
**REPORT OF THE
FOURTH FAO REGIONAL CONFERENCE
FOR THE NEAR EAST**

Damascus, United Arab Republic - 10-20 December 1958

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS



R E P O R T

of the

FOURTH FAO REGIONAL CONFERENCE

for

THE NEAR EAST

DAMASCUS : 10-20 DECEMBER 1958

Rome 1959

FAO/59/3/1723

C O N T E N T S

	<u>Page</u>
A. PROCEDURAL MATTERS	1 - 3
B. THE WORK OF FAO IN RELATION TO THE FOOD AND AGRICULTURE SITUATION	4
1. Statement to the Conference by the Director-General	4 - 6
2. Recent Developments in the Food and Agriculture Situation in the Region	7 - 11
3. Trends and Objectives in the Work of FAO in the Near East	11
4. Policy Questions Arising out of Technical Meetings	12 - 17
(a) Second FAO Near East Meeting on Animal Health	12 - 13
(b) Meeting on Veterinary Education in the Near East	13
(c) Near East Forestry Commission	13 - 15
(d) Meeting on Agricultural Extension	15 - 16
(e) FAO/WHO Regional Nutrition Meeting	16
C. MAJOR QUESTIONS OF FOOD AND AGRICULTURAL DEVELOPMENT IN THE REGION	17
1. Orientation of Agricultural Production and Supplies in Relation to Demand	17 - 22
2. Problems of Nutrition in the Region	22 - 28
3. Organization and Development of Research in Agriculture, Fisheries and Forestry	28 - 29
4. Land Tenure and Settlement in the Near East	30 - 32
5. The Role of Government Departments in Planning, Implementing and Administering Rural Development	32 - 33
D. SPECIFIC ACTIVITIES REQUIRING CONFERENCE GUIDANCE OR GOVERNMENT ACTION	34
(a) Locust Control	34 - 35
(b) Mediterranean Development Project	35 - 36
(c) Regional Agreement on Plant Pests and Diseases	36 - 37
(d) Sunn Pest	37
(e) World Seed Campaign	37
(f) 1960 World Agricultural Census	38 - 39
(g) Fishery Administration	39 - 40
(h) Animal Production and Health	40 - 43
E. FUTURE ORIENTATION OF FAO'S WORK IN THE REGION	44
1. Free-the-World-from-Hunger Year	44 - 46
2. Trends and Objectives in the Work of FAO in the Near East	47 - 50
3. Concluding Statement by the Director-General	50
F. SUMMARY OF PRINCIPAL RECOMMENDATIONS AND SUGGESTIONS	51 - 62
ANNEXES	
I List of Participants: Delegates, observers, FAO staff	
II List of Documents	
III Proposals for an Expanded Inter-Regional Project on Desert Locust Control.	

FOURTH FAO REGIONAL CONFERENCE FOR THE NEAR EAST

DAMASCUS, 10-20 DECEMBER 1958

A. PROCEDURAL MATTERS

The Fourth FAO Regional Conference for the Near East was held in Damascus, Northern Region, United Arab Republic, from 10-20 December 1958. Member Governments represented were

Afghanistan	Italy	Sudan
Ethiopia	Jordan	United Arab Republic
France	Lebanon	United Kingdom
Iran	Pakistan	Yemen
Iraq	Saudi Arabia	

Observers were present from :

Holy See	League of Arab States	UNRWA
Morocco	United Nations	UNICEF
Spain	ILO	WHO
Turkey	UNESCO	International Office for Epizootics (OIE)
United States of America		Statistical Society for Arab Countries

A full list of participants is given in Annex 1 of this Report.

The Conference was called to order by Dr. B.R. Sen, Director-General of FAO, after which His Excellency Dr. Nour el Dine Kahale, President of the Executive Council of the Northern Region of the United Arab Republic welcomed the delegates. In his address, he described the significant development which had occurred in Syrian agriculture in recent years, and expressed his warm appreciation for the assistance given by FAO experts in specific fields.

The Director-General of FAO then welcomed the delegations on behalf of the Organization. In expressing his appreciation of the facilities which the Government of the United Arab Republic had made available to the Conference, he mentioned that Damascus was a most appropriate site for the Regional Conference, since the Northern Region combines most of the features of the agriculture of the Near East. Dr. Sen referred to the vigorous expansion of agriculture, especially of cotton and cereals production, to the growth of industry and to social progress in the Region. The Regional Conference was an important link in the chain that unites member nations, and it was hoped soon to be able to welcome a new region,

namely Africa, which has many problems in common with the Near East. Reference was made to the 10th Anniversary of the Universal Declaration of Human Rights whose celebration coincided with the opening of the Conference.

The Conference then elected His Excellency Sayed Marei, Minister of Agriculture and Agricultural Reform and leader of the delegation of the United Arab Republic, as Chairman of the Conference. The following Vice-chairmen were elected :

Afghanistan	Mr. Ali Noor
Ethiopia	Mr. Mulatu-Debebe
Iran	Mr. Heidan Ali Arfaa
Iraq	Mr. Abdul-Hadi Ismail Ghani
Jordan	Mr. Ali Nassouh El Taher
Lebanon	Mr. Rashid Habal
Saudi Arabia	Mr. Abdallah Dabbagh
Sudan	Mr. Mahammed Kamil Shawki
Turkey	Dr. Ihsan Akhun

The following Agenda were adopted :

A G E N D A

A. INTRODUCTORY ITEMS

1. Opening of the Conference
2. The election of Chairman and Vice-Chairmen
3. Adoption of the Agenda

B. THE WORK OF FAO IN RELATION TO THE FOOD AND AGRICULTURE SITUATION

4. Trends and Objectives in the Work of FAO in the Near East:
Statement by the Director-General and Discussion
5. Policy Questions arising out of Technical Meetings

C. MAJOR QUESTIONS OF FOOD AND AGRICULTURAL DEVELOPMENT IN THE REGION

6. Orientation of Agricultural Production and Supplies in relation to Demand
7. Nutrition in relation to Food and Agricultural Policy
8. Organization and Development of Research in Agriculture, Fisheries and Forestry
9. Land Tenure and Settlement in the Near East
10. The Role of Government Departments in Planning, Implementing and Administering Rural Development

D. SPECIFIC ACTIVITIES REQUIRING CONFERENCE GUIDANCE OR GOVERNMENT ACTION

11. (a) Mediterranean Development Project
- (b) The Need for a Regional Agreement for preventing the Introduction of Plant Diseases and Pests into the Near East
- (c) Desert Locust Control
- (d) Sunn. Pest
- (e) World Seed Campaign
- (f) 1960 World Agricultural Census
- (g) Fishery Administration
- (h) Animal Production and Health

E. CONCLUDING ITEMS

12. (a) Free the World from Hunger Year
 - (b) The Future Orientation of FAO's Work in the Region
13. Adoption of Report
-

A list of working papers is given in Annex II of this Report.

A drafting committee was appointed for the final report from the delegations of Ethiopia, Iran, Iraq, Sudan and the United Arab Republic. Sub-committees were also appointed for Nutrition, Locust control, Livestock problems, Economics and Marketing, and Research.

B. THE WORK OF FAO IN RELATION TO THE FOOD AND AGRICULTURE SITUATION

1. Statement to the Conference by the Director-General

In expressing his pleasure at participating in the work of the Fourth FAO Regional Conference for the Near East, the Director-General stressed the importance of such meetings for the work of FAO in finding solutions to problems affecting the whole region. He hoped that practical and constructive proposals would be made by the Conference which he might take into consideration in preparing the program of work and budget for 1960 and 1961.

The 9th Session of the FAO Conference in November 1957 had authorized the strengthening of the regional structure of the Organization. Accordingly increased authority and responsibility had been given to the regional representative and to the technical staff posted to the region. The technical staff attached to the Regional Office had been increased by five professional posts. The Director-General made special reference to the recent appointment of Dr. Sidky as Regional Representative and paid high tribute to his energy and knowledge of the region.

There had in the past been some criticism that FAO's program of work in the region did not always meet the needs of the member countries. This situation might have resulted partly from the organizational structure of FAO and partly from inadequate participation by Government personnel at the highest level in the work of FAO. The Director-General had undertaken a far-reaching reorganization of FAO Headquarters to bring about greater coordination between subject-matter specialists, so that the program of work of FAO could be formulated to fulfil the needs of regions or countries more adequately. This reorganization had just been approved by the Council and it was now for member countries to make the best use of FAO as reorganized for the advantage of the region.

As regards the program of work of FAO in the region, as was natural in a semi-arid region such as the Near East, a substantial proportion of FAO assistance was devoted to the survey and development of soil and water resources. Important changes were occurring in the field of land tenure and land settlement in many countries of the region, while control of animal and plant pests and diseases was also in the forefront of the program. Out of 150 technical assistance expert posts in the countries of the Near East, 40 were in land and water use, 35 in crop production and protection, and 30 in animal production; the remainder being distributed over other fields.

An important change approved by the 9th Session of the FAO Conference was the increased emphasis on the social implication of FAO's work, extending over fields such as agricultural extension, cooperative organization, marketing and land reform, and which aimed at a re-orientation of certain FAO programs towards improving the standard of living of the rural population.

A special consultant, Dr. Heman Santa Cruz, had been recently appointed to carry out an appraisal of this re-orientation of the social aspects of FAO's work and his report would shortly be issued. The Director-General stressed the importance of extension work, especially in the Near East region, without which technical advice remained largely ineffective. Much attention was being given to this subject in the Far East and Latin America where agricultural extension development centers had been organized, and he hoped to see a similar increase of activity in the Near East region where the need for efficient overall coordination between the agricultural and social activities of government were increasingly urged. A number of technical meetings of importance to the region had included the FAO/WHO Regional Committee on Nutrition, a subject matter field of particular importance for the population of the region. He urged member governments to implement the recommendations of the Committee extending them where appropriate to related fields, such as the development of fisheries, in relation to human nutrition.

The Director-General then made special reference to the progress of the Mediterranean Development Project which was a far-reaching undertaking aiming at stimulating economic and social development over the whole Mediterranean region. The survey had implications of fundamental importance for the economic development of many countries having been launched as a systematic attempt to discover how far the problems in this region could be solved by technical cooperation between the countries concerned, combined with the direction of investment of domestic and foreign capital resources. The central problems of over-crowding and insecurity must be solved by a balanced program for the utilization of resources, including the establishment of new industries, not only to absorb surplus rural population, but also to provide materials and equipment for the modernization of agriculture. This project was directly connected with the unfavourable food situation existing in many parts of the region coupled with the accelerated rise in populations and aggravated by the deterioration in the external trading position of the primary producers. The survey had been undertaken with the full cooperation of the Secretary-General of the United Nations and other specialized agencies. In addition, the cooperation of Governments was being enlisted through setting up national committees to assist in developing plans based on a broad integrated approach to development. He wished to express his gratification at the ready response and cooperation he had received from member countries in carrying out this project.

In spite of the progress of Desert Locust control over the past few years, a recent assessment of crop damage showed that losses now average about 3.5 million dollars a year, while in Morocco alone in 1954 damage amounted to 14 million dollars. The recommendations of the FAO Technical Advisory Committee held in 1958 on long-term policy of Desert Locust control recognized that the dynamics of Desert Locust invasions are still insufficiently known. It was, therefore, proposed that existing national and international programs should be supplemented by the expansion of the ecological survey of the main breeding areas; the intensification of research especially in the field and on methods of control; the provision of increased training facilities and pilot projects for testing and demonstrating locust control

operations by most modern techniques. It was considered that such developments must be undertaken on a scale greatly in excess of those at present in operation, and, therefore, the Director-General strongly urged Governments to formulate a combined request for financing this project from the Special Fund for Economic Development of the United Nations. He stressed that this fund is to finance surveys, research, training and demonstration, and the initiative lies with governments or groups of governments to make requests.

The Director-General drew attention to the need for focussing public attention on a world-wide scale on the continuing problem of hunger and he had, therefore, proposed to the 26th Session of the Economic and Social Council a project to be called "Free the World from Hunger Year", which would make the climax in 1963 of a campaign to be carried out over the next five years resulting in a special international food congress which could coincide with the 20th anniversary of the establishment of FAO at the Hot Springs Conference. The proposal had aroused wide interest and support and had been commended unanimously at the last session of the FAO Council, which had set up a small committee of government representatives to assist him in carrying out the project. Proposals would be made to the next session of the FAO Conference and he had no doubt that the countries of this region would appreciate the vital interest of their populations in a campaign of this kind.

The Director-General concluded by referring to the agenda for which documents had been prepared to provide a starting point for discussion on major issues, rather than to attempt to answer questions. He looked forward to guidance and conclusions from the Governments of the Near East which would enable him to make suggestions to the next session of the Conference of FAO as to how its program of work can be adapted to meet more fully the needs of member countries. ^{1/}

^{1/} A background paper prepared by the Secretariat on the work of FAO in the last 5 years in the Near East (NERC 58/2) is reproduced in Annex 3.

2. Recent Developments in the Food and Agriculture Situation in the Region

Recent Trends in Agricultural Production

In reviewing developments in the food and agricultural situation of the Near East since the Third FAO Regional Conference held in Cairo in 1953, the Conference noted that rapid progress had been made by the countries of the Region in expanding the cultivated area and increasing agricultural production. Continuing efforts were being made in all countries further to improve the levels of production, trade and consumption.

During the five years 1953-57, production had averaged almost 25 per cent higher than in 1948-52 and about 50 per cent higher than the pre-war level. The rate of expansion had kept ahead of the growth in population which for the region as a whole had averaged some 2 per cent per annum. Production per caput had thus shown an increase of about 11 per cent since 1948-52.

The steady increase in per caput and total output in the region as a whole concealed, however, wide fluctuations in annual output in many countries of the Near East. The Conference observed that such fluctuations in output were characteristic of much of the region where dry farming was predominant and agriculture remained exposed to variable weather conditions.

