be widened to cover food and agricultural price policies generally, in relation to countries of Asia and the Far East. This would enable the meeting to come to grips with important practical problems being faced by almost all governments in the region.

It was agreed that the agenda should provide for discussions of:

- (a) the objectives that are appropriate to price policies in the region, and the priorities among them ;
- (b) the various formulae of price policy, such as cost of production, parity ratios, farm income calculations, etc., considered in relation to the achievement of the objectives of price policies in the region ;
- (c) the subsistence and non-monetary aspects of farming in the region, as conditioning the appropriate objectives and formulae ;
- (d) the effects of price policies, in relation to agricultural development and general economic development, including effects on consumer welfare and foreign trade.

The delegates of Burma and France, while warmly supporting the proposal, urged that the regional working party should keep to the realities of the problems facing governments, and not become automatically involved in points of mainly academic interest. If the purpose of the working party were limited in the way suggested, its results could be useful in other regions of the world.

#### **D. Regional Working Party on Crop and Livestock Insurance**

It was recalled that the previous Regional Conference held in August 1953 had recommended that a working party should be set up to con-

sider the methods of crop and livestock insurance which had been adopted by countries in the region and elsewhere, and to report on the possibilities of extending crop insurance more widely.

The Conference was informed that in pursuance of that recommendation FAO had begun studies in 1954 of the various systems of crop and livestock insurance operating in different countries. The working party was held from 27 August to 7 September 1956 in Bangkok, and was attended by delegates from Cambodia, Ceylon, India, Japan, Korea, Philippines and Thailand.

In its report, which was tabled at the Conference, the working party stated that crop insurance and livestock insurance were necessary in countries of Asia and the Far East and were feasible provided due account was taken of the special difficulties involved. The desirable features of practicable schemes were indicated in the report.

In order to supplement the experience of crop insurance in Japan and of livestock insurance in Japan and Korea, the working party recommended that pilot schemes might be initiated in as many countries of the region as possible. Those countries which were at present unable to start pilot schemes were advised to commence the collection and analysis of the statistical data required for laying a sound actuarial basis for crop insurance and/or livestock insurance at a later date.

Governments were advised to seek the technical assistance of FAO in respect of the initiation of schemes and the training of the necessary personnel. In particular the working party considered that FAO might be requested to organize a regional training course for the senior crop insurance officers required for initiating crop insurance.

The delegate of Pakistan emphasized that there was a great need for crop insurance in a country such as his where agricultural production was subject to serious natural hazards. He expressed the view, however, that detailed and accurate data regarding soil conditions, climate, acreage yields, etc., were needed before any crop insurance program could be run efficiently and successfully. In view of this he felt it would be very useful if help could be given by FAO in indicating the specific data required for the initiation of schemes and, later on, in the formulation of pilot projects.

The delegate of Ceylon said his Government endorsed the recommendations. An FAO expert had already drafted a pilot scheme for Ceylon and the Government was considering its adoption. He said that his Government was already involved in the payment of relief to farmers whose crops suffered severely in natural disasters, and it preferred to make these payments in the form of subsidies under a crop insurance scheme to which the farmers themselves contributed. Noncontributory relief payments were demoralizing.

The delegate of India agreed in principle with the need for such insurance. He stated that his Government had been considering crop and livestock insurance since 1947, and had drafted pilot projects. However, the State governments who had the responsibility, were unwilling to share

the necessary expenditure with the Central Government. The Indian pilot proposals did not provide for indemnifying livestock against total incapacitation, nor for the Government to share the insurance premiums, and differed in these respects from the working party's proposals. India would not be able to implement schemes immediately.

With these qualifications the working party's recommendations were endorsed by the Conference.

## *Chapter 6*

### **MATTERS REQUIRING GOVERNMENT ATTENTION OR INTERNATIONAL CO-OPERATION**

#### **A. Co-operatives as a Means of Fostering Fisheries Development**

The Conference discussed the value of co-operative organization in fisheries and recent experience in the region with special reference to current FAO activities, viz., (a) an investigation of the functions performed by middlemen and co-operatives respectively and their influence on fish production and trade ; (b) a training center in fisheries co-operatives and administration to be conducted in 1957 under FAO's Expanded Technical Assistance Program.

The delegates of Australia, Canada, Ceylon, India, Indonesia, Japan, Pakistan and the Philippines participated in a discussion which emphasized the importance attached by most governments of the region to the co-operative movement as a means of fostering fisheries development generally and of strengthening the economic position of fishermen in particular. It was also evident that in most cases the extension of the movement to fisheries has been inspired by successful experience gained among small producers in agriculture. However, there are special difficulties in fisheries arising from the extreme vulnerability, poverty and ignorance of the fishermen and also from the complexity and technical problems of the fishery industry itself. Of particular importance is the still imperfect handling of fresh fish catches owing to the limitations of refrigeration facilities at present available.

#### ***Current programs***

A review of recent developments in a number of countries showed that the co-operative movement in fisheries is quite old in some countries like India, Ceylon, Japan and Indonesia, and of comparatively recent growth in others like the Philippines and Pakistan. In all cases it has received a great impetus from the impact of postwar food policies. While reference was made to certain administrative functions, e. g., in regard to the lease of fishing rights in India and Japan, it was stressed that a

primary objective in all cases has been to channel finance to the fisherman in order to relieve indebtedness and improve his performance. In this connection, reference was made to credit facilities available in Ceylon, India, Japan, Indonesia and the Philippines. Also consistent with this objective has been the setting up of supply co-operatives through which fishermen's requisites are supplied at cost or concessionary prices. In general this has proved a very convenient means of assisting fishermen and has succeeded in many places.

However, although much progress has been achieved in the limited sense that the number of credit and supply societies has increased and is increasing, it was emphasized that these measures alone have not proved sufficient to induce significant changes in the fishery economy as a whole. Several delegates urged an active and resolute intervention in the field of marketing as the only effective means of ensuring adequate returns to the fishermen and reducing excessive distribution costs. References were made to established co-operative fish-marketing organizations in certain countries, which revealed some differences of approach to this problem. In Ceylon, the Co-operative Fish Sales Union offers the fisherman an alternative marketing outlet at guaranteed prices while in Indonesia, freely competitive first-sales are promoted through the co-operative ownership of 109 fish auctions, out of 159 such auctions.

The delegate of India referred to marketing societies in India which have succeeded in a few places where the Government has been able to strengthen the societies' bargaining position through the ownership of facilities for storing, processing and transporting catches. He emphasized the critical need for more trading capital on the part of the societies and the inadequate resources of the fishermen members in this respect. In the Philippines this problem is being tackled through the provision of facility loans and commodity loans covering much of the cost of essential marketing facilities and of catches delivered by members for sale by the societies.

In relation to the different measures applied, the Conference concluded that while some success has been achieved and much valuable experience has been gained in some countries, the movement as a whole is in need of considerable strengthening from the point of view not only of operating capital and facilities, but also of training in the organization and management of societies and of technical experience in the conduct of fish trading. Attention was drawn to the following outstanding problems requiring urgent attention.

### ***The Middleman Problem***

There were many references to the firmly entrenched position of the middlemen almost everywhere in the fishery industries of the region, and to the serious obstacle which this offers to the successful promotion of co-operative activities. In large numbers of scattered fishing centers

remote from the main retail outlets, the fishermen are entirely dependent for the disposal of their catches on a few dealers who control the only available facilities for distributing a highly perishable commodity under very difficult conditions of climate and distance. This dependence has been increased by borrowings to cover the purchase of essential equipment and stores so that many fishermen are closely tied to middlemen not only by their involuntary trading relationship but also by heavy, unrecorded indebtedness. The situation is reflected in arbitrary price-fixing and other abuses, and in the absence of incentives to the fisherman to increase his catch. In certain regions of Pakistan the Agricultural Produce and Markets Act has been enforced to control the charges and number of middlemen in the markets. The experience so far gained is quite encouraging.

At the same time the Conference recognized that the position of the middlemen is due to the particularly difficult conditions under which fluctuating supplies of fish have to be landed, distributed and sold, and to the fact that they perform certain functions indispensable to the continuity of fishing operations, especially the timely supply of credit. It is difficult for a government, through co-operatives, to perform these same functions with the same degree of flexibility, and it was recognized that the fish trade itself is a complicated, delicate and highly specialized business in which the commercial experience of the middlemen is much greater than that of the government departments and co-operative leaders. Far too little is known as yet of the precise manner in which the middlemen operate, their turnover, profit margins and influence on price formation and extent of distribution.

### ***Education and Training***

The discussion emphasized the importance of leadership in the promotion and management of fishery co-operatives and referred especially to two aspects namely :

- (a) the need to inspire among the fishermen a genuine desire for co-operation and to educate them to more effective participation in the movement ; and
- (b) the need for leaders adequately trained in both the organization and management of co-operative societies and in the special problems of handling, utilizing and distributing fish products commercially.

The Conference noted and warmly welcomed offers of assistance in this connection from Australia and Canada. The delegate of Australia announced his government's recent invitation to FAO to conduct a training center in fishery co-operatives and administration in Australia in 1957. The co-operative movement among fishermen had flourished in



Australia and had proved very successful in overcoming many of the problems under discussion. The Australian Government would welcome an opportunity to sponsor such a regional center and to share their experience in the management of fishery co-operatives.

The delegate of Canada referred to Canadian experience of the problems described both in Canada and in the region, and the extent to which these had been overcome by co-operative endeavor among fishermen. Reviewing the extensive training facilities available in Canada, he invited FAO and the members of the Conference to avail themselves of these facilities and expressed his government's willingness to co-operate in making arrangements.

### ***Conclusion***

The Conference agreed that the outstanding problems which should engage the attention of both governments and FAO in this field are those related to the functions of middlemen and to the training and experience of fishery co-operative leaders. Accordingly, the Conference expressed strong support for the current activities promoted by FAO concerning an investigation of the respective functions performed by middlemen and co-operatives, and for the proposed FAO/ETAP Training Center in Fishery Co-operatives and Administration. In this connection, the offers of assistance from Australia and Canada were also warmly welcomed.

## **B. The 1960 World Census of Agriculture**

The Conference was informed of the plans of FAO for conducting a world census of agriculture in 1960. Delegates stressed that the greatest benefit and economy could be obtained for both Member Governments and FAO if the census program were designed to fit the needs of Member Governments in Asia and the Far East, as well as to provide internationally comparable statistics. Consequently, great importance was attached to the conference of regional statisticians in the Far East scheduled for early 1957 to examine FAO's draft program for the census, and attendance by Member Governments at this conference was recommended.

The delegate of Japan welcomed the changes envisaged from the 1950 census program, and noted that many census items which were suitable for conditions in Western nations were not necessarily appropriate for countries of Asia and the Far East. He noted the advances that had been made in the field of sampling, which would enable wider scope for census coverage. The delegate of Japan hoped that the draft census program would be made available as soon as possible.

The delegate of India stated his Government's intention of co-operating with FAO in the census program, and indicated that the Indian Second

Five Year Plan contained a tentative provision for financing the census in India. He hoped that it would be feasible to combine the agricultural census in India with the planned census of population because this would result in more useful information being obtained ; but this depended in part on the time reference chosen by FAO for the World Census of Agriculture. The delegate of India also welcomed the changes FAO was proposing in the 1950 census program, and particularly those relating to more extensive use of sampling methods.

Realizing the importance of an agricultural census to provide data needed for general economic and particularly agricultural planning, the delegate of Indonesia stated that his country planned to conduct such a census as soon as possible. He indicated that a census of population was planned for 1960, and that some questions relating to agriculture would be included. When the results of the population census were available, these could be used as a basis for sample surveys on items dealing with agriculture. In addition, he reported that the Indonesian Government was preparing to set up a training course for agricultural statisticians in order to fill the need for qualified workers in this field.

Several delegates stated that they would be glad to have the assistance that FAO was planning in connection with the census.