In the current season, for example, winter crops in several countries had been adversely affected by severe drought conditions, and had also suffered from locust infestation. Production of wheat in the Northern Region of the United Arab Republic had declined from 1.35 million tons in 1957/58 to 561,000 tons, and that of barley from 720,000 tons to 179,000 tons - a decrease to 41 per cent and 25 per cent respectively. There had been similar reductions in output for other grains such as millet and for pulses. In other countries, too, especially in Jordan, Lebanon and Iraq, grain production was well below the 1957/58 levels. On the other hand Ethiopia, Sudan and Turkey had harvested large grain crops. In Sudan the surplus over local consumption requirements was estimated to reach some 400,000 metric tons. In the Southern Region of the United Arab Republic wheat production was about the same as in the previous year, but import requirements of wheat were increasing.

The Conference considered that this situation underlined the continuing importance of maintaining and increasing efforts to reduce fluctuations in levels of output through the introduction of improved production techniques, and in particular the extension of the area under irrigation.

The Conference noted that several countries of the region were making progress towards greater diversification of agricultural production both to meet internal consumption requirements and in response to export demand. The rapid expansion of sugar production to meet growing internal consumption in the Northern Region of the United Arab Republic, in Iran, and in Turkey, and of cotton for export in the Northern Region and in Iran, were notable

examples. The delegates of Jordan and Lebanon also referred to the rapid increase in production of fruit and vegetables in their countries for internal use as well as for export.

Concern was expressed, however, regarding the lag in output of live-stock products which had generally continued to grow at a much slower rate than crop production. From 1948-52 to 1953-57 total output of livestock products in the region as a whole had increased by only 13 per cent as compared, for example, with increases of over 60 per cent for sugar and 30 per cent for grains. The Conference was therefore glad to note that comprehensive livestock development programs had been recently initiated in a number of countries.

As far as forestry is concerned the Conference noted that timber production in the Region is still far from filling all requirements. No precise information is at present available on net growth but it has been estimated that even the current yearly removals, amounting to less than 4 million cu. meters of industrial wood, will not be available in the future if the exhaustion of the forests continues. Removals of fuel wood are recorded to be more than 10 times higher than those of industrial wood, but considerable quantities felled are unrecorded and, for this reason, it is at present impossible to give a clear and comprehensive picture of total removals or to accurately compare present drain with annual growth. It can only be stated that consumption of industrial wood in the Region is today at the very low level of 0.03 cu. meters per head.

Fisheries production in the region as a whole has increased slightly in the past five years. However, the increase has not been able to supply the needs of the region and most countries still import considerable quantities of fish, especially canned fish.

Recent Trends in Agricultural Trade and Prices

The Conference noted with concern recent developments in the agricultural trade of the Near East. The rapid growth of internal demand for food and agricultural products as a result of population growth and rising incomes had in several instances reduced export supplies or had necessitated additional imports. The fall in prices of agricultural exports had not been matched by a corresponding decrease in prices of imported industrial products. Trade deficits had thus increased in a number of countries. To this must be added the uncertainty of foreign exchange earnings due to sharp year to year fluctuations in output and hence in export availabilities. The Conference noted that while the volume of agricultural exports from the Near East during 1953/57 had increased by some 25 per cent over the average of 1948/52, the total value had risen by only 7 per cent. On the other hand, during the same period the volume of imports of agricultural products had increased by 22 per cent. Several countries confronted with balance of payments difficulties had to resort to stringent import economy measures. Measures to encourage exports had also been introduced in a number of cases and preferential exchange rates and bilateral or barter agreements.

To fulfil the minimum needs of wood and timber products, the Region has to import substantial quantities of roundwood, sawnwood, pulp, paper and board. As an average of recent years some 2.5 million cubic metres roundwood equivalent, or two fifths of the total consumption were imported, whereas exports were negligible.

Agricultural Development Programs - Recent Developments

In most countries of the Near East, agricultural development programs were currently under way or were under consideration for early implementation. Governments had become increasingly aware of the need to integrate development projects in different fields into comprehensive programs with due regard to the inter-relationship of agriculture and other sectors of the economy. Within agriculture itself the difficulties that had arisen in the past from the adoption of the "bundle of projects" approach were gradually being recognized and greater emphasis placed on the importance of formulating well integrated and balanced programs for the development of national agricultural resources. To carry out such programs, special bodies or boards with autonomous administrative and financial structures had been created in some countries. Elsewhere, as in Saudi Arabia and Afghanistan, Ministries of Agriculture had been established recently or had been reorganized on more efficient lines. It was noted that while investment funds and foreign exchange remained inadequate in many countries, agricultural development programs had on the whole been given high priority for funds.

The deliberations of the Conference revealed a growing recognition in countries of the Region of the need to aim at an integrated approach to rural development, by taking into account social, educational and cultural aspects. The practical implications of such an approach vary from one country to another. In some instances, separate Ministries or Departments for Community Development or Social Affairs were established in recent years. Other governments promote the implementation of development programs at local levels by initiating or strengthening services which have a direct bearing on an improved level of living, such as extension, literacy campaigns, aid to mothers and children, cooperatives, etc.

In summarizing the basic philosophy underlying development programming in his country, the delegate of the United Arab Republic stressed four points: 1) improvement of the agrarian structure as an essential step towards ensuring the welfare of the rural community; 2) the complementary character of agriculture and industry; 3) the need to strike a balance in setting production targets between the nutritional requirements of the population and the interests of the national economy as a whole; 4) the importance of increasing productivity in agriculture, fisheries and forestry. Educational and social services were also considered to be of basic significance to agricultural development.

A new agricultural development program has recently been established for the Southern Region of the United Arab Republic. This program, which called for a total expenditure of some L.E. 60 million over the next ten years, covered 11 inter-related projects for land improvement consolidation

of fragmented holdings, the reorganization of agricultural rotation, improvement and diversification of crop production, livestock improvement and protection, fishery development, mechanization, agricultural industrialization, and extension. Similarly a five-year program involving an estimated cost of S.L. 100 million was under consideration for the Northern Region. This program included projects for the improvement of cotton and field crops, development of pasture and fodder resources, fruit and vegetable improvement, soil improvement, plant protection, livestock improvement, forestry and fishery development, agricultural industrialization and agricultural education. The two programs were complementary to the five-year industrial program of the Southern Region and a similar industrial program under preparation in the Northern Region. In the Sudan, where transport and communications were key elements in development planning, a series of agricultural development projects were being carried out with a view to ensuring a continuing expansion of agricultural production with particular emphasis on sorghum and livestock products as the main staple foods and on cotton and gum Arabic as the main cash crops. Attention was also being given to promoting mechanization of agriculture in the central rain lands and the improvement of marketing methods and organization. The Jordan delegation stressed the importance of the government's role in rural development, and the need for integrating development plans under a single administrative unit. Reference was made to a special authority for the development of the left bank canal area of the Jordan river. Other delegations also referred to the importance of integrating development projects into comprehensive programs with centralized authority. In Ethiopia a five-year development plan has been initiated in which agriculture ranked second after communications in the allocation of investment funds. An important feature of this program was the establishment of five regional agricultural development centres in different parts of the country. Continuing efforts were being devoted to animal health improvement. Development activities in other countries, particularly in Afghanistan, Iraq and Saudi Arabia, were being accelerated with major emphasis on land and water development. A ten-year agricultural development program was recently initiated in Turkey for the period 1958-67.

Agrarian Reform

The Conference was informed of the progress made in implementing policies for the improvement of agrarian structures, and took note of several new programs that had recently been initiated. In the Southern Region of the United Arab Republic, 566,000 feddans of requisitioned land had become available for redistribution to small and landless farmers since the Land Reform Law had been promulgated in 1952. In the Northern Region a Land Reform Law had been issued in September 1958. Approximately 1,000,000 hectares were to be requisitioned, which would permit ownership for 250,000 individual farmers, in addition to the distribution of state land. In Iraq, private ownership of land had recently been limited to 250 hectares in the irrigated zones and 500 hectares in the rainfed zones. The Conference was informed that some 8,000,000 donums were to be requisitioned after compensation and redistributed among 500,000 families.

In all countries where agrarian reform programs were in operation, provision had been made for the formation of cooperative societies, the organization of credit facilities for new settlers, and the establishment of extension services. A Ministry of Land Reform had been set up in each of the two regions of the United Arab Republic, while in Iraq a High Committee for Agrarian Reform had been appointed.

In Jordan and Iran, distribution of State-owned land to needy farmers was continuing, while in Cyprus measures were under consideration with a view to preventing excessive fragmentation and promoting consolidation of scattered holdings.

In Iran, agrarian reform started with the redistribution of some 1,500 villages of Crown-land. This progress is supported by the Development Bank whose activities include land development, operating credit and cooperative financing and the collection of repayments. In addition, measures are being taken to distribute state domain property. Teams for mapping and surveying start their work before distribution takes place. Farmers under both schemes are encouraged to form their own cooperative and credit societies mainly under the auspices of the Agricultural Bank and receive technical advice under the Community Development Program.

Land Development and Improvement

Several delegates submitted reports on land development and improvement programs currently under way or under consideration in their countries. A 10-year program including several major irrigation and drainage schemes had been drawn up for the reclamation of some 900,000 hectares in the Northern Region of the United Arab Republic. In the Southern Region, the High Assuan Dam would add nearly 1,000,000 hectares to the cultivated area. In the Sudan, large areas at present uncultivated were considered suitable for agricultural development and the potential increase in irrigated area had been estimated at 6,000,000 feddans approximately. Work on the Managil extension covering a total area of 800,000 feddans was well advanced, with 200,000 feddans expected to be brought under irrigation this season and the remainder to be developed over the next three years.

3. Trends and Objectives in the Work of FAO in the Near East

In view of the difficulty of separating the debate on the past, present and future trends of FAO's work in the region, the discussion of this item has been amalgamated under Item 12, "The Future Orientation of FAO's Work in the Region", see E. 2 of this report.

4. Policy Questions arising out of Technical Meetings

(a) Second FAO Near East Meeting on Animal Health, Damascus,
5-10 March 1956

The Conference noted the main policy recommendations of the Second FAO Near East Meeting on Animal Health as recorded in Document NERC 58/4. Consideration was given to these policy recommendations as follows:

- i) The Director-General of FAO should consider inviting Governments of the Near East Region to participate in a Working Party on Animal Production which would meet periodically and which in the first instance should be set up on a temporary basis, taking on its permanent form after some experience had been gained.

The Conference was of the opinion that the time had come for the Near East Working Party on Animal Production to be established on a formal and permanent basis and that its title should be the Near East Working Party on Animal Production and Health.

The Conference accordingly recommended:

that the Near East Working Party on Animal Production and Health be established by FAO and that Governments should designate their respective representatives thereon as soon as possible.

- ii) The Director-General should invite the representatives of three of the countries to assume special responsibility, in cooperation with members of the FAO staff, for assembling and considering information on the animal health problems of the region, including attention to veterinary education, animal nutrition and management, as a basis for determining those problems which are most deserving of attention on a regional basis.

In the opinion of the Conference the establishment of the Near East Working Party on Animal Production and Health which will comprise representatives from all the countries in the Near East Region, will supersede the arrangement whereby three countries were invited to assume certain responsibilities for certain phases of this work during the interim period. It was therefore agreed that this proposal would lapse.

- iii) The meeting requested FAO, as a matter of urgency, to undertake a study of the facilities that exist for the professional training of veterinarians in the Near Eastern countries. The project should include visits by selected veterinary educationists to existing schools in the area, followed by the holding of a meeting or centre at which representatives of Governments and educational institutions would meet the FAO advisers to prepare comprehensive recommendations in the form of a report.

The Conference took note of the fact that the Meeting on Veterinary Education in the Near East as called for in the above recommendation was, in fact, held in Teheran, Iran, from 21-28 October 1957.

- iv) The attention of governments of those countries which do not now have veterinary services was called to the advantages to the livestock industries in those countries of having adequate veterinary services, and also to the need for such services if dangers of spread of diseases from one country to another are to be reduced.

The Conference endorsed the importance of government veterinary services and urged governments which do not already have such services to establish them in their own interest and in the interest of neighbouring countries.

- v) The meeting recommended that a follow-up meeting should be held as soon as is practicable at which delegations review common problems in the field of animal health and production.

It was noted that following the establishment of the Near East Working Party on Animal Production and Health, a meeting of this body will be held as soon as practicable and that Animal Health will form an important segment of the Agenda of this meeting along the lines suggested by the Second Near East Meeting on Animal Health.

The Conference accordingly recommended that FAO should hold a meeting on Animal Production and Health in the Near East in 1959 or as soon as possible thereafter, at which the members of the Near East Working Party on Animal Production and Health and of the technical groups to be established thereunder, would participate.

- (b) Meeting on Veterinary Education in the Near East, Teheran, Iran, 21-28 October 1957

The Conference endorsed the need for further consideration to be given to the subject of veterinary education and approved the holding of an international meeting on veterinary education by FAO in 1960.

- (c) Near East Forestry Commission

The Conference heard the report of the Second Session of the Near East Forestry Commission held in Cairo in October 1958. The Report (Document FAO NEFC 58/32) which was submitted by the Chairman of the Near East Forestry Commission, Mr. Shawki, Sudan, deals with the following policy questions and recommendations:

1. The Commission endorsed the preparation and maintenance of national bibliographies on eucalyptus and expressed the hope that the Near East Forest Research Centre might undertake the compilation of a regional bibliography.

2. The Commission recommended that provision be made by Member Governments for an adequate representation of forestry interests in the organization and conduct of National Seed Campaigns.
3. The Commission invited research institutions dealing with equipment for forestry and wood-working industries to send the result of their work to the FAO Forestry Division so that they might be considered for publication in the form of equipment notes.
4. The Commission decided to set up an ad hoc Committee for the Mediterranean Development Project consisting of the representatives of Lebanon, Libya, Iraq, Sudan and the United Arab Republic to cooperate with this project.
5. The Commission wished to lay emphasis on the fact that one most important factor limiting forestry development in the region is the inadequacy of budgetary provisions for operational expenses and investment and invited Member Governments to make every possible effort to make more funds available to forestry services.
6. The Commission recommended that the terms of reference of the Working Party on Forest Range Management should be expanded to include all rights of usage as well as grazing. The Director-General was asked to correspond with member countries concerning the nomination of representatives to this Working Party.
7. The Commission recommended that the Director-General should explore possibilities to set up a regional training centre on Watershed Management. The representative of Iraq mentioned that his Government would be prepared to act as host.
8. The Commission gratefully acknowledged the efforts made by FAO and the Northern Region of the United Arab Republic to establish a Near East Forest Ranger School and strongly appealed to interested member governments to nominate more students and pay their contributions. It emphasized that this opportunity was a unique chance to spread forestry knowledge in the Arabic language.
9. The Commission wished to stress the importance of the Near East Forest Research Centre which has been established in Damascus and once again urged member countries to nominate representatives and pay their contributions towards the expenses of this Centre.