### **C. Plant Protection Agreement for the Southeast Asia and Pacific Region**

The Conference was informed that the Plant Protection Agreement for the Southeast Asia and Pacific Region came into force on 2 July 1956 with the signature of nine governments, of which five became parties to the Agreement.

The Conference was fully aware of the importance of concerted international co-operation in the field of plant protection without which it was impossible to prevent effectively the introduction of destructive plant diseases and pests from other parts of the world and their spread within the region. It was highly desirable therefore that all governments concerned become parties to the Agreement as soon as possible. The Conference was gratified to note that France was prepared to adhere to the Agreement in the near future.

The establishment of the regional committee to be known as the Plant Protection Committee for the Southeast Asia and Pacific Region was also fully supported by the delegates, most of whom expressed the willingness of their governments to participate in the meeting of the Regional Committee, which was being convened in Bangkok from 3 to 7 December 1956, to deal with all the important technical questions relating to implementation of the Agreement.

In this connection, it was suggested that a point raised by the delegate of Ceylon regarding the desirability of inclusion of noxious weeds,

such as water hyacinth and *Salvinia*, in the list of destructive diseases and pests appended to the Agreement could usefully be referred to the regional committee. It was thought desirable, as mentioned by the delegate of India, for each government concerned to prepare lists of pests and diseases not yet occurring in their territory, but of potential danger, for submission to the regional committee. The delegate of India also drew attention to a destructive fungus disease affecting the leaves of coconut trees in Southern India and asked FAO to explore the possibility of advising on effective measures to combat this disease.

The Conference took note of the progress of plant protection work reported by the delegations of Philippines, Viet-Nam, Indonesia, Ceylon and France. Attention was drawn to the importance of training personnel in this field. The delegate of Viet-Nam expressed a desire for the regional committee to study setting up a regional phytosanitary institute in order to make possible a common approach to the problem among the governments concerned.

The Conference also recalled that at the FAO Council session which approved the Agreement, the Director-General was urged to outpost an experienced plant protection officer to the FAO Regional Office in Bangkok in order to assist in the implementation of the Agreement. Since, however, this was impossible under the regular budget and the proposal also met the budgetary difficulties of regional projects under the Technical Assistance Program, it was suggested that governments might consider joining their forces for a so-called group-country project in 1958.

#### **D. Livestock Improvement**

Selected recommendations of the FAO Meeting held at Brisbane in August 1955 on Livestock Production under Tropical and Subtropical Conditions were placed before the Conference for consideration. Also tabled was a proposal by the delegate of India for the "Co-ordination of Rinderpest Eradication in India and other Countries in the East and Far East". The Conference decided to consider the Indian proposal under this agenda item, along with other aspects of livestock improvement.

The delegations of Australia, Denmark, India, Indonesia, Laos, the Netherlands, Pakistan, the Philippines, Thailand, the United Kingdom and Viet-Nam contributed to a lively discussion on the broad principles of livestock improvement, indicating what was being done in their countries to apply these principles. In addition to endorsing selected recommendations from the Brisbane Livestock Meeting, which had been placed before the Conference for consideration, the discussion resulted in a number of further proposals, mostly regarding methods of international collaboration for livestock improvement.

The debate demonstrated that most countries in the region have by now drawn up, and are in the process of implementing far-reaching

programs for the protection and betterment of herds and for the development of the whole livestock industry. However, some delegations reported serious inadequacies in the work which it has so far been possible to undertake.

### ***Objectives of Livestock Policy***

There was general agreement that a basic objective of livestock policy must be the closest possible integration of crop and animal husbandry. This would ensure a permanent agriculture with conservation and enrichment of the soil, ease the problem of producing adequate nutritious feed, provide a supplementary and more even flow of income for farmers and spread opportunities for employment over the year.

It was agreed that attention must be paid to all aspects of livestock improvement, namely disease control, feeding and management and breeding if progress is to be made. To ignore disease control would be suicidal, but unless long-term measures are taken from the beginning to develop pastures and fodder production, the benefits of disease control and breeding programs cannot be realized.

### **THE PROBLEM OF NUTRITION**

The Conference emphasized that the problem of feed supplies was the real limiting factor to livestock development. Disease control and breeding problems were much more amenable to solution. They fell more into the sphere of government action, whereas the extra feed required had to be grown by the farmer. Furthermore, in many cases any increase in the area devoted to grass and fodder crops must be at the expense of the food crop area. However, the net result is often an increase in the quantity and particularly the nutritive quality of the total food produced.

Considerable work had been done on the survey of grasslands. The time had come for more practical work on the introduction of better varieties of grasses and fodders and in the management and use of grasses, legumes etc. Several delegations emphasized the need for more help from FAO in these lines of work.

In this connection Ceylon reported excellent experience with Signal Grass (*Brachiaria*, *Brizantha*), imported from Australia and later from East Africa, the original home of this species, which had proved successful under a wide range of climatic conditions and promises to transform the pasture situation in the island. Ceylon would be glad to make planting material available to other countries in the region.

More attention needed to be given to feeding practices in relation to the chemical analyses of grass and feedingstuffs, including rice straw. The delegate of Thailand mentioned an interesting project for an animal nutrition map of Thailand, to be correlated with the soil map.

## GENETICAL IMPROVEMENT OF LIVESTOCK

It was generally agreed that in most countries genetical improvement of the livestock, through importation of selected animals and crossing with indigenous stock, was a very necessary process. Some countries were badly in need of breeding stock owing to wartime losses. Some countries had found that selection alone gave very slow results; however, others already possess superior breeds. The assistance of FAO in the importation of breeding stock was requested by many delegations.

Several countries gave an account of their work on livestock breeding.

The technique of concentrating in the first instances on selected areas, as in the Key Village Scheme in India and the Village Aid Program in Pakistan, was reported as offering a practicable approach to a vast problem. In this way livestock breeding and general livestock improvement can be integrated with improvement in other fields.

There was considerable discussion on the recommendation of the Brisbane Meeting that animals imported from temperate climates should be tested for heat tolerance where possible. A few delegates had expressed doubts as to the need and/or practicability of this recommendation, but it was generally agreed that such testing could help avoid mistakes, since individual animals from the same breed can differ widely in their degree of heat tolerance. However it was recognized that facilities are at present limited and that the testing will not always be feasible.