10. The Commission believed that the time was now opportune to undertake a timber trend study for the Near East Region and therefore recommended that provision should be made in the program of work of FAO for the Forestry Division to prepare such a study.
11. The Commission invited the Director-General of FAO to explore the feasibility of organizing under ETAP a regional training centre on forestry and forest products statistics and pointed out that written evidence of the interest of as many governments as possible should be addressed to the Director-General. The idea was also expressed that member nations could benefit greatly from the advice which a forestry statistician could offer by visiting various countries in succession, if requests for such assistance were included in the country program.
12. The Commission recommended that a study of acacias should be undertaken comprising identification, biological needs, value as fodder, and tanning material reproduction techniques and others and that as high a priority as possible should be given to such a study.
13. The Commission recommended that a second Regional Poplar Conference be held, and Turkey offered to act as host for a special seminar on poplar to be set up under ETAP.
14. The Commission finally expressed the hope that ways may be found for issuing forestry publications in Arabic translations.

The Conference altogether felt alarmed about the present state of forestry in the Region which, of all the regions of the world, had relatively the smallest forest area. The number and extent of stands managed on a sustained yield basis were extremely small and on the other hand the economic and social development in the region might be expected to bring about increased consumption requirements for round wood and its products.

(d) Meeting on Agricultural Extension

The discussion of policy questions arising out of the Near East Technical Meeting on Agricultural Extension demonstrated an increased appreciation, on the part of Member Governments, of the fundamental importance of agricultural extension in the complex of government services required for agricultural development. Problems of extension organization and training were considered and the need was expressed for a thorough study of extension services in the countries of the Region. Delegates commented on the close relationship between agricultural extension and other types of agricultural education and requested F.A.O. to devote increased attention to vocational training in agriculture.

The Conference stressed the desirability of strengthening FAO's Near East Regional Office and of carrying out more activities of a regional nature designed to strengthen national extension services. In particular the Conference strongly endorsed the following recommendations of the Near East Technical Meeting on Agricultural Extension.

1. FAO should take the initiative in organizing a six-weeks training course for trainers of extension workers.
2. A permanent regional centre for advanced training for extension supervisors, subject matter specialists and trainers should be established.
3. FAO should undertake the publication of a regional extension periodical.
4. FAO's Near East Regional Office should serve as a clearing house for collection and distribution of extension teaching materials produced in the Region.
5. A team should be organized to evaluate extension organization and programs in the Region.
6. FAO should organize a study tour for extension leaders.
7. A survey should be made of existing agricultural educational institutions and their facilities for training extension personnel.

In endorsing these recommendations, the Conference gave highest priority to those dealing with training and requested that in addition to arranging regional training centres, FAO should assist with short-term national training centres. The Conference recommended that the survey of agricultural educational institutions and their facilities for extension training be broadened to cover facilities for agricultural and forestry education in general, including vocational training. In carrying out all of the recommendations, FAO was requested to bear in mind the language requirements of the various countries. The cooperation of ILO, UNESCO, and the League of Arab States, in implementing the recommendations of common interest, was offered by the observers of these organizations.

(e) FAO/WHO Regional Nutrition Meeting

Policy questions arising from their meeting are dealt with in Chapter C. 2 Problems of Nutrition in the Region.

C. MAJOR QUESTIONS OF FOOD AND AGRICULTURAL DEVELOPMENT IN THE REGION

1. Orientation of Agricultural Production and Supplies in Relation to Demand

a) The Short-term Outlook for Food and Agricultural Products in International Trade:

The Conference considered the short-term outlook for food and agricultural products in international trade in the light of recent trends in the world agriculture situation and with regard to developments in respect of commodities of particular interest to the Near East Region.

The Conference was informed of the main conclusions drawn by the Council at its 29th Session from its general review of the State of Food and Agriculture. It was concerned to note the persistence of certain disquieting features in the world agricultural commodity situation, in particular that :

- (i) the volume and value of trade in some major agricultural commodities had fallen;
- (ii) exportable supplies generally had remained large and agricultural surplus problems were affecting a number of commodities and countries;
- (iii) the decline in international market prices of many products, particularly when seen in relation to movements in prices of other goods, had imposed serious financial strains on several agricultural countries;
- (iv) present production prospects indicated that supplies of several commodities would remain large throughout 1958/59, with no commensurate developments in the growth of world consumption.

Viewed against this background immediate prospects for the main Near East export commodities were not encouraging. World consumption of cotton, for example, was still on the decline and while demand for long-staple varieties was expected to increase, average prices were likely to remain depressed. Similarly, the export outlook for fresh fruit was unfavourable due to ample supplies in the European market. In coffee, a further increase in stocks of the main producing countries appeared likely during the coming year. The Conference noted, however, that the demand for dried fruit including raisins and dates was expected to remain firm. Output of oriental tobacco was below that of last year and international market trends with respect to this commodity were expected to remain favourable.

Near East harvests of commodities entering into international trade had generally shown an upward trend and it was feared that foreign exchange earnings from agricultural exports might not be maintained with possible unfavourable effects on the rate of implementation of economic development programs now under way in many countries of the Region. Furthermore, import requirements of basic foodstuffs, in particular grains, were increasing in several countries, both as a result of the growth in population and of unfavourable crops and this would mean a further strain on foreign exchange resources. In the opinion of the Conference these developments underlined the need for countries both within and outside the region, to adjust the orientation of agricultural production more closely to demand. The importance of the principles of selective expansion of production and consumption was stressed in this connection. The suggestion was also made that with a view to furthering implementation of national development programs, governments holding large stocks of basic foods, particularly cereals, should consider making these available on favourable terms to interested countries in the Region.

The Conference noted the information given in secretariat paper NERC 58/5 regarding the short-term outlook for cereals, cotton, oil seeds and oils, fresh and dried fruits, tobacco, coffee and sugar, as well as the more recent developments affecting these commodities as reported by the secretariat. Several delegations provided supplementary information on developments in their countries.

With regard to rice, exports had been suspended from the Southern Region of the United Arab Republic following a poor harvest.

There had been a shortage of rice and wheat in Pakistan but latterly the supply situation had improved. Wheat import requirements of the Southern Region of the United Arab Republic were expected to increase in view of a reduced crop. Short crops of wheat and barley had also been harvested in the Northern Region, Jordan and Iraq. Attention was drawn to the region's continuing high import requirements of wood and wood products. Output of fruit and vegetables was increasing rapidly throughout the region especially in Lebanon, Jordan and the United Arab Republic, where ample supplies were available for export. The delegates of Ethiopia and Sudan drew attention to the expansion in livestock numbers and output of livestock products in their countries and to the increase in exportable supplies of these commodities.

In expressing its appreciation for the documentation presented by the secretariat, the Conference considered that short-term outlook forecasts provided a valuable basis for governments in determining desirable adjustments in import and export policies for a period of 12 to 18 months ahead. Such forecasts could also assist countries in appraising prospects for foreign exchange earnings from agricultural products. The Conference was glad to be informed that FAO was giving continuing attention to the further development of commodity outlook work and believed that the exchange of information at Regional Conferences on short-term supply and requirement prospects for commodities of importance to each region could usefully supplement the work of the FAO Committee on Commodity Problems and its

different commodity groups, the Council and the Conference. It was suggested that FAO would consider the possibility of preparing from time to time up-to-date statements on the food and agricultural situation and outlook in the Near East for the information of member governments in the Region.

b) Effect of Longer Term Factors on Demand and Consumption

Factors stressed in the discussion of the longer term outlook for demand and consumption included the rapid growth of population, and changes in food consumption levels.

There is a realization that population data are inadequate in many countries of the Region, but it is clear that the rate of increase is very high, reaching up to 3 percent per annum in some countries, though the rate in most countries is of the order of 2 to 2.5 percent. Such a rate of increase requires heavy capital investment and a rapid increase in agricultural production if standards of living are to be maintained or raised.

Emphasis was also placed upon changes in consumption levels for food, forestry and other agricultural products following changes in income and the growth of city populations. Again there is a dearth of accurate information on these factors.

Several delegations emphasized the need for systematic government planning to prepare for this future growth and change including those of Afghanistan, Ethiopia, the Sudan and the United Arab Republic. Of interest in this connection were the details of government administrative structure given by many delegations on the role of government departments in planning, implementing and administering rural development, (Item 10 of the Agenda). There is no uniformity of government structure, and the approach to forward planning follows no regular pattern. Comprehensive economic development plans have not yet been developed in this region, though the delegations of several countries referred to steps being taken in this direction. The approach more commonly adopted is through a development board or coordinating council. The need for agricultural economic research and further training centres in the economic planning of agricultural and forestry development was stressed.

Reference was also made to the need for high calibre economic planning experts with a comprehensive outlook to assist governments on a longer term basis in the field of agricultural development.

Guidance was also requested on methods to be adopted in implementing development policies. The delegate of the United Arab Republic, for example, placed great emphasis on the use of cooperative organizations for production requisites and for marketing. He also emphasized the need for improved transport and communications to facilitate development.

c) Marketing

One of the most striking facts emerging from the Conference was indeed the appreciation of the need for improved marketing and distribution in countries where population trends, the effects of rising income per head and the process of urbanization combine to make traditional and existing marketing and transport arrangements inadequate to supply the growing needs particularly of milk, meat, fruits, vegetables and other perishable foods. All delegations stressed the need for improvements in marketing.

The delegation of the United Arab Republic referred to inadequate availability of shipping and transport planes for perishable commodities. Other delegations mentioned the growing use of refrigerated road vehicles, but the greatest emphasis was placed on the need for research and training in particular marketing methods. In this connection, the United Arab Republic reaffirmed its offer to act as host government to the proposed regional training centre on the marketing of fruits and vegetables, which had been postponed for several years through lack of ETAP Regional Project funds. The delegation of Lebanon strongly recommended a permanent FAO regional marketing centre in Lebanon to conduct research, practical developments and training in the marketing of agricultural products with particular reference to fruits and vegetables. A formal offer was made of buildings for the institute including experimental and research facilities and 3 large centres for packing citrus and apples, cold stores and refrigerated transport for demonstration purposes. The special advantage of Lebanon for such a regional centre were outlined and appreciated by many delegations.

These proposals are embodied in the following recommendation.

RECOMMENDATION ON AGENDA ITEM 6

"THE ORIENTATION OF AGRICULTURAL PRODUCTION
AND SUPPLIES IN RELATION TO DEMAND"

The Conference recommended:

A. To Governments:

That to improve the organization of agricultural production and the factual basis of agricultural planning

1. Governments of the region give careful consideration to the improvement of rural institutions, particularly the formation of cooperatives in the field of improved seed supplies, fertilizers, other production requisites and marketing.

2. Governments of the region undertake surveys and studies including:

- (a) The collection and analysis of demographic statistics of the level of population, the rates of increase, changes in the age composition, the degree and rate of urbanization and other relevant factors. That in these studies they enlist the full support of the United Nations, the Statistical Society for Arab Countries and other bodies experienced in the demographic field.
- (b) Household consumption surveys to determine expenditure on food and non-food items including quantities self-produced in relation to total expenditure, size and age of family in different social and income groups. These surveys may be, where appropriate, combined with dietary and other economic surveys. The help of statistical bodies competent in this field should be sought including the Near East Regional Office of FAO.

B. To FAO

That to improve the efficiency of the region in agricultural planning and marketing that FAO undertake as soon as possible:

- 1. The establishment of a further regional training centre on economic planning and project formulation, including the development of agriculture, forestry and fisheries projects.
- 2. The conducting of a short intensive training centre on the methods of packing, grading and marketing of fruits and vegetables, in Cairo. This centre has been postponed several times through lack of STAP regional project funds and was scheduled for 1958 in Cairo. Special efforts should be made to secure the necessary funds to hold the centre as soon as possible.
- 3. The creation of a permanent regional marketing institute in Lebanon to:
 - (a) Organize regular training courses in the principles and practices of agricultural marketing.
 - (b) Conduct training in the region on the marketing of agricultural commodities particularly of fruits and vegetables.
 - (c) Study and develop grades and standards on a regional and international basis.
 - (d) Study and develop the packing, handling, storage and transport of agricultural products, particularly fruits and vegetables.

- (e) Conduct research on marketing methods.
- (f) Publish reports and studies on agricultural marketing.

The Director-General is invited to explore the site and facilities available in Lebanon for this permanent institute and to explore the possibilities of financing this project from ETAP, the UN Special Fund for Economic Development or other sources as soon as possible.

4. To approach Governments in general:

To direct as far as possible any expansion in production towards commodities in short supply in accordance with the principles of the selective expansion of production and consumption adopted by the 7th Session of the FAO Conference.

5. To approach Governments holding large supplies of foodstuffs:

To consider making supplies, particularly of grains, available under suitable currency arrangements to assist countries of the region engaged in large-scale economic development programs, in accordance with the FAO Principles of Surplus Disposal and the recommendations of the FAO Conference and Council.

6. To approach the United Nations and other agencies:

To conduct surveys of equipment available for transporting perishable products including big slow transport planes and refrigerated and ventilated ships, with a view to communicating such surveys to the interested countries of the region as early as possible.