Delegates generally placed great importance on developing and using the technique of artificial insemination, but agreed that it is important to investigate its acceptability in terms of public opinion. Some countries, including India and Ceylon, reported considerable experience in artificial insemination which could be helpful to those countries in the region that are now in the pilot stage of this work or have hardly used the technique. Some delegations expressed a wish for more information on the problems involved.

## CO-OPERATION FOR RINDERPEST ERADICATION

India summarized the steps which had been taken, under FAO's auspices, since the initial meeting in London in 1946, toward the eventual eradication of rinderpest in Asia and Africa. At the Nairobi Meeting (1948) it had been concluded that this could be achieved only by the closest international co-operation, especially along boundaries. In India a pilot scheme for complete eradication undertaken in the southern part of the country would be extended to the whole country during the second Five Year Plan. India would therefore now like to see effective international arrangements come into effect for :

- (a) eradication of rinderpest in border districts of adjacent countries, with a gradual extension of the immune zones from the borders inwards ;
- (b) prompt dissemination of information, regarding the prevalence of the disease in the border areas of one country, to the neighboring country or countries ;
- (c) establishment of quarantine stations to control movements across borders.

The hope was expressed that FAO could take the initiative in the setting up of such arrangements and that help could be given in supplying equipment. The Conference fully concurred in these proposals.

The delegate of Pakistan indicated that a pilot scheme for eradication of rinderpest was also in operation in his country and will be greatly expanded during the first Five Year Plan. Thailand reported that it had co-operated with Cambodia, Laos and Viet-Nam to form an immune zone along their respective borders. The delegates of Ceylon, Indonesia, the Philippines and Thailand pointed out that their countries were free from rinderpest.

### ***Training of Personnel***

The Conference agreed on giving priority to the training of personnel in all of the many and varied aspects of livestock improvement. In some cases short-term emergency courses could produce urgently needed personnel quickly, but such people should be given an opportunity to complete this training later.

#### **ASSISTANCE FROM COUNTRIES OUTSIDE THE REGION**

The delegates of Australia, Denmark and the Netherlands pointed out that their countries had had much experience in livestock problems and offered assistance along specific lines. Australia may be able to serve as host for the FAO Dairy Training Center scheduled to be held in 1959. Denmark might send experts to working parties or organize courses in Denmark. In particular it could give advice from its extensive experience in artificial insemination work. The Netherlands offered assistance along similar lines.

### ***Recommendations of Brisbane Meeting***

There was unanimous support for the recommendations of the Brisbane Meeting, except for the query already mentioned regarding heat tolerance tests.

The Conference considered that the proposed Working Party on Livestock Production would serve very useful purposes in stimulating and guiding the implementation of the recommendations of the Brisbane Meeting. One country had already nominated its representative and several delegations would take this matter up on their return to their countries.

### ***Additional Proposals***

The delegation of the Philippines proposed that a livestock study tour of various countries, along the lines of the Extension Study Tour, would be very helpful for the intraregional exchange of experience.

The delegate of Thailand proposed the establishment of a working party on pasture and fodder development, on the pattern of that for the Mediterranean area. Thailand also raised the possibility that a regional plan for the manufacture of vaccine might be worked out, with certain countries being designated to specialize in certain vaccines for use in several countries. The exchange of fellowships within the region was also proposed.

It was agreed that these proposals could usefully be examined by the Working Party on Livestock Production when it is established.

### **E. Uses of Domestic and Imported Agricultural Surpluses for Financing Economic Development:**

The possibility of using agricultural surpluses as an aid to economic development was brought to the attention of the Conference. It was pointed out that, under certain conditions, the disposal of domestic or imported surpluses for this purpose would be in accordance with the "Guiding Lines and Principles of Surplus Disposal" formulated by FAO's Committee on Commodity Problems. These provide that surpluses should be used to stimulate consumption, but should do so without prejudice to the markets of agricultural producers either in the countries in which surpluses are used or in international trade. There are several different circumstances under which surpluses can be used to further economic development, including making increased deficit financing possible in a developing country, the provision of the initial reserves required for a crop insurance scheme, or the provision of part of the financing for milk distribution projects similar to the Bombay Milk Scheme.

The delegates of Australia, Canada, Denmark, India, Japan, Netherlands, United Kingdom and the United States, spoke on this subject. FAO's *Uses of Agricultural Surpluses to Finance Economic Development in Underdeveloped Countries — A Pilot Study in India* was commended by the Conference. It was generally accepted by the Conference that it

was feasible and desirable to use agricultural surpluses to increase consumption and provide part of the financing for economic development, although several delegates commented on the complexities involved in practical implementation.

It was the opinion of the Conference that if the principles formulated by FAO were observed, surpluses need not have adverse effects on the normal markets of agricultural products. Several delegates observed that care should be taken to adhere to the "Guiding Lines and Principles of Surplus Disposal".

The delegate of India observed that his country's second Five Year Plan had gaps with regard to both internal financing and foreign exchange. He indicated that agricultural surpluses would be of assistance in filling these gaps, and reported that a study was now being made of the extent to which this is possible. This will depend on such things as crop conditions in India and the pace of development activity. He noted that stocks of agricultural surpluses can be used as insurance against natural calamities, to stabilize prices, to finance economic development and counteract inflationary tendencies if they appear. The delegate of India emphasized four factors in the use of agricultural surpluses to aid development :

- (a) the use of surpluses was favored as part of the financing of the national development program, as opposed to individual projects ;
- (b) surpluses for this purpose should be made available as grants or on long-term loans ;
- (c) it was desirable to have the assurance of a supply of surpluses for several years to permit efficient planning and programming ; and
- (d) surpluses should be made available at prices no higher than domestic prices in recipient countries to avoid the necessity of subsidizing their sale.

The delegate of India also commented that the surpluses to be obtained pursuant to the recent \$360 million agreement with the United States would be additional to normal imports of the same commodities.

The delegate of Japan reported that his country was using the counterpart funds derived from the sale of agricultural surpluses to provide part of the financing for the country's development plan, and that counterpart funds so obtained were used to finance agricultural development loans, which will enable large development projects to be completed quickly and increase productivity in agriculture. He emphasized that care was being exercised to insure that there was no interference with normal imports.

The delegate of Australia indicated that there is no doubt that some benefits arise from the financing of economic development by the technique of surplus disposal, but he had several reservations in this regard. He



considered that the conditions set forth in *A Pilot Study in India* were so complex as to be difficult to fulfil in practice. He noted that it was likely that only part of the additional income generated by the use of surpluses would be spent for them, and that the remainder would serve to depress prices and displace normal trade. The delegate of Australia considered that the secondary results of financing by this method are never as effective as they seem, and that they can have unfavorable effects on local producers, on the stability of a reasonably employed community, and on other exporting countries.

No delegation reported the use of domestic agricultural surpluses for financing development.

## *Chapter 7*

### **THE FUTURE ORIENTATION OF FAO'S WORK IN THE REGION**

This item of the agenda led to an interesting discussion to which the delegations of Australia, Canada, Ceylon, Denmark, India, Indonesia, Japan, Laos, the Netherlands, Pakistan, the Philippines, Thailand, United Kingdom, United States, and Viet-Nam, contributed.

Warm appreciation was expressed by all countries for FAO's work over the last ten years. However there was a need for re-appraisal on the basis of experience gained. Some shifts in emphasis on lines of work, expansion here, contraction there, and some changes in methods of work, might contribute to still greater effectiveness. Changing circumstances, as well as the lessons of experience, could dictate such modifications.

The Conference was unanimous that the time had come to share more widely within the region the rich experience in the various phases of agricultural development that had now accumulated in many fields. For example, the delegates of the Philippines pointed out that the Conference had shown that for most problems there was at least one country present that had found a solution. The countries within the region should learn to draw more upon each other for help, going outside the region only when necessary. It was suggested that:

- (i) the FAO Regional Office should collect, abstract and disseminate the wealth of information available from within the region, concerning the experience of different countries in dealing with technical and economic problems of agriculture; and
- (ii) permanent training centers might be set up in different countries for regional purposes. Individual countries recognized to have special experience in particular fields might offer facilities for training in those fields to trainees recommended by governments of other countries in the region.

Viet-Nam strongly supported the earlier proposal of Laos for a regional association of agricultural schools and colleges, as a mechanism for the exchange of ideas and information.

The subject of future orientation of methods of work was also taken up in relation to the holding of technical meetings, working parties, training centers and study tours. The Conference was generally of the opinion that more study tours of selected countries by specialists in given subject matters would contribute in a very practical way to the spread of knowledge. Several countries, especially the less developed, also felt the need for more training centers and/or working parties. However, there was some feeling that if contractions had to be made in some methods of work to permit more emphasis on others (such as services for the dissemination of scientific information) regional meetings and even training centers might be reduced. India made a strong plea for curtailing meetings generally in favor of other services, and Japan stressed the need for careful co-ordination of meetings.

The delegations of Ceylon, India, Japan, and the Philippines, stressed greater attention to the dissemination of scientific information. Specific proposals included :

- (i) an abstracting service, like the present *World Fisheries Abstracts*, for agriculture, horticulture and animal husbandry,
- (ii) a service within FAO for the exchange of scientific papers, and
- (iii) a directory of agricultural research workers in the region.

The delegation of Ceylon proposed that more attention be given to the serial classification of FAO publications so that they can be more readily identified, and that periodical indices of all FAO publications be issued. More news bulletins on various subjects would be of interest. The attention of the Conference was drawn to the fact that while abstracting services are undoubtedly of great usefulness, it is difficult to avoid duplicating some very good services which already exist, such as those of the Commonwealth Bureaux.

While the Conference agreed that in general the time had come to shift the emphasis from survey to implementation of action programs in specific subject-matter fields, several countries indicated that in their case general and specific surveys are still badly needed as a basis for action. Indonesia pointed out that FAO can assist in practical surveys aimed at laying a sounder basis for agricultural policy and planning. Laos indicated the need, at its present stage of development, for preliminary studies so as to learn from the experience of others, and Viet-Nam suggested a study of the real and immediate possibilities and of the means required for increasing agricultural production in the countries in Southeast Asia ; Pakistan intended to make a request for a survey of forestry resources and for a rubber expert.

The Conference drew attention to the need for longer periods of service by experts, if they are to make their most effective contribution after the initial period of learning in the country of assignment. It was recognized that it was difficult to offer contracts for more than one year.

so long as most governments determine the amount of their contributions to the United Nations Technical Assistance Fund only from year to year. Experts can often not readily change their plans at the end of a year's service to accept a further period. Several countries pointed out the desirability of experts being familiar with Asian conditions and expressed the view that whenever possible they should be drawn from within the region. However it was recognized that it is often difficult for these countries to spare trained persons. It was also pointed out that there is a special need for the experts sent to the more developed countries to be of the very highest caliber, and that generally great attention has to be paid to human qualities in addition to technical competence. Experts should come out better informed as to the equipment they are likely to find available locally for their work and more funds should be provided by FAO for additional equipment where necessary.

Several delegations gave strong support to a substantially longer period for fellowships. More use could be made of intraregional fellowships. In this connection the delegate of India intimated that his Government would be glad to offer its facilities at a number of specialized scientific institutes for fellows from other countries of the region.

The delegations of Pakistan and India also observed that there was much experimental work being done in their countries, but the data needed to be collected, compiled, analyzed and made available to research workers, planners, and extension organizations. For this, they point out, FAO's help would be needed. The need was expressed for a survey of extension techniques.

The Conference felt that greater attention should be given to agricultural education by FAO. One important problem in the educational field was the shortage of textbooks suitable for the region and assistance in this field would be welcome.

Among other subjects for which several countries requested more attention were the use of isotopes for agricultural research, the role of mechanization in agriculture and plant introduction. The matter of tools and implements was one in which every country had techniques peculiar to itself and FAO could do much in stimulating an exchange of information. A brochure on the whole subject of mechanized farming in relation to Asian countries would be of great value. The economic as well as the engineering and agricultural aspects needed careful attention.