2. Problems of Nutrition in the Region

The extent and seriousness of problems of nutrition in the region must be emphasized. While a satisfactory analysis of food consumption is not at present possible, in view of the incomplete and imperfect data on food supplies and food utilization, and the small number of food consumption surveys as yet made, there is abundant evidence that the diet of large sections of the population is unsatisfactory. At the present time there is no marked general shortage of calories in most countries in the region, though inadequate calorie intake occurs in certain groups and intake may show seasonal fluctuations. Diets are, however, in general deficient in proteins of high quality and in certain essential vitamins and minerals. Available knowledge of the prevalence of under- and malnutrition and deficiency disease, and of morbidity and mortality in infants and young children, is generally in line with what is known about food consumption. Evidence from both sources underlines the need to raise levels of nutrition.

The Conference had before it a summary of the Report of the FAO/WHO Nutrition Committee for the Near East, which met in Cairo from 18 to 26 November 1958, and considered and supported the recommendations made by that Committee on matters falling within FAO's field of interest. It has reproduced some of these recommendations in its own report, under various relevant heads, with any additions and modifications arising out of its own discussions. The full report of the Joint Committee will be available to governments in due course.

a) Nutrition in Relation to Food and Agricultural Policy

Many factors influence food consumption. In Section A of this Chapter of the report attention is given to such factors as demographic changes, income and price levels, and marketing problems. It is, however, essential that, in planning food and agricultural policy, earnest attention be paid to the nutritional requirements of the consumer and that policy be oriented to fulfil these requirements. While effective measures to improve nutrition necessarily differ from country to country, the Conference emphasized the need which exists in most countries for greater supplies of inexpensive foods rich in protein, both of animal and vegetable origin, including fish and legumes. Increased production and consumption of vegetables and fruits are also highly desirable from the nutritional standpoint. Mention was also made of the need to strike a balance between cash crops and the production of foods which are directly consumed by the people and help to cover their nutritional requirements. Of special importance is the development of better facilities for the preservation, storage, transport and marketing of foodstuffs. Efforts should be made to utilize more fully for human consumption in the region foods such as dates which are in surplus supplies in some countries.

The various measures needed to establish and implement satisfactory national nutrition policies are considered below.

b) Data on Food Consumption

More accurate and comprehensive data on food consumption are needed in the various countries, since knowledge of food consumption and its trends is a necessary basis for sound national food and nutrition policies. This requires the establishment of national food balance sheets and the conducting of dietary surveys. Household consumption surveys, referred to in Section III A, may be made from various motives. If the motive is primarily economic, the survey should be designed to provide some useful nutritional information. Conversely, in making dietary surveys the main object of which is to obtain data on food consumption, information should also be collected on the economic, agronomic and social background of the group surveyed. Whenever possible, dietary surveys and clinical surveys of the state of nutrition should be made simultaneously on the same population group, account being taken in the clinical surveys of the relation between nutrition and infectious and parasitic disease. Knowledge of the nutrient content of local foods, and of the effect of local processing methods on nutritive value, is needed for the analysis of dietary survey data.

The Conference recommends:

- (a) that governments should make every effort to develop satisfactory national food balance sheets, seeking assistance from FAO as needed
- (b) that more dietary surveys should be made, by statistically sound methods and by suitably trained workers, whenever possible dietary surveys and surveys of state of nutrition being made simultaneously on the same population group
- (c) that a simple "Manual on Dietary Survey Techniques", specially designed for use in rural areas and dealing both with methods of making surveys and the analysis and presentation of their results, should be prepared with assistance from FAO.

c) National Nutrition Committees

National nutrition committees, of appropriate composition and with defined functions, can make an essential contribution to the end in view. Their establishment has been recommended by various FAO Conferences from the Hot Springs Conference (1943) onward. The Conference noted, however, that such committees have often been ineffective or have failed to survive, among the reasons for this being the absence of clearly defined programs and functions, lack of trained nutrition workers to provide technical advice, insufficient funds to enable the committee to function actively and encourage nutrition work and applied nutrition programs, and lack of authority to influence national nutrition policy. Special consideration was given to this problem by the Ninth Conference of FAO (1957). Each FAO Near East Regional Conference, as well as the Arab League, has urged the setting up of such committees. With regard to their structure and function, the present Conference makes the following comments:

- (i) If a National Nutrition Committee is to exercise a real influence on national food and nutrition policy, it should be composed of officials of high rank. On the other hand, such officials have often no time to study thoroughly the problems involved and need technical advice.
- (ii) The Committee may meet under the auspices of the Ministry of Health or the Ministry of Agriculture. The development of national nutrition policies and programs depends, however, on the co-ordinated efforts of a number of ministries and services. Hence, it is desirable that the Committee should not be responsible to a single ministry, but should report to a high executive authority, such as a Council of Ministers or a National Planning Board.

- (iii) A permanent secretariat for the Committee is essential, and the necessary financial and administrative arrangements for this should be made. The technical secretary of the Committee should be a highly qualified and experienced nutrition worker.
- (iv) The Committee should have close relationships with university research laboratories and other research institutions. It should preferably have funds at its disposal to support research needed to guide practical nutrition activities.
- (v) It is suggested that a National Nutrition Committee may consist of senior representatives of the ministries concerned and include representatives of the food industry and of the consumer. One well-prepared meeting of such a Committee per year would probably be sufficient. The substantive work should be done by technical sub-committees, organized by the permanent secretariat, which would make recommendations for action to the National Nutrition Committee itself. The reports and recommendations of the Committee should not be confined to generalities, but be supported by solid and convincing facts.

While these comments may serve as a general guide, it is recognized that the precise structure and functions of National Nutrition Committees will differ from country to country, in accordance with administrative practices and other factors.

The Conference recommends:

- (a) that National Nutrition Committees should be set up in countries in which they do not now exist, and appropriately strengthened in countries in which they have already been established.
 - (b) that these Committees should be given the necessary authority and funds to carry out their functions.
- d) National Nutrition Institutes, Departments or Bureaux

The main functions of institutes of this nature include the conducting of surveys, undertaking special investigations concerned with problems of nutrition and the development of educational programs. They should work in association with various ministries or departments of government, including Health, Agriculture and Education, which have responsibilities for various aspects of nutrition, and with National Nutrition Committees.

The Conference recommends:

- (a) that National Nutrition Institutes should be established or strengthened in the various countries.
- (b) that FAO should, on request from governments, provide experts, equipment and fellowships, to assist in the setting up and development of such Institutes.

e) Consumption Goals

Consumption goals which take account of nutritional requirements should be established with the cooperation of national nutrition institutes and nutrition workers. These goals should be realistic and related to existing food habits, the economic situation and to the practical possibilities of expanding food production. In most countries, increasing supplies of food rich in protein will be an important objective.

f) Education and Training in Nutrition

While the solution of the problem of nutrition lies largely in agricultural and economic development, ignorance about the foods or diet needed for health is also a major cause of unsatisfactory nutrition. Vigorous efforts to develop education in nutrition are a necessary part of national food and nutrition policies.

Education in nutrition should be provided through a variety of channels, including schools, maternal and child health services and community development and rural welfare and agricultural extension programs, and be linked with other activities such as health education, supplementary feeding, home economics and, when feasible, the development of school gardens. This calls for the training in nutrition of workers at various levels, varying from professional and specialized personnel to workers in local services who can pass a nutritional knowledge to the people during their daily activities. With respect to professional personnel, special attention is directed to the need for training more non-medical nutritionists and dietitians on a graduate level and their suitable employment in practical nutrition work. It is also necessary to increase the number of home economists and to develop home economics service, since home economists can influence women in the home and help in improving family diets. Some training in nutrition should be provided to services working at the village or community level, to enable them to instruct the people in better habits of diet. In educational campaigns account must be taken of food sanitation and of the relation between malnutrition and infectious and parasitic disease.

The Conference recommends:

- (a) that measures be taken in the various countries to develop the training of specialized nutrition workers.
- (b) that suitable nutrition instruction be included in the training of health personnel, school teachers, agricultural extension workers and social welfare workers.
- (c) that the education in nutrition of the people be vigorously promoted through all appropriate channels.
- (d) that FAO should consider the possibility of organizing, preferably in association with WHO and other international agencies, a training course in nutrition for workers in the region.

g) Supplementary Feeding

The supplementary feeding of vulnerable groups, particularly expectant nursing mothers, young children and school children is a direct means of improving nutrition and can be used as a medium for education in nutrition. The provision of free or cheap subsidised meals to industrial and other workers is also a valuable measure.

The Committee recommends:

- (a) that Governments should extend the supplementary feeding of these various groups;
- (b) that a Seminar on Supplementary Feeding and Education in Nutrition should be arranged by FAO, in association with UNICEF and WHO.

h) Other Recommendations to FAO

The Conference recommends:

- (a) that arrangements be made for a small team of highly qualified nutrition workers to visit different countries in the region on the request of governments to advise about the development of nutrition research and practical nutrition programs and on problems relating to national nutrition policies. The cooperation of WHO in this project should be sought.
- (b) that FAO provide more fellowships, on the request of governments, for the training abroad of workers in nutrition and associated fields from the region.

i) Exchange of Information

Knowledge of the developments in nutrition research and applied nutrition taking place in one country is of value in furthering work in the field of nutrition in other countries.

The Conference recommends:

that more technical information on nutrition and associated subjects should be interchanged within the region and that the FAO Regional Office should encourage and contribute to this exchange.

j) Further Meetings of the FAO/WHO Nutrition Committee for the Near East

Meetings of a committee of this nature are of value in promoting contact between nutrition workers in different countries, in clarifying nutrition problems in the region and in laying plans for future developments.

The Conference recommends:

that further meetings of the FAO/WHO Nutrition Committee for the Near East should be held periodically, preferably at intervals of about three years.

3. Organization and Development of Research in Agriculture

Fisheries and Forestry

There was general recognition by the Conference of the need for well established national programs of research, in relation to agricultural development. Details were given by certain delegations of existing national research organizations showing that a number of countries had already established coordinating committees and research councils and other research bodies which served as a liaison between research workers and policy making bodies.

The delegate of the United Arab Republic described the progress made in both the promotion and organization of scientific research in recent years. Research into improvement of particular crops had been considerably expanded since the establishment of the Cotton Research Board in 1920. Research committees are established in various ministries and agencies. In 1956 the Higher Council of Sciences had been established, both to coordinate all research activities being carried out by Government and to promote the wider application of scientific research. A national plan for research is now being studied by this Council.

The delegate of Iran stressed the shortage of specialists and emphasized the need for paying the highest salaries to research workers, as was now the policy of his country. A committee had been set up, coordinating the various research activities of government departments.

The Government of Iraq had undertaken research for many years in a wide variety of agricultural fields, especially in soil science, salinity problems, and in plant and animal disease and pest control. A Directorate-General of Research was created in 1957, to conduct research within the Ministry of Agriculture in agriculture and fisheries. Within this Department a Research Council has been set up under the leadership of the Director-General. Research is also conducted by the Department of Forestry which is also under the Ministry of Agriculture.

In Jordan a Department of Scientific Research with qualified specialists has been established and the Ministry of Agriculture of Jordan has put thirteen experimental stations at its disposal for Research work in various agricultural fields. The application of results of research has been

facilitated by developments in the extension division of the Ministry of Agriculture. This now contains 182 employees including experts in all fields of agriculture, home economics and the organization of Youth Clubs. The Forest Department of Jordan is also carrying out measures in the field of soil and water conservation coupled with reforestation of state and private lands. In connection with research and extension one of the serious problems is that trainees from rural areas often are unwilling to return to rural work.

The Sudan delegate asked if it would be possible for FAO to assist his government in the direct recruiting of suitable research specialists, which they were experiencing increasing difficulty in recruiting. His country had a wide variety of research activities, coordinated by an advisory committee on agricultural research. A Central Research Council is under consideration.

Other delegations described the national research activities and pointed out the general shortage of research technicians and of equipment throughout the Region. A number of proposals were made by which FAO might assist both in the organization of national research bodies and in the establishment of regional cooperation.

The role of the Regional Office was stressed in promoting such coordination, and the Director-General was requested to examine how such liaison functions might be carried out.

The Conference

Recognizing the importance of various aspects of agricultural research and its application as a contribution to the economic development of the countries of the Region;

Considering that the setting up and the execution of programs of agricultural research required considerable resources and adequately trained personnel;

Convinced of the need to make every effort to promote and facilitate regional cooperation in agricultural research;

Requests the Director-General

1. to carry out a study and prepare a working paper on national research organizations and their activities in the field of agriculture, and
2. to convene at the appropriate time a working party representing the governments and interested organizations of the region, to study and recommend measures for achieving better coordination in the field of agricultural research.

4. Land Tenure and Settlement in the Near East

Within the last year, the problems of land reform have received increasing attention in this Region. Comprehensive land reform laws have been proclaimed in the Northern Region of the United Arab Republic and in Iraq. The distribution of land requisitioned under the Land Reform Law is virtually completed in the Egyptian Region of the United Arab Republic. In Iran, where the distribution of Crown lands to the villagers has been proceeding for some time, the government is now preparing to distribute state lands to the tenants, and West Pakistan has established a Land Reform Commission with wide powers to improve tenure conditions and an Agricultural Development Corporation to speed up farm settlement. All these reforms have one thing in common: they all aim at giving the cultivators incentives to produce more, opportunities for a better living, and a higher status of citizenship and dignity.

Each country has various alternatives for improving its land tenure system. Some agrarian reform measures involve fundamental changes in the social order, others can be fitted into the existing system, others fall in between these two approaches. The choice between these alternative types of land reform measures is primarily a matter of general national policy and depends upon special circumstances in the individual countries.

Once a government has decided to adopt a certain type of agrarian reform, many technical, economic and administrative questions arise in the implementation of the national policy of agrarian reform. It is one thing to pass a law; it is another to implement and administer it successfully. Many countries in various parts of the world have found the implementation and effective administration of agrarian reform laws most difficult.

In order to succeed, the technical, economic and administrative aspects must be competently handled from the viewpoint of better production and marketing methods, effective cooperative, credit and extension services, and good local organization for the participation of farmers in the program. Otherwise the agrarian reform program may fail to bring the desired results, may reduce consumption and cause a serious decline in agricultural production, particularly in market and export crops, and may leave disillusionment in its wake on the part of the farm tenants and laborers who were to benefit from the reform. It is not enough to distribute the land. Land and water must be used better than before, more and better types of credit must be provided, cooperative services must be organized, and most important of all, the cultivators must be helped to assume responsibilities as holders of their farms and as citizens of their community and country. The delegate of the United Arab Republic stated that the farmer should be considered as the principal element of production and every step should be taken to promote his welfare. Land reform programs should be designed to look after the farmer whether he be an owner, a tenant, or a laborer.