The field excursions in Indonesia had again revealed the rich possibilities of exchange of plant material. Several national bureaux existed, but their work would be facilitated if a world bureau of plant introduction could be established under the auspices of FAO. It was also suggested that FAO study all possible means for facilitating the import of livestock through promoting the standardization of quarantine regulations and eventually the establishment of international quarantine stations.

Other possible lines of work mentioned were a study of diversified farming in relation to conditions in the region, more attention to horti-

culture, evaluation of formulae for pesticides and fungicides, and a national sample study, requested by Pakistan for the collection of basic data for implementing agrarian reforms, for which FAO's help would be required.

Appreciation was expressed for the FAO work on commodities, especially rice, and it was suggested that similar information might be supplied in relation to commodities not now covered, such as spices. Several delegations mentioned a need for assistance with studies on the marketing of agricultural products, and a proposal was made for a regional training center on agricultural marketing techniques.

## Chapter 8

### SUMMARY OF PRINCIPAL SUGGESTIONS AND RECOMMENDATIONS

In the course of its deliberations, the Third FAO Regional Conference for Asia and the Far East made certain suggestions and recommendations to Member Governments, and to FAO, which are summarized below. More detail can be found in earlier chapters of this report.

#### *Selective Expansion of Agricultural Production and Consumption (Chapter 4-A. (i))*

##### TO GOVERNMENTS

###### The Conference

- (a) commends to governments the selective expansion of agricultural production and consumption as an important subject deserving of full consideration ;
- (b) notes the more widespread application of the principles of selective expansion by governments of the region in their programs of increasing production ;
- (c) recommends that governments take all possible steps to improve the supply of information to their agricultural planning authorities on specific points enumerated in this report ;
- (d) commends to governments of the region the plan of FAO to carry out one or two country studies in 1957 in countries willing to co-operate, in order to facilitate a fuller understanding of the principles of selective expansion by means of their application in the circumstances of a particular national situation.

##### TO FAO

###### The Conference

- (a) commends the studies by the FAO Secretariat on long-term trends in international trade in agricultural products contained in *The State of Food and Agriculture 1956* ;

- (b) recognizes the value of such studies to governments in connection with agricultural policy ;
- (c) recommends that such studies should be pursued further with respect especially to those export commodities which are of importance to the countries of the region.
- (d) commends the FAO commodity studies being undertaken under the guidance of the Committee on Commodity Problems, recognizing their value to governments in connection with their plans to expand agricultural production and complementary agricultural development, and requests that consideration be given to the initiation of similar studies on spices.
- (e) hopes that the enquiries concerning income and price elasticities of demand for rice and other cereals, being undertaken by the joint FAO/ECAFE Agriculture Division, can be continued and expanded.

***Joint ECAFE/FAO Working Party on Agricultural Development and Planning (Chapter 4-A. (ii))***

To FAO

The Conference notes and endorses the recommendations made by the ECAFE Working Party on Economic Development and Planning at its Second Meeting held in Bangkok, 17-29 September 1956, that its Third Meeting should be in collaboration with FAO and on the problems and techniques of agricultural development planning and implementation.

***The Rôle of Ministries of Agriculture in Community Development (Chapter 4-B.)***

TO GOVERNMENTS

The Conference commends to governments the views on community development, with particular reference to agriculture, summarized on pages 35-38 of this report.

to FAO

The Conference recommends that FAO continue its interest in community development and help Member Governments in the strengthening of their agricultural services in order to serve better the cause of community development.

### ***Problems of Agrarian Reconstruction (Chapter 4-C.)***

TO FAO

The Conference suggests that FAO should :

- (a) continue its technical assistance in the field of agrarian reconstruction, especially in the field of settlement and resettlement ; in which connection the possibility of a regional training center on this subject was mentioned ;
- (b) consider the possibility of organizing objective and critical periodic surveys of progress achieved including the organization of sample surveys at the request of Member Governments.

### ***Watershed Management (Chapter 4-D.)***

TO GOVERNMENTS

The Conference

- (a) recommends that the governments should adjust their legislative and administrative machinery, as found necessary, to organize watershed management on a sound footing ;
- (b) recommends that the governments should assure the necessary financial support for research in this field ;
- (c) requests that they provide for the satisfactory functioning of the Working Party on Watershed Management ;
- (d) suggests to the governments that FAO might be asked to co-operate in the study of watershed management problems of the Mekong river project.

TO FAO

The Conference recommends that FAO should continue its activities to provide technical assistance in organizing national training centers, study groups and pilot field projects on watershed management.

### ***The Role of Government in Fisheries Development (Chapter 4-E.)***

TO GOVERNMENTS

The Conference recommends :

- (a) that efforts should be intensified to staff, equip and train the fishery services in conformity with the wide range of activities involved in current fishery development programs ;



- (b) that consideration be given to the benefits to be derived from interdepartmental consultation and co-ordination at all levels in the conduct of fishery programs, bearing in mind the extreme dependence of fisheries on other economic activities.

### ***World Survey of Living Aquatic Resources (Chapter 5-A.)***

#### **TO GOVERNMENTS**

The Conference recommends that where possible Member Governments should advise FAO as to the areas and species which should receive priority attention in the conduct of its World Survey of Living Aquatic Resources, and within the limits of the facilities available to them should support the program by supplying all available information on a comparable basis concerning the resources exploited by their respective fishery industries or resulting from investigation by their research institutions.

### ***Survey of Agricultural Education in Relation to Needs (Chapter 5-B.)***

#### **TO GOVERNMENTS**

The Conference suggests that Member Governments consider the desirability of

- (a) upgrading education in the fields of agriculture, veterinary science, fisheries, forestry, nutrition and agricultural economics to an equal standard with other fields of education ;
- (b) more careful selection and screening of students ;
- (c) the introduction of systems of vocational guidance ; and
- (d) a regional organization of agricultural schools and colleges, including interuniversity staffing, and periodic regional conferences of agricultural teachers and administrators.

#### **TO FAO**

The Conference recommends that FAO continue its technical assistance activities in improving agricultural education in the region, explore the possibility of a survey of agricultural education in relation to needs in the region, and assist in the solution of the shortage of textbooks.

### ***Regional Working Party on Agricultural Prices and Costs and Price Support Policies (Chapter 5-C.)***

#### **TO FAO**

The Conference welcomes the initiative of the Government of India in proposing a regional working party on aspects of price policies, and

recommends that FAO give high priority to the holding of such a working party as early as possible, but not later than 1958.

### ***Regional Working Party on Crop and Livestock Insurance (Chapter 5-D.)***

#### **TO GOVERNMENTS**

The Conference generally endorses the recommendations of the Regional Working Party on Crop and Livestock Insurance and suggests that Member Governments give consideration to initiating pilot schemes for crop and livestock insurance when feasible.

#### **to FAO**

The Conference suggests that FAO assist Member Governments in determining the specific data required for the initiation of crop and livestock insurance schemes, and in the formulation of pilot projects.

### ***Co-operatives as a Means of Fostering Fisheries Development (Chapter 6-A.)***

#### **TO GOVERNMENTS**

The Conference recommends

- (a) that governments support the current FAO investigation of the respective functions of middlemen and fishery co-operatives in fish production and trade in some countries within the region, and consider possibilities for extending the survey to other fishing centers in Asia and the Far East.
- (b) that governments should give special attention to the critical need for trained fishery co-operative leaders and should endeavor to take advantage of facilities to be provided at the FAO/ETAP Training Center in Fishery Co-operatives and Administration proposed to be held in Australia in 1957.

### ***The 1960 World Census of Agriculture (Chapter 6-B.)***

#### **TO GOVERNMENTS**

The Conference recommends that Member Governments be represented, in so far as possible, at the regional conference of statisticians to be held early in 1957 to review the FAO draft program for the 1960 World Census of Agriculture.

TO FAO

The Conference recommends that FAO adapt as far as possible its program for the 1960 World Census of Agriculture to meet the conditions and needs for information of the member countries in the region.

***Plant Protection Agreement for the Southeast Asia and Pacific Region  
(Chapter 6-C.)***

TO GOVERNMENTS

The Conference

- (a) recommends that all the Member Governments concerned should become parties to the Plant Protection Agreement for the South-east Asia and Pacific Region as soon as possible ;
- (b) recommends that the governments concerned should participate in the meeting of the Regional Plant Protection Committee to be convened in Bangkok from 3 to 7 December 1956 to deal with the implementation of the Agreement ;
- (c) suggests that the governments concerned might consider a group country project in 1958 for the provision of a regional plant protection officer charged specifically with assisting in the implementation of the Agreement.

TO FAO

The Conference recommends that FAO should continue its technical assistance in training personnel in plant protection, and suggests it should explore the possibility of establishing a regional phytosanitary institute in order to make possible a common approach to the problem among the nations.

***Livestock Improvement (Chapter 6-D.)***

TO GOVERNMENTS

The Conference :

- (a) endorses those recommendations of the Brisbane Meeting on Tropical and Subtropical Conditions brought before it for consideration (see working paper FERC 56/16) and with the exceptions of two reservations on the general feasibility of heat tolerance tests, recommends that governments give them the fullest consideration in working out their livestock development plans ;

- (b) supports the proposal for establishment of a permanent Working Party on Livestock Production and requests governments that have not already done so to appoint their representative to this working party as soon as possible ;
- (c) recommends that the countries of the region co-operate in measures for the establishment of zones immune from rinderpest along their borders as a step toward complete eradication of the disease ;
- (d) requests that countries give support to a proposal for a livestock study tour of various countries within the region ;
- (e) suggests that governments provide the necessary experienced staff, as rapidly as possible for extension in the field of animal husbandry.

to FAO

The Conference

- (a) recommends that FAO take the necessary initiative in helping governments to co-ordinate their efforts for eradication of rinderpest ;
- (b) recommends that FAO organize a livestock study tour within the region as soon as practicable ;
- (c) recommends that the Working Party on Livestock Production be asked to consider other proposals emanating from the discussion of this subject at the Conference.

### ***Uses of Domestic and Imported Agricultural Surpluses for Financing Economic Development (Chapter 6-E.)***

TO GOVERNMENTS

The Conference considers that it is feasible to use agricultural surpluses to increase consumption and to finance economic development. Member Governments should investigate carefully this method of financing for their economic development programs, bearing in mind that surpluses should be used for this purpose in accordance with FAO's " Guiding Lines and Principles of Surplus Disposal ".

### ***The Future Orientation of FAO's Work in the Region (Chapter 7)***

Under this heading, the following additional suggestions and recommendations were made.

## TO GOVERNMENTS

### The Conference

- (a) recommends that governments take urgent steps to raise the status of professional workers in agriculture to levels comparable with those of professional civil servants in other fields.
- (b) The Conference suggests that permanent training centers might be set up in different countries for regional purposes. Individual countries recognized as having special experience in particular fields might offer facilities for training in those fields to trainees recommended by governments of other countries in the region.

## TO FAO

### The Conference

- (a) recommends that FAO should undertake more systematic co-ordination of its activities involving conferences, meetings and training centers.
- (b) suggests that FAO should collect, abstract and disseminate the wealth of information available from within the region, concerning the experience of different countries in dealing with technical and economic problems of agriculture. This could be done through such means as abstracting services, organization of the exchange of scientific papers, and the publication of a directory of agricultural research workers in the region. In addition, the publication of news bulletins and periodical indices of FAO publications would be helpful.
- (c) recommends that more attention be given to the organization of study tours.
- (d) recommends, in connection with technical assistance that :
  - (i) as far as possible experts for service in Asia and the Far East should be drawn from within the region because of their greater familiarity with local conditions ;
  - (ii) greater attention be paid to the possibility of training fellows within the region ;
  - (iii) in many cases, the periods of service of experts and duration of fellowships need to be longer.
- (e) requests that in FAO's future programs of work consideration be given to :
  - (i) the study of the technical and economic aspects of mechanization of agriculture in the region ;
  - (ii) a survey of diversified farming in relation to conditions in the region ;

- (iii) the use of isotopes for agricultural research ;
  - (iv) the evaluation of extension methods ;
  - (v) co-ordination of work on plant introduction ;
  - (vi) co-ordination of quarantine measures for facilitating the import of animal breeding stocks ;
  - (vii) horticulture, including the holding of a regional meeting on fruit and vegetable production.
- (f) (i) recognizes the need for improvements in the marketing of agricultural products ;
- (ii) hopes that it will be possible for FAO to give more attention to marketing problems in relation to products important to the region ;
- (iii) recommends FAO to examine the possibility of holding in the region a training center on marketing techniques.
- (g) Having regard to the fact that the region comprises a large number of economically underdeveloped countries, recommended strongly that more funds be allocated for FAO work in the region.