The delegates were in general agreement that land reform measures must be accompanied and supported by provisions for supervised credit fitted to the managerial needs of tenants and small land owners, so that they can obtain better seeds, fertilizers, draft power and implements for more efficient production at favourable terms. Such provisions have been made under the land reform laws of the United Arab Republic in the Southern and Northern Regions, in Iraq and in Iran.

The Conference recognized the importance of vigorous cooperative societies to assist the small cultivators in marketing their products, in purchasing various goods they require for production and home consumption, in obtaining the use of various kinds of machinery and equipment too costly for them to own individually, and in following proper crop rotations and other improved farming practices. The delegates from the United Arab Republic, Iraq and Iran reported that their governments are giving strong support and financial assistance to cooperative societies particularly in land reform areas. The representative of the Arab League emphasized the vital need for promoting the cooperative movement since it is a relatively new form of organization and mutual aid activity in most countries of this Region. He referred to a meeting on cooperatives planned to be held in the Region in 1959, at which the role of cooperatives in agrarian reform programs will also be discussed.

There also was a strong consensus of the delegates concerning the crucial role of extension services in agrarian reform programs. The cultivators are called upon to assume new responsibilities as holders of productive farm units, to adopt better techniques and more efficient farming methods. All this requires new skills in organizing the farm into a modern production process and calls for technical and economic advice from well-trained extension workers on the village level.

Several delegates raised the problem of dealing with consolidation of fragmented holdings and the enlargement of undersized farms with a view to creating viable farm units yielding a decent livelihood to the farm family. These issues require a good land registration system and provisions for preventing future fragmentation into dispersed and uneconomic holdings. The Conference noted that FAO is carrying on work in this field and expressed interest in the experience of other countries in dealing with these problems.

The United Arab Republic reported on the favourable results of the ceilings on rents established in the Southern Region. The incomes of tenant families increased not only due to a reduction in rent payments, but also due to a higher rate of investment in the production process on the part of the farmers made possible by lower rents and supported by the assistance and guidance of the cooperative societies. Security of tenants on the land has been improved in several countries of the Region, such as in Jordan, Iraq, the United Arab Republic, Pakistan and Malta.

The Conference urged that greater attention must be given to soil and water resources surveys and land use planning, since many aspects of agrarian reform require the allotment of various types of land to their

most appropriate use, such as irrigation, dryland farming, grazing and forestry. Moreover, these various types of land use must be coordinated in such a way as to yield the highest production and a sufficient income to the rural families in the respective areas. FAO was requested to furnish a high calibre adviser in this field of land use planning and farm development for the most effective use of land and water resources, as soon as funds become available.

The representative of ILO expressed his organization's active interest in agrarian reform, especially from the viewpoint of the welfare of agricultural workers, their employment conditions and opportunities, and any measures designed to improve wage levels of agricultural laborers. ILO will continue to cooperate with FAO and the countries in the Region on these matters as it has in the past.

The Conference endorsed the recommendation made at the Salahuddin Land Problems Centre that in view of the basic importance of conducting studies in the field of land problems and particularly expanding land and water development for settling rural families on productive farms, a permanent Institute, Centre or similar group be organized in the Region under FAO auspices to keep these problems under constant review, undertake studies and train technicians in these fields.

5. The Role of Government Departments in Planning, Implementing and Administering Rural Development

The machinery for planning, the organizational structure of the ministries of agriculture, and the organization or coordinating machinery for rural development programs were considered. There was general recognition of the need for broad economic and social planning based on comprehensive technical, economic and social data. The need for planning the organizational and administrative structures, and personnel requirements for development appeared to be less well recognized.

Most country delegations felt the need to move forward simultaneously in the many fields involved in rural development. Although the need for the broad approach was generally felt, there was a diversity of views as to how to organize the work. In some countries, such programs as community development moved more or less parallel to the programs of old-established departments. A number of countries, however, were making determined efforts to integrate, or at least closely coordinate, all activities aimed at rural development.

Delegates expressed the view that FAO assistance in the fields of planning, organizing and administering rural development would be useful and welcome. For providing such assistance, only highest level, broadly trained and experienced experts would be suitable. The thought was also expressed that better integration, within FAO, of work in the various subject-matter fields would be helpful to governments in dealing with broad planning and organizational problems.

D. SPECIFIC ACTIVITIES REQUIRING CONFERENCE GUIDANCE OR
GOVERNMENT ACTION

(a) Locust Control

1. Desert Locust

The Conference directed particular attention to desert locust control which it regarded as a major problem affecting the economy of all countries in the Region.

The Conference appreciated that during recent years, national locust control services in the Near East had been greatly strengthened and that since FAO accepted a coordinating role a new standard of international cooperative action had been developed. Despite these advances the countries of the Near East remained under the continuing and imminent threat of attacks by the desert locust and periodical crop losses were still inflicted.

The Conference also recognized the high costs of existing methods and strategy of desert locust control which undoubtedly involved some waste of manpower and materials and believing that a more rational policy of desert locust control could be reached only through a long-term policy of research, survey and training, the Conference adopted the following resolutions:

The Conference

Noting with satisfaction the establishment of the United Nations Special Fund for Economic Development and

Being of the opinion that an enlarged inter-regional project on desert locust control should qualify for assistance from the Special Fund,

Recommends that the proposals detailed in Annex III for an expanded desert locust control program at an estimated cost of about US\$ 3.7 million, should be submitted by the governments represented at the Fourth Session of the Near East Regional Conference as early as possible for consideration by the Managing Director administering the Special Fund.

Owing to the urgency of this matter the Conference authorized the Director-General to transmit this submission to the Managing Director on behalf of the governments of:

Ethiopia
Iran
Jordan

Pakistan
Saudi Arabia
Sudan

and any other government requesting the Director-General to act accordingly.

The Conference approved in principle the proposals submitted by the United Arab Republic to the Fifth Session of the FAO Desert Locust Control Committee, for strengthening the international campaigns in the Arabian Peninsula through a unified command, increased flexibility and a stabilized budget. The Conference requested all governments to submit to the Director-General, as soon as possible, their views upon these proposals so that they may be considered in detail at the next session of the FAO Desert Locust Control Committee in June/July 1959.

Whilst the Conference regarded the Arabian Peninsula as an area of great strategic importance it drew attention to the need to treat the entire invasion area of the desert locust as one entity. Maximum control efforts in the Near East could be nullified by inadequate control elsewhere.

The Conference urged the Government of Yemen to establish a national locust control service at the earliest opportunity since it considered that the lack of such a service was a serious obstacle to effective locust control throughout the Arabian Peninsula.

Noting the serious locust situation existing in the Arabian Peninsula, the Conference expressed the hope that the Director-General would explore all possible means of extending immediate assistance in that area.

2. Moroccan Locust

Recognizing the continuing threat of infestations by the Moroccan locust in many countries of the Near East, the Director-General was requested to convene a technical meeting to review progress on research and control achieved since the meeting on the Moroccan locust held in Beirut in 1949.

(b) Mediterranean Development Project

The Conference heard a report on the progress achieved towards the implementation of the Mediterranean Development Project. It endorsed the steps taken and commended the Director-General for having initiated this Project. Its special value in the improvement of land use patterns and practices was emphasized.

While it was considered that at the present stage of the work it would be premature to discuss in detail the broad issues with which the Mediterranean Development Project was concerned, several delegations outlined the serious problems encountered in their countries with regard to defective land use practices, deforestation and soil erosion.

In Jordan, a forest and watershed survey has been started as a basis for a land management plan for the northern forest zone and the associated catchment areas. The importance of systematic underground water resource surveys was stressed by the delegate of the United Arab Republic and reference was made to pilot projects as a means of administering improved land use practices. One such project has already been proposed for the Northern Region of the United Arab Republic. A number of delegations

emphasized the importance of fruit production and suggested that FAO should undertake regional studies in this field. The desirability of a regional training centre in horticulture was also stressed. The delegate of Ethiopia suggested that a scheme similar to the Mediterranean Development Project might be undertaken for the countries bordering on the Red Sea.

The Conference expressed satisfaction with the establishment of an ad hoc Committee of the Near Eastern Forestry Commission to cooperate with the Mediterranean Development Project, and urged the countries represented on the Committee to participate actively in its work.

(c) Regional Agreement on Plant Pests and Diseases

Attention was called to the serious and widespread threat to crop production caused by plant pests and diseases, to the danger of possible introductions of new pests and diseases into the region and their subsequent spread through the region. Detailed surveys of pests and diseases had been undertaken in some countries, such surveys were commencing in others; nevertheless, the Conference noted that the knowledge of the distribution of pests and diseases within the region was inadequate. The need for a general strengthening of plant protection services was evident. As regards the movements of plants into and within the region, such measures as prohibition, certification, inspection, disinfection and quarantine should be expanded.

It was noted that only three countries within the Near East Region (Iraq, Pakistan and United Arab Republic) were parties to the International Plant Protection Convention.

Having reviewed the existing state of plant protection measures within the region the Conference adopted the following Resolution:

The Conference

Noting the severe crop losses caused by plant pests and diseases throughout the Near East Region, the lack of adequate information on the existing plant pests and diseases and the relative inadequacy of present methods of control in some areas,

Appreciating that new plant pests and diseases may be introduced into and spread through the Region,

Recognizing that continuing and extending crop losses can be prevented most effectively by the operations of well organized plant protection services throughout the Region,

Regretting that only three governments of the region were parties to the International Plant Protection Convention,

Requests the Director-General:

1. To give urgent consideration to the appointment of at least a temporary Plant Protection expert to the Near East Regional Office to assist governments in undertaking surveys of plant pests and diseases, and in promoting the establishment and development of national plant protection services and in organizing a regional plant pest and disease information and reporting service.
2. To convene as early as may be appropriate a regional technical meeting to (a) consider the formulation and adoption of a Plant Protection Agreement for the Near East Region, (b) prepare proposals for the further strengthening of national plant protection services throughout the region, (c) assist governments in the preparation of a submission for assistance from the United Nations Special Fund for Economic Development to strengthen plant protection services.

The Conference also urged (a) those governments in the region without national plant protection services to take steps to establish such bodies without delay, and (b) that any government of the region not already so should become a party to the International Plant Protection Convention.

(d) Sunn Pest

The Conference called attention to the serious and sometimes catastrophic depredations caused by the Sunn Pest to cereal crops in many areas of the Near East Region and requested FAO to devote maximum possible attention to providing assistance to governments in arriving at a solution to this major problem. The Conference was informed that although FAO fully appreciated the great importance of Sunn Pest control the assistance it had been able to offer to the region was restricted by the Organization's financial resources and by difficulties in securing the services of suitable experts. Nevertheless, steps were being taken to provide a group country expert during 1959 and to establish a documentation centre.

It was suggested that Sunn Pest control deserved similar attention to that devoted by FAO to the Desert Locust problems and that the possibility of supporting the Sunn Pest project by allocations from the United Nations Special Fund for Economic Development should be explored.

The attention of the Organization was drawn to the need for hastening the establishment of an information centre on Sunn Pest.

(e) World Seed Campaign

The Conference recognized the great importance of the extensive use of high quality seed of well adapted and superior crop and tree varieties as one of the most effective and cheapest means to increase crop production and to improve the quality of agricultural and forest products. The Conference, therefore, strongly supported the decision of the Ninth Session

of the FAO Conference held in 1957 to launch a World Seed Campaign, which will culminate in a "World Seed Year", to be designated by the Tenth Session of the FAO Conference. As to the year which would be most suitable as the "World Seed Year", the delegation of the United Arab Republic suggested to recommend 1960.

Most governments in the region have already made considerable progress in establishing national committees for the direction of the campaign in their own countries, and in strengthening or planning technical activities relating to crop and seed improvement.

Although in various countries a more or less smoothly functioning scheme for seed production, certification and distribution of various crops is already in operation, it was considered that programs in other countries and for other crops could be intensified and improved, specially in the field of seed certification and seed testing.

In order to assist the governments in their efforts to ascertain the success of this campaign, FAO was requested to provide as many publications, brochures, etc., as possible, from other countries, preferably translated in the local language, as a guidance for establishing seed improvement schemes in the countries of the region. It was also suggested that the countries of the region should prepare lists of publications available in this field for distribution to the interested countries through the FAO Near East Regional Office.

It was considered that training of seed technicians abroad under fellowships would greatly assist those countries which lack qualified technical staff for conducting national institutions in the field of crop improvement and seed production. Facilities and information on the equipment of seed testing laboratories and inspection services would be highly appreciated. Special emphasis was given to measures necessary for the maintenance of varietal purity and trueness-to-type.

(f) 1960 World Agricultural Census

The Conference noted recent developments in the FAO Program for the 1960 World Census of Agriculture as presented in document NARC 58/16, and endorsed FAO's plans to assist countries of the Region in carrying out their censuses of agriculture. The Conference noted also the increased participation of countries in the 1960 World Census program.

The Conference welcomed the emphasis given by the Director-General to both the special and common characteristics of the structure of agriculture in the Region and supported the holding of a regional meeting of national and FAO experts to formulate a regional census program for the Near East. The delegations of Jordan and of Iraq extended an invitation to hold such a meeting in their countries. The Conference stressed the importance of convening this meeting early in 1959, if possible in March.

The Conference emphasized the importance of training personnel in agricultural census operations. The Conference strongly supported the holding of a regional training centre on agricultural censuses in 1959 and urged countries to participate in this centre. The carrying out of a trial census and the inclusion of some crop-cutting experiments in the program of the centre were suggested. The delegation of the United Arab Republic offered facilities as host for this centre. Damascus and the period from May to July were mentioned as the most convenient location and time for the centre.

The Conference also recommended that a training centre be held on data processing and tabulation of census results early in 1960. The delegations of Lebanon and Jordan extended invitations for holding this centre in their countries and indicated their willingness to offer the necessary facilities.

The Conference commended the assistance offered by FAO through the provision of census experts, the fellowship program, and the documentation prepared by FAO on statistical methodology, data processing and tabulation, and sampling methods. The Conference requested the Director-General to continue his efforts in assisting member countries in the processing, tabulation and early publication of census data provided the confidential nature of such data were guaranteed.

In connection with the fellowship program the Conference suggested that such training should be on a graduate university level and that the trainees should be selected from amongst graduates in mathematics, economics or agriculture and given an opportunity to specialize in the various fields of agricultural statistics. The training of lower level statistical personnel could best be undertaken locally under conditions simulating those under which they would be actually working.

The Conference, furthermore, recommended that a team of three census experts be appointed to work jointly with the Regional Statistician in assisting member countries in their census work and in coordinating their plans so as to ensure international and regional comparability. The team should consist of one specialist in general census methodology, one specialist in sampling techniques and the application of statistical methodology to agricultural experimentation, and one specialist in data processing and tabulation.

Finally, the Conference was unanimous in appreciating the assistance given or planned by FAO in agricultural statistics. Delegates expressed their support of the Director-General in his efforts to increase such assistance.

(g) Fishery Administration

The Conference noted the need for adequate fishery administrations in order to develop and implement the programs for expansion of fisheries within the region. Delegates pointed out the creation of fisheries departments and policies in line with Resolution No. 17 adopted by the Seventh Session of the FAO Conference in 1953.

The Conference also took note of the potential for the development of fisheries within the region and the assistance already given by FAO under UTAP. The United Arab Republic delegation called for a concerted regional approach to the development of fisheries by FAO.

The need for a Regional Fisheries Officer stationed in the Cairo Office was indicated and the Conference recommended such action be taken by FAO.

The delegates further pointed out the continuing need for FAO assistance, especially in the training of workers and in supplying additional experts on various projects.

In this connection the Conference strongly recommended the establishment of a Training Center on Modern Fishing Gear and Improved Fishing Methods.

Note was also taken of the possibility of establishing a fishery program in an established University or Institute within the Near East Region, with the possible assistance from Governments, UNESCO and FAO. This would give the opportunity for providing adequately trained fishery technicians which the region currently lacks.

With this additional help from FAO in the form of Training Centers and experts, it was indicated that fisheries could be expanded and contribute considerably to the basic nutritional needs of the region.

(h) Animal Production and Health

The Conference considered matters pertaining to Animal Production and Health. The background paper issued by the Secretariat "Animal Production and Health" (AgA/1958) was noted. After discussion the Conference reached the following conclusions:

Recognizing the vital importance of animal production, (a) for the attainment of improved productivity through a more balanced and diversified agricultural economy resulting from the progressing integration of animal husbandry with crop production; (b) for the provision of the needed farm draft power, and (c) for the improvement of the nutrition of the people in the Near East Region by diversification of the diet and through the provision of protective foods supplied by animals and animal products,

Noting with approval the elevation of the FAO section responsible for the program of work in the field of Animal Production and Health from the status of a Branch to that of a Division,

Urged the Director-General to allocate the necessary funds to the new Animal Production and Health Division to enable it to strengthen its work particularly in the Near East Region where such strengthening is urgently required; and further

Requested the Director-General to appoint as soon as possible a Regional Veterinary Officer and if possible a Livestock Officer for the Near East Region, to be attached to the Regional Office (possibly one from Regular Program and the other from LTAP funds);

Endorsed the FAO program in the field of Animal Production and Health for 1959 and the proposals for 1960-61, including the Study on Problems of Animal Feeding in Tropical and Sub-tropical Areas and the issue of a publication on this subject, and

made the following recommendations:

Concerning the Functioning of the Near East
Working Party on Animal Production and Health
and of its Technical Groups

1. That FAO should proceed to invite governments to submit nominations and that Governments should designate their respective representatives for the Near East Working Party on Animal Production and Health, and for the technical groups thereunder, at the earliest opportunity;
2. That the Near East Working Party on Animal Production and Health, as soon as it is constituted, should itself decide on the number and nature of additional technical sub-groups which need to be established as required;
3. That in the first instance, however, the Near East Working Party on Animal Production and Health should set up a technical group on Animal Health in order that it may as soon as possible review and study the situation with the assistance of the FAO Headquarters and Regional staff and with the collaboration of the O.I.E. and in order that it may make plans and recommendations for further action in respect of animal diseases control measures and policies in the Near East Region;

Concerning Regional Veterinary Laboratories
and Training Centres

4. That the Governments in the region in consultation with FAO should concurrently submit an application to the Director of the Special Fund for Economic Development for financial assistance to be given in the order of US\$ 1,000,000 over the next 5 years for the implementation of an intensive and integrated training and operational disease control program which would materially stimulate trade and economic development in the region;
5. That consideration be given by FAO and by the Near East Technical Group on Animal Health to the designation of a regional vaccine production research and diagnostic laboratory or laboratories, to the holding of training centres for veterinarians and the provision of equipment, especially transport, with such financial and technical assistance as may be required, to be derived from the Special Fund for Economic Development;

Concerning Rinderpest

6. That the report of the FAO/OIE Meeting of the Far East Animal Health Group which is scheduled to take place in Manila in 1959 as recommended by the Far East Regional Conference held in Tokyo in October 1958, and which will review inter alia the problems relating to Rinderpest Disease Control, be made available as soon as possible;

7. That the results of experiments currently in progress under the sponsorship of O.I.E. concerning the duration of viability of Rinderpest virus under usual conditions of trade in livestock and livestock products, be also made available at the earliest opportunity in view of the great economic importance of the matter to both importing and exporting countries in the region;

8. That particular attention be given by FAO, by O.I.E. and by the proposed technical group on Animal Health to the urgent need for a realistic policy with regard to the exportation of livestock and livestock products from cattle surplus countries where Rinderpest is endemic to those countries which are free from Rinderpest but require meat imports;

Concerning Foot and Mouth Disease

9. That the attention of Governments should be drawn to the welcome establishment by FAO of a WORLD REFERENCE CENTRE at Pirbright, U.K., for the identification of the types and strains of foot and mouth disease virus and that Governments should make arrangements for such identification to be simultaneously undertaken in their respective national laboratories;

10. The subject of Foot and Mouth disease, which is becoming of ever increasing importance in the Near East Region, should be further reviewed by the Near East technical group on Animal Health, in the light of important research developments now in progress and of the operation of the two Foot and Mouth vaccine laboratories and other laboratories which may be established in the countries of the Near East Region;

11. That the attention of governments be drawn to the important role played by sheep in the epizootology of Foot and Mouth disease in the Near East region and that the FAO/OIE survey in this field be continued.

Concerning World Catalogue of Genetic Stocks
of Livestock

12. That FAO should prepare and issue a publication on the types and breeds of sheep in the Near East Region on the lines of the useful publications recently issued by FAO on the types and broods of cattle originating in Africa;

Concerning Sheep and Goat Production and their Diseases

13. That in view of the importance of sheep and goats in the Near East Region, a technical meeting on sheep and goat production and their diseases be held in the region as soon as practicable, possibly in association with the next Near East Animal Production and Health Meeting scheduled for 1960;

Concerning Animal Climatology

14. That consideration be given by the Governments in the Near East Region, in consultation with FAO, to the possibilities of securing financial assistance from the Special Fund for Economic Development for the establishment of a regional animal climatological centre in the Near East;

Concerning Dairying

15. That in view of the growing importance of the dairy industry in the region and of the increasing number of UNICEF-assisted dairy plants, FAO should convene a meeting on dairy problems in the Near East Region in 1960 or as soon as practicable.

In this connection the Conference noted with appreciation the offer of the Lebanese Delegation that the Government of the Lebanon was prepared to act as host for this meeting.

E. FUTURE ORIENTATION OF FAO'S WORK IN THE REGION

1. Free-the-World-from-Hunger Year

In introducing the subject the Director-General supplemented his remarks on this matter in his address under Item 4 of the Agenda and explained the motives which had led him to this proposal. Many separate aspects of production and population, and of surpluses in some areas and shortages in others, were under study but there was also a great need to view the problem of relieving hunger in its entirety and deal with it in a unified way. The purpose of the proposal was just that. The method proposed was that an intensive campaign should be undertaken to arouse an increased awareness in the world of the problems and possibilities in that context. The campaign should culminate in a World Food Congress in the designated year.

FAO would contribute an impetus to this by undertaking a series of studies. These would attempt to bring together and show in focus existing information on levels of food consumption and health, on the possibilities and problems of increasing production, and on distribution and trade. This would not represent new work, but rather a focusing of what had been and was being done on the overall problem of hunger and its removal.

However the task was not one which FAO could carry out alone. The fundamental cause of hunger was poverty and this was an important fact of the field of work of the United Nations. Education was fundamental for increasing production and improving nutrition and this was the concern of UNESCO. The aid of WHO would be needed in the study on consumption and health. UNICEF was closely concerned with the better nutrition of children and mothers. ILO's help was needed in problems of training and increasing labour productivity. Therefore the campaign must be comprehensive in character.

The Director-General informed the Conference that he had already put the proposal before ECOSOC and, as a follow-up on this, it had been discussed at a meeting of the heads of the various UN Agencies who had promised full cooperation. He also proposed to enlist the support of the non-governmental organizations, who could take up the problems in the light of the studies by FAO and other agencies and examine the more detailed aspects of particular concern to them at both international and national levels.

The choice of 1963 for the Free-the-World-from-Hunger Year had a special significance as the 20th anniversary of the Hot Springs Conference which had given birth to FAO. The time was therefore most propitious for a review of achievements and an assessment of the tasks still facing us. The World Food Congress, which would serve as the culminating point of the campaign would examine the nature of the problem of freeing the world from hunger, appraise the measures being taken to deal with it, and recommend the steps needed to take more adequate action. The findings of such a Congress should provide the starting point for policy consideration by

national and international authorities. Action programs can then follow as a result of determinations made by the governing organs of such authorities in the light of the findings of the Congress.

In the view of the Director-General the Congress could not serve these purposes unless it was more than a meeting of government representatives. It must reflect the thinking of those in all spheres of life who had a contribution to make. The responsibility for organizing the campaign and the Congress should also be given to a specially constituted body representative of all these interests.

The recent session of the FAO Council had given its warm support to the whole proposal, which it viewed as a rededication of this organization to the basic purposes for which it had been formed.

At present the whole matter was in its formative stages when ideas from all sides would be welcome and this was the object of placing the subject before the present Conference.

The Conference gave the Director-General's proposals an enthusiastic and unanimous welcome in a discussion in which nearly all delegations participated. To combat hunger was the foundation stone on which FAO was built, it was the underlying theme of the discussions at the Conference and of all the work which FAO did. The Conference felt that the idea was a noble and human one that could serve as a symbol of the objectives of FAO and the ideals and hopes of all humanity and the Director-General was to be congratulated for it.

Referring to the immensity of the task the delegate of Lebanon emphasized the need for close cooperation with the United Nations and other Specialized Agencies, and the Conference welcomed the Director-General's statement that the assistance of other UN organizations had already been pledged to the campaign.

The delegate of the United Arab Republic noted how nearly the Director-General's plan to study production and population trends touched on conditions throughout the Region, where population was growing rapidly and very great increases in production would be needed in coming decades even to keep pace with it. The observer of the Arab League pointed out that the Near East was not poor, but rich in human and natural resources, and that one task was to focus attention on these and provide for their development and wise distribution.

All countries pledged their fullest support to the campaign. In this connection the Conference pointed out that countries must not only cooperate internally, but with each other, if the project was to be successful.

With respect to the conduct of the campaign, the Director-General stressed that it should be a practical operation directed to the root causes of hunger, in which he invited the participation not only of governments, but of all other organizations which had this matter at heart.

At the conclusion of the debate the Conference unanimously approved the following resolutions:

THE FOURTH FAO REGIONAL CONFERENCE FOR THE NEAR EAST

Being conscious of the fact that hundreds of millions of people throughout the world still suffer from hunger or malnutrition, and that in the Near East itself the battle against hunger has not yet been won

Aware of the need for still greater efforts to banish the fear of hunger from the people of this region and the whole world

Warmly welcomes the proposal of the Director-General that a concerted campaign be undertaken, to culminate in a "Free-the-World-from-Hunger Year" in 1963, that is on the 20th anniversary of the Hot Springs Conference

Considers that this proposal offers an excellent opportunity to mobilise public opinion for the intensification of efforts to improve food production and nutrition

Learns with pleasure that the other members of the United Nations family are expected to be associated with this campaign and that it is also intended to enlist the energies and resources of the many international non-governmental, religious and service organizations

Supports the Director-General's intention to prepare a third World Food Survey and related studies in the fields of production and distribution, as a basis for the dissemination of information and to provide source material for discussion groups throughout the world

Considers that the countries of the Near East are vitally interested and could and should make important contributions to this campaign

Therefore RECOMMENDS:

1) That the Governments of all Near Eastern countries take steps to stimulate the discussion of this proposal at all levels

2) That the ideas and suggestions of Governments be forwarded to the Director-General to assist him in working out these proposals for submission to the Council and the Conference for further action.

2. Trends and Objectives in the Work of FAO in the Near East

(a) Present and future work of the Organization

The Conference commended the Director-General for the work which the Organization was performing in the region. It stressed the need for more intensive and systematic surveys of agricultural land and water resources, including soil and land classification, surface and underground water resource appraisals, forests and the forward planning of more efficient land and water use in area development projects, including the development of farming types and crop systems for the most efficient use of irrigation water.

In many parts of the Near East, water is such a strategic limiting factor in agricultural production, that its fullest development for agricultural use is of paramount importance. Irrigation farming must be developed as efficiently as possible to obtain the fullest use of water, farming methods and crop rotations must be developed to achieve best use of the land and water resources. At the same time, the conservation of soil and water requires comprehensive land use planning to put irrigation, dryland farming, grazing and forestry in proper relation to each other so that their respective uses support each other rather than lead to conflicts and waste of resources.

Several delegates pointed out that regional projects under Expanded Technical Assistance in this field should be strengthened. Many governments, in particular the Sudan and Afghanistan, recommended that FAO should give high priority to establishing under the Technical Assistance Program a regional post for the Near East of a land use and agricultural development adviser. The services of such a highly qualified expert would be most valuable to the countries in this Region.

The need for training in the region was thoroughly discussed; and attention was drawn to the desirability of arranging training courses for participants from non-Arab speaking countries. The Government of Iran suggested that special courses for more advanced studies should be organized and that facilities would be made available by that government if teachers and equipment could be provided by the FAO. Regional research institutes and training centers had already been established in certain countries advanced in various subject matter fields, but the need was clearly expressed for the establishment of additional regional institutes, particularly in the field of animal climatology, veterinary biologics production, cereal breeding and locust control training. Many proposals for training centers were made; these, together with the proposed regional institutes, are discussed elsewhere in this report. From whatever source their institutes or training centers are financed it was strongly recommended that FAO participation should be guaranteed for long enough to ensure their success.

In addition to the proposals discussed elsewhere in the report, and in regard to the future technical work of the Organization in the region, the United Arab Republic suggested that the meeting proposed for 1959 for the purpose of achieving uniformity in soil survey and classification methods should be preceded by a study of the progress which had been achieved in the countries in the region. Additional work should also be carried out on the use of animal drawn and hand implements and efforts made to pay more attention to animal nutrition. A concerted regional approach was needed to advise governments on fishery administration and techniques, for this reason it was desirable that the regional fishery officer, referred to above, should be stationed in the region. Emphasis should also be placed on agricultural education and the vocational training of agricultural workers for which the facilities of the Arab States Fundamental Education Center (ASFEC) could be used.

The Conference welcomed the increased attention being given to the social implications of economic development programs and noted with satisfaction the work of the FAO in the field of rural welfare.

The Conference noted with approval the close collaboration that exists between the FAO, UN, UNESCO, WHO, UNICEF and ILO on subjects of mutual concern in the Region. In addition it was pleased to note the active participation of the League of Arab States particularly in the field of desert locust control and the increasing activity of OIE in the field of animal disease control work in the Near East.

(b) Regional structure

The Conference welcomed the appointment of Dr. Sidky as Regional Representative and endorsed the activities of the Regional Office in Cairo. It was felt that the knowledge and impact of the Organization on the region could be increased if the information services of the Regional Office were strengthened. Material should be prepared on the regional level and should be derived from the region. It considered that more use should be made of ETAP experts for the provision of specialized information, and that more publications could be translated into Arabic or other languages in use in the region. The library facilities should be steadily built up and kept up to date; these facilities should be made available to research workers throughout the region. Libraries in the countries in the region should also be expanded and equipment provided.

The Conference strongly endorsed the resolution of the 9th Session of the FAO Conference held in 1957 providing for the strengthening of the regional structure of the Organization. It welcomed the recent appointments of a forestry officer, a horticulturist, an economist and a marketing specialist, but concern was expressed at the lack of a regional fishery adviser. Proposals were also made for the appointment of regional officers for agricultural extension, animal health, plant protection, agrarian reform, agricultural credit, and groundwater. It was however recommended by the Governments of Iran and Afghanistan that, due to the size of the region and language difficulties, a sub-regional office should be established in Teheran which would service Iran, Afghanistan, and Pakistan. In the light of these

appointments and of the consequent strengthening of the regional office, the Conference suggested that more authority be delegated to the regional staff so that they may play a more pronounced role in the formulation of the program of work of the Organization as well as the preparation of Regional Technical Meetings and Conferences which should be more closely coordinated. The United Arab Republic Delegation reaffirmed that in regional meetings the following points should be taken into consideration: 1) the participation of the regional staff whether in the preparation of documents or in conducting discussion should be more pronounced, 2) Conference documents should be developed early in advance to ensure the high standard usually maintained by the Secretariat in preparing such documents and guarantee their early dispatch to member countries, 3) technical divisions should continue to be fully represented by high ranking officers, 4) the provision of precis writers should be made available to ensure the maintenance of summary records for the proceedings.

The Conference also expressed the view that outposted technical officers should not duplicate the work of the field experts, and should remain in the region for sufficient time to enable them to analyse the various problems and recommend solutions. The need for preparation of a timetable of well-planned visits by the regional officers to countries in the region was strongly stressed. The timing of their visits should take account of cropping seasons and allow adequate time for study of proposals.

c) Expanded Technical Assistance Program
and UN Special Fund for Economic Development

The recent establishment by the United Nations of a Special Fund for Economic Development was welcomed by the Conference. While it was aware that preliminary consideration was being given to the formulation of requests for submission to the Managing Director of the Fund, it suggested that projects should have a direct bearing on raising agricultural productivity and should be of real economic significance. To this end, Desert Locust control, surveys for natural agricultural resources as a basis of development schemes, aerial mapping, soil and land classification, fisheries resources, underground water resources, forestry, training, animal disease control, marketing improvement and sunn pest control were among those suggested. These proposals are dealt with in the appropriate chapter of this report. In the preparation of submissions to the Special Fund, Member Governments of the region expressed their desire to have the assistance of the Regional Office and the FAO Country Representatives.

The Member Countries of the region receiving assistance under the Expanded Technical Assistance Program expressed satisfaction with the results achieved, but noted the continuing need to ensure that highly qualified experts were recruited. In view of the rapid rise in population, an increase in the volume of aid was called for. Attention was also drawn to the insufficiency of funds for regional projects under ETAP which were growing in importance as the region developed. In regard to expert services, it was suggested by one delegation that experts should serve a probationary

period of six months, at the end of this period the Government and the Organization would consider the future employment of the expert; it was however pointed out that present procedures whereby most experts are appointed, initially, for six months or a year, do in fact provide opportunities of this kind. It was also suggested that when experts were replaced there should be an overlap in the country between the incumbent and his successor. Many delegations drew attention to the importance of experts' final reports and asked that they should include all the necessary detailed information leading up to the final recommendations.

3. Concluding Statement by the Director-General

In a concluding statement the Director-General paid high tribute to the strong delegations sent by governments of the region, and the high standard of the discussions. He thanked the delegations for the realistic recommendations and suggestions that had been made. Some of these were addressed to governments and he hoped that these would be drawn to the attention of appropriate government departments and that action would be taken. Others were addressed to FAO. On these he would do his best, though the resources of FAO, both on the regular and Expanded Technical Assistance Programs, are limited. Some of the proposals could be carried out with existing resources, others would be considered in drawing up the program of work and budget for 1960 and 1961. Others may lie outside FAO's resources.

Considerable reference had been made to the United Nations Special Fund for Economic Development. The Director-General reminded delegations of his opening statement (see Section B, 1, of this report) that this fund is to finance surveys, research, training and demonstration and that the initiative lies with governments or groups of governments to make requests. As he had been specifically requested by the Conference, he himself would undertake to transmit the request for the Desert Locust Control project to the Managing Director of the Special Fund. He would also assist governments in preparing requests on other subjects. He reminded the Conference of the restrictions placed by the FAO Council on the financing of permanent regional institutes. Adequate support from governments is necessary. Such aid as FAO could give would be provided. The Director-General also referred to the limitation imposed by the Technical Assistance Committee of ECOSOC (TAC) on regional projects, whereby a limit of 12 percent had been set, although FAO had strong requests amounting to more than this small share of its total program.

The Director-General was not able to derive any precise scale of priorities from the discussions, but he had been impressed by the emphasis placed on locust control, animal production and health, agricultural economic planning, nutrition and extension. He was particularly grateful for the strong support given to the proposed "Free-the-World-from-Hunger Year". He concluded by stating that the Conference was a landmark in FAO's history because of the strong representation of member countries; the high standard of the discussions; the hospitality of the host country and the efficient way the conference had been conducted by all concerned.

F. SUMMARY OF PRINCIPAL RECOMMENDATIONS AND SUGGESTIONS

In the course of its deliberations the Fourth FAO Regional Conference of the Near 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.

B. 4. Policy Questions Arising out of Technical Meetings

(a) Arising from the Second FAO Near East Meeting on Animal Health (March 1956)

The Conference recommended:

1. that a Near East Working Party on Animal Production and Health be established by FAO and that Governments should designate their respective representatives thereon as soon as possible. See also Recommendation 25 B (i), (ii), and (iii);
2. that FAO should hold a meeting on Animal Production and Health in the Near East in 1959 or as soon as possible thereafter, at which the members of the Near East Working Party on Animal Production and Health and of the technical groups to be established thereunder would participate.
3. The Conference endorsed the importance of government veterinary services and urged governments which do not already have such services to establish them in their own interest and in the interest of neighbouring countries.

(b) Arising from the Meeting on Veterinary Education in the Near East (October 1957)

4. The Conference endorsed the need for further consideration to be given to the subject of veterinary education and approved the holding of an international meeting on veterinary education by FAO in 1960.

(c) Arising from the Meeting of the Near East Forestry Commission (October 1958)

5. The Conference endorsed the following recommendations:

- (a) that provision be made by Member Governments for an adequate representation of forestry interests in the organization and conduct of National Seed Campaigns;

- (b) that an ad hoc Committee be set up to cooperate with the Mediterranean Development Project, consisting of the representatives of Lebanon, Libya, Iraq, Sudan and the United Arab Republic;
- (c) that the terms of reference of the Working Party on Forest Range Management should be expanded to include all rights of usage as well as grazing, the Director-General being requested to arrange with member countries for the nomination of representatives to the Working Party;
- (d) that the Director-General should explore possibilities to set up a regional training centre on Watershed Management;
- (e) that a timber trend study for the Near East Region should be carried out;
- (f) that a study of acacias should be undertaken, including identification, biological needs, value as fodder, and reproduction techniques.

The Conference recommended:

- 6. The holding of a Second Regional Poplar Conference, noting that the Government of Turkey had offered to act as host for a special seminar on poplar to be set up under ETAP.
- (d) Arising from the Near East Technical Meeting on Agricultural Extension (October 1958)

The Conference endorsed the following recommendations

- 7. (a) that FAO should take the initiative in organizing a six-weeks' training course for trainers of extension workers;
- (b) that a permanent regional center for advanced training for extension supervisors, subject matter specialists and trainers should be established;
- (c) that FAO should undertake the publication of a regional extension periodical;
- (d) that FAO's Near East Regional Office should serve as a clearing house for collection and distribution of extension teaching materials produced in the Region;
- (e) that a team should be organized to evaluate extension organization and programs in the Region;
- (f) that FAO should organize a study tour for extension leaders;
- (g) that a survey should be made of existing agricultural educational institutions and their facilities for training extension personnel.

8. The Conference recommended that the survey of agricultural educational institutions and their facilities for extension training be broadened to cover facilities for agricultural education in general, including vocational training in agriculture.

C. 1. The Orientation of Agricultural Production and Supplies in Relation to Demand

The Conference recommended:

9. A. To Governments:

that to improve the organization of agricultural production and the factual basis of agricultural planning

1. Governments of the region give careful consideration to the improvement of rural institutions, particularly the formation of cooperatives in the field of improved seed supplies, fertilizers, other production requisites and marketing;
2. Governments of the region undertake surveys and studies including:
 - (a) the collection and analysis of demographic statistics of the level of population, the rates of increase, changes in the age composition, the degree and rate of urbanization and other relevant factors. That in these studies they enlist the full support of the United Nations, the Statistical Society for Arab Countries and other bodies experienced in the demographic field;
 - (b) household consumption surveys to determine expenditure on food and non-food items including quantities self-produced in relation to total expenditure, size and age of family in different social and income groups. These surveys may be, where appropriate, combined with dietary and other economic surveys. The help of statistical bodies competent in this field should be sought including the Near East Regional Office of FAO.

B. To FAO:

That to improve the efficiency of the region in agricultural planning and marketing FAO undertake as soon as possible:

1. The establishment of a further regional training centre on economic planning and project formulation, including the development of agriculture, forestry and fisheries projects;

2. The conducting of a short intensive training centre on the methods of packing, grading and marketing of fruits and vegetables in Cairo. This centre has been postponed several times through lack of ETAP regional project funds and was scheduled for 1958 in Cairo. Special efforts should be made to secure the necessary funds to hold the centre as soon as possible.
3. The creation of a permanent regional marketing institute in the Lebanon to:
 - (a) Organize regular training courses in the principles and practices of agricultural marketing;
 - (b) conduct training in the region on the marketing of agricultural commodities particularly of fruits and vegetables;
 - (c) study and develop grades and standards on a regional and international basis;
 - (d) study and develop the packing, handling, storage and transport of agricultural products, particularly fruits and vegetables;
 - (e) conduct research on marketing methods;
 - (f) publish reports and studies on agricultural marketing.

The Director-General is invited to explore the site and facilities available in Lebanon for this permanent institute and to explore the possibilities of financing this project from ETAP, the UN Special Fund for Economic Development or other sources as soon as possible.

4. To approach Governments in general:

To direct as far as possible any expansion in production towards commodities in short supply in accordance with the principles of the selective expansion of production and consumption adopted by the Seventh Session of the FAO Conference.

5. To approach Governments holding large supplies of foodstuffs:

To consider making supplies particularly of grains available under suitable currency arrangements to assist countries of the region engaged in large-scale economic development programs, in accordance with the FAO Principles of Surplus Disposal and the recommendations of the FAO Conference and Council.

6. To approach the United Nations and other agencies:

To conduct surveys of equipment available for transporting perishable products including big slow transport planes and refrigerated and ventilated ships, with a view to communicating such surveys to the interested countries of the region as early as possible.

C. 2. Problems of Nutrition in the Region

The Conference recommended:

10. (a) that Governments should make every effort to develop satisfactory national food balance sheets, seeking assistance from FAO as needed;
- (b) that more dietary surveys should be made, by statistically sound methods and by suitably trained workers, whenever possible dietary surveys and surveys of state of nutrition being made simultaneously on the same population group;
- (c) that a simple "Manual on Dietary Survey Techniques", specially designed for use in rural areas and dealing both with methods of making surveys and the analysis and presentation of their results, should be prepared with assistance from FAO.

The Conference recommended:

11. (a) that National Nutrition Committees should be set up in countries in which they do not now exist, and appropriately strengthened in countries in which they have already been established;
- (b) that these Committees should be given the necessary authority and funds to carry out their functions.

The Conference recommended:

12. (a) that National Nutrition Institutes should be established or strengthened in the various countries;
- (b) that FAO should, on request from Governments, provide experts, equipment and fellowships, to assist in the setting up and development of such Institutes.

The Conference recommended:

13. (a) that measures be taken in the various countries to develop the training of specialized nutrition workers;

- (b) that suitable nutrition instruction be included in the training of health personnel, school teachers, agricultural extension workers and social welfare workers;
- (c) that the education in nutrition of the people be vigorously promoted through all appropriate channels;
- (d) that FAO should consider the possibility of organizing, preferably in association with WHO and other international agencies, a training course in nutrition for workers in the region.

The Conference recommended:

- 14. (a) that arrangements be made for a small team of highly qualified nutrition workers to visit different countries in the region on the request of Governments to advise about the development of nutrition research and practical nutrition programs and on problems relating to national nutrition policies. The cooperation of WHO in this project should be sought;
- (b) that FAO provide more fellowships, on the request of Governments, for the training abroad of workers in nutrition and associated fields from the region.

The Conference recommended:

- 15. that more technical information on nutrition and associated subjects should be interchanged within the region and that the FAO Regional Office should encourage and contribute to this exchange.

The Conference recommended:

- 16. that further meetings of the FAO/WHO Nutrition Committee for the Near East should be held periodically, preferably at intervals of about three years.

C. 3. Organization and Development of Research in Agriculture, Fisheries and Forestry

The Conference recommended that FAO:

- 17. (a) carry out a study and prepare a working paper on national research organizations and their activities in the field of agriculture, and
- (b) convene at the appropriate time a working party representing the Governments and interested organizations of the region, to study and recommend measures for achieving better coordination in the field of agricultural research.

C. 4. Land Tenure and Settlement in the Near East

The Conference endorsed the recommendation

18. made at the Salahuddin Land Problems Centre (1955) that in view of the basic importance of conducting studies in the field of land problems, and particularly expanding land and water development for settling rural families on productive farms, a permanent Institute, or Centre, or similar group be organized in the Region under FAO auspices, to keep these problems under constant review, undertake studies, and train technicians in those fields.

D. Specific Activities Requiring Conference Guidance or Government Action

(a) Desert Locust Control

19. A. To Governments:

The Conference recommended:

that the proposals detailed in Annex III for an expanded desert locust control program at an estimated cost of about US \$ 3.7 million, should be submitted by the Governments represented at the Fourth Session of the Near East Regional Conference as early as possible for consideration by the Managing Director administering the Special Fund.

B. To FAO:

- (a) Owing to the urgency of this matter the Conference authorized the Director-General to transmit this submission to the Managing Director on behalf of the governments of:

Ethiopia	Pakistan
Iran	Saudi Arabia
Jordan	Sudan
Lebanon	

- (b) requested the Director-General to convene a technical meeting on the Moroccan Locust to review progress on research and control achieved since the meeting held on the Moroccan Locust in Beirut in 1949.

(c) Regional Agreement on Plant Diseases and Pests

20. A. To Governments:

The Conference urged (a) those Governments in the region without national plant protection services to take steps to establish such bodies without delay, and (b) that any Government of the region not already so should become a party to the International Plant Protection Convention.

B. To FAO:

The Conference requested the Director-General

1. To give urgent consideration to the appointment of at least a temporary Plant Protection expert to the Near East Regional Office to assist Governments in undertaking surveys of plant pests and diseases, and in promoting the establishment and development of national plant protection services;
2. To convene as early as may be appropriate a regional technical meeting to (a) consider the formulation and adoption of a Plant Protection Agreement for the Near East Region, (b) prepare proposals for the further strengthening of national plant protection services throughout the region, (c) assist Governments in the preparation of a submission for assistance from the United Nations Special Fund for Economic Development to strengthen plant protection services.

(d) The Sunn Pest

The Conference drew attention to:

21. the need for FAO to devote similar attention to the Sunn Pest to that devoted to the Desert Locust, including the need for hastening the establishment of an information centre on Sunn Pest and for exploring the possibility of securing additional funds including allocations from the United Nations Special Fund for Economic Development.

(e) World Seed Campaign

22. The Conference strongly supported the decision of the Ninth Session of the FAO Conference to launch a World Seed Campaign, which will culminate in a "World Seed Year", to be designated by the Tenth Session of the FAO Conference. Certain delegations suggested 1960 as a suitable year for the "World Seed Year".

(f) World Agricultural Census

The Conference recommended:

23. (a) that a regional training centre on agricultural censuses be held in 1959;
- (b) that a training centre in data processing and tabulation of census results be held early in 1960;
- (c) that a team of three census experts be appointed to work jointly with the Regional Statistician in assisting Member Countries in their census work and coordinating their plans.

(g) Fishery Administration

The Conference recommended:

24. the establishment of a training centre on modern fishing gear and improved fishing methods.

(h) Animal Production and Health

25. A. To Governments:

The Conference recommended:

That the Governments in the region in consultation with FAO should concurrently submit an application to the Director of the Special Fund for Economic Development for financial assistance to be given in the order of US \$ 1,000,000 over the next 5 years for the implementation of an intensive and integrated training and operational disease control program which would materially stimulate trade and economic development in the region.

B. To FAO:

The Conference

Urged the Director-General to allocate the necessary funds to the new Animal Production and Health Division to enable it to strengthen its work particularly in the Near East Region where such strengthening is urgently required; and further

Requested the Director-General to appoint as soon as possible a Regional Veterinary Officer and if possible a Live-stock Officer for the Near East Region, to be attached to the Regional Office (possibly one from Regular Program and the other from ETAP funds);

Endorsed the FAO program in the field of Animal Production and Health for 1959 and the proposals for 1960-61, including the study on problems of animal feeding in tropical and sub-tropical areas and the issue of a publication on this subject, and

Recommended:

- (i) That FAO should proceed to invite Governments to submit nominations and that Governments should designate their respective representatives for the Near East Working Party on Animal Production and Health, and for the technical groups thereunder, at the earliest opportunity;
- (ii) That the Near East Working Party on Animal Production and Health, as soon as it is constituted, should itself decide on the number and nature of additional technical sub-groups which need to be established as required;
- (iii) That in the first instance, however, the Near East Working Party on Animal Production and Health should set up a technical group on Animal Health in order that it may as soon as possible review and study the situation with the assistance of the FAO Headquarters and Regional staff with the collaboration of the OIE and in order that it may make plans and recommendations for further action in respect of animal diseases control measures and policies in the Near East Region;
- (iv) That consideration be given by FAO and by the Near East Technical Group on Animal Health to the designation of a regional vaccine production research and diagnostic laboratory or laboratories, to the holding of training centres for veterinarians and the provision of equipment, especially transport, with such financial and technical assistance as may be required, to be derived from the Special Fund for Economic Development;
- (v) That the report of the FAO/OIE Meeting of the Far East Animal Health Group which is scheduled to take place in Manila in 1959 as recommended by the Far East Regional Conference held in Tokyo in October 1958, and which will review inter alia the problems relating to Rinderpest Disease Control, be made available as soon as possible;
- (vi) That the results of experiments currently in progress under the sponsorship of O.I.E. concerning the duration of viability of Rinderpest virus under usual conditions of trade in livestock and livestock products, be also made available at the earliest opportunity in view of the great economic importance of the matter to both importing and exporting countries in the region;

- (vii) That particular attention be given by FAO, by O.I.E. and by the proposed technical group on Animal Health to the urgent need for a realistic policy with regard to the exportation of livestock and livestock products from cattle surplus countries where Rinderpest is endemic to those countries which are free from Rinderpest but require meat imports;
- (viii) That the attention of Governments should be drawn to the welcome establishment by FAO of a WORLD REFERENCE CENTRE at Pirbright, U.K., for the identification of the types and strains of foot and mouth disease virus and that Governments should make arrangements for such identification to be simultaneously undertaken in their respective national laboratories;
- (ix) The subject of Foot and Mouth disease, which is becoming of ever increasing importance in the Near East Region, should be further reviewed by the Near East technical group on Animal Health, in the light of important research developments now in progress and of the operation of the two Foot and Mouth vaccine laboratories and other laboratories which may be established in the countries of the Near East Region;
- (x) That the attention of governments be drawn to the important role played by sheep in the epizootology of Foot and Mouth disease in the Near East region and that the FAO/OIE survey in this field be continued.
- (xi) That FAO should prepare and issue a publication on the types and breeds of sheep in the Near East Region on the lines of the useful publications recently issued by FAO on the types and breeds of cattle originating in Africa;
- (xii) That in view of the importance of sheep and goats in the Near East Region, a technical meeting on sheep and goat production and their diseases be held in the region as soon as practicable, possibly in association with the next Near East Animal Production and Health Meeting scheduled for 1960;
- (xiii) That consideration be given by the Governments in the Near East Region, in consultation with FAO, to the possibilities of securing financial assistance from the Special Fund for Economic Development for the establishment of a regional animal climatological centre in the Near East;

- (xiv) That in view of the growing importance of the dairy industry in the region and of the increasing number of UNICEF-assisted dairy plants, FAO should convene a meeting on dairy problems in the Near East Region in 1960 or as soon as practicable.

E. 1. Free-the-World-from-Hunger Year

The Conference recommended:

26. 1. That the Governments of all Near Eastern countries take steps to stimulate the discussion of this proposal at all levels;
2. That the ideas and suggestions of Governments be forwarded to the Director-General to assist him in working out these proposals for submission to the Council and the Conference for further action.

LIST OF DELEGATESAFGHANISTAN:

Mr. Mohamed Yasin Mayel
Director-General of Agronomy

Mr. Noor Ali 1/
Economic Adviser in the Ministry of Agriculture

Mr. M. H. Keshtiar
Forestry Expert, Ministry of Agriculture

ETHIOPIA:

Mr. Mulatu-Debebe 1/
Director-General of Finance

Mr. Mulugeta Gebrewold
Deputy Director-General, Agricultural Department

Mr. Habtu Lshete
D.G. Agricultural and Statistics Division,
Ministry of Agriculture

FRANCE:

Mr. Raymond Lignon
Director of Technical Cooperation Mission in the Near East

IRAN:

H.E. Mr. Atahaki
Ambassador of Iran to Lebanon

Mr. Heidar Ali Arfaa 1/
Director-General, Ministry of Agriculture

IRAQ:

Mr. Abdul-Hadi Ismail Ghani 1/
Director-General of Agricultural Research and Projects
Ministry of Agriculture

Dr. Faik Al Orfali
Supervisor, Social Affairs Department

Dr. Marcel Demarchi
Physician, Nutrition Institute, Ministry of Health

Dr. H. T. Kittani
Member of the High Committee of Agrarian Reform

1/ Vice-chairman of the Conference

ITALY:

Mr. Luigi Bolla
Consulate General, Damascus

Mr. Giorgio Cuneo
Consulate-General, Damascus

JORDAN:

Mr. Ali Nassouh El Taher 1/
Under-Secretary of Agriculture

Mr. Rifat Mufty
General Director of Grain Office

Mr. Yacoub Salti
Director of Forestry

Mr. Moraiwid Tell
Chief, Technical Assistance Section, Jordan Development
Board

Mr. David W. Wozab
FAO Groundwater geologist

LEBANON:

Mr. Rashid Habal 1/
Director of Forestry

Mr. Edouard Saouma
Director, Institute of Agronomic Research

Mr. Basbous Malek
Chief of Reforestation and Soil Conservation

Mr. Sultan Haidar
Veterinary Doctor, Chief Animal Husbandry and Poultry
Department

Mr. Adel Cortas
Chief of Agricultural Commerce and Agricultural
Quarantine Service

Mr. Hisham El Hag
Agricultural Engineer

PAKISTAN:

Mr. Mian Nasim Husain
Minister of Pakistan to Lebanon

Mr. Jamil U. Hasan
Consul-General, Damascus

1/ Vice-chairman of the Conference

Mr. Ibrahim Mohammed Abou Boutain
Director of Agriculture, Eastern Province

Dr. Hadi El Nagar
Assistant Director, Ministry of Health

Mr. Mohammed Ali Miheimied
Deputy Director, Department of Animal Production
Ministry of Animal Resources

H.E. A. Haj Younes
Minister of Agriculture, Syrian Region

Dr. M. Roushdy
Assistant Under-Secretary of State for Animal Health
Ministry of Agriculture, Cairo

Mr. Jamil Mualla
Secretary-General, Ministry of Agriculture, Damascus

Dr. Fayez Tayeh
Director of Animal Resources
Ministry of Agriculture, Damascus

2/ Chairman of the Conference

UNITED ARAB REPUBLIC (contd.):

- Dr. M. Hilal Kassem
Director-General, Veterinary Department, Cairo
- Dr. Ahmed Hamed Nasharty
Director-General, Horticultural Department, Cairo
- Dr. A. G. Mehrez, M.Sc.
General Director, Seed Production and Distribution
Department, Cairo
- Mr. Nassouh Daccak
Director of Economic Affairs, Damascus
- Dr. A. A. El-Itriby
Director, Animal Production Department, Cairo
- Dr. A. A. Moursi
Sub-Director, Plant Production Department, Cairo
- Mr. Ibrahim Saad Hagrass
Sub-Director of Domain Department, Cairo
- Mr. Abdel Fattah Farah
Controller-General of Economic Statistics, Cairo
- Mr. M. Chahoud
Director of Planning
Ministry of Social Affairs and Labour, Damascus
- Mr. Abduljabar Aboulchamat
Director of Plant Protection, Damascus
- Dr. Ismail A. Abdou
Director, Nutrition Institute, and Technical
Secretary of Permanent Nutrition Committee, Cairo
- Mr. Abdul Hannan Hilwa
Director of Forests, Damascus
- Mr. Soliman Mansour
Chief Agronomist, National Planning Committee, Cairo
- Dr. Dia E. El-Chatti
Director, International Health Affairs,
Ministry of Health, Damascus
- Mr. Ahmed Rifaat
Sub-Director of the Hydrobiological