In this connection, the Representative of the Director-General drew attention to the fact that in both the Regular and the Technical Assistance budgets over-all increases were unlikely, and that by the present outlook there might even be some retrenchment. Therefore, the Director-General would have to establish priorities very carefully in choosing those projects among the many recommended by this Conference which could be included in the draft program of work to be submitted to the Ninth Session of the FAO Conference in 1957.

*Annex A*

**LIST OF DELEGATES, OBSERVERS AND FAO STAFF  
ATTENDING THE MEETING**

**Delegations of Member Nations**

**AUSTRALIA**

*Delegate :*

K. C. O. Shann  
Australian Ambassador to the  
Philippines  
Australian Embassy  
Manila

*Alternate Delegates :*

D. D. Shaw  
Project Officer  
Bureau of Agricultural Eco-  
nomics  
Canberra

W. L. Morrison  
Second Secretary  
Economic Relations Branch  
Department of External Affairs  
Canberra

*Associate Delegates :*

U Kyin Sein  
Chief Marketing Officer  
Department of Agriculture  
Rangoon

U San Khin  
Marketing Officer  
Department of Agriculture  
Rangoon

**CANADA**

*Observer :*

R. B. Edmonds  
Second Secretary and Vice-  
Consul  
Canadian Embassy  
Djakarta

**BURMA**

*Delegate :*

U Khin  
Director of Agriculture  
Rangoon

**CEYLON**

*Delegate :*

M. Rajendra  
Land Commissioner  
Colombo

*Associate Delegates :*

W. R. C. Paul  
Acting Director of Agriculture  
Department of Agriculture  
Colombo

E. R. A. de Zylva  
Deputy Director of Fisheries  
Department of Fisheries  
Colombo

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*Annex B*

**LIST OF DOCUMENTS**

**Working Papers Prepared by the Secretariat**

FERC 56/1	Annotated provisional agenda.
FERC 56/2	Recent developments in the food and agricultural situation of Asia and the Far East.
FERC 56/3	Selective expansion of agricultural production and consumption.
FERC 56/4	FAO/ECAFE working party on problems of agricultural programming and planning.
FERC 56/4/Supl.	FAO/ECAFE working party on problems of agricultural programming and planning.
FERC 56/5	The role of ministries of agriculture in community development.
FERC 56/6	Problems of agrarian reconstruction.
FERC 56/7	Watershed management.
FERC 56/8	Role of government in fisheries development.
FERC 56/9	World survey of living aquatic resources.
FERC 56/10	Survey of agricultural education in relation to needs.
FERC 56/11	Regional working party on agricultural prices and costs and price support policies.
FERC 56/12	Regional working party on crop and livestock insurance.
FERC 56/13	Co-operatives as a means of fostering fishery development.
FERC 56/14	The 1960 world census of agriculture.
FERC 56/15	Plant protection agreement for the Southeast Asia and Pacific Region.
FERC 56/16	Livestock improvement.
FERC 56/17	Uses of domestic and imported agricultural surpluses for financing economic development.
FERC 56/18	The work of FAO in the region.

**Papers Submitted by the Delegations**

FERC 56/Sp.	1 Co-ordination of rinderpest eradication work in India and other countries in the East and Far East. Submitted by the Indian delegation.
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- FERC 56/Sp. 2 A note on the first Five Year Plan in the field of agriculture. Submitted by the delegation of Pakistan.
- FERC 56/Sp. 3 Introductory statement by Australian delegation.
- FERC 56/Sp. 4 Statement by Australian delegation on agricultural education in relation to needs.
- FERC 56/Sp. 5 Recent developments in food and agricultural situation in Asia and the Far East. Submitted by the Philippines delegation.
- FERC 56/Sp. 6 Agrarian reconstruction. Submitted by the Philippines delegation.
- FERC 56/Sp. 7 Regional working party on agricultural prices and costs and price support policies. Submitted by the Philippines delegation.
- FERC 56/Sp. 8 FAO/ECAFE working party on problems of agricultural programming and planning. Submitted by the Philippines delegation.
- FERC 56/Sp. 9 Development of watersheds in the Philippines. Submitted by the Philippines delegation.
- FERC 56/Sp. 10 The role of government in fisheries development and national policies on fisheries. Submitted by the Philippines delegation.
- FERC 56/Sp. 11 Co-operatives as a means of fostering fishery development. Submitted by the Philippines delegation.
- FERC 56/Sp. 12 Plant protection agreement for Southeast Asia and the Pacific Region. Submitted by the Philippines delegation.
- FERC 56/Sp. 13 The role of government in livestock improvement including rinderpest eradication. Submitted by the Philippines delegation.
- FERC 56/Sp. 14 Progress report of surveys of living aquatic resources of the Philippines. Submitted by the Philippines delegation.
- FERC 56/Sp. 15 Australian statement on uses of domestic and imported agricultural surpluses for financing economic development.
- FERC 56/Sp. 16 Statement by Australian delegation on livestock improvement.
- FERC 56/Sp. 17 Implementation of plant protection agreement. Submitted by the Viet-Nam delegation (in French).
- FERC 56/Sp. 18 Plant protection agreement for the Southeast Asia and Pacific Region. Statement by Indonesian delegation.
- FERC 56/Sp. 19 Statement by United States delegation on uses of domestic and imported agricultural surpluses for financing economic development.



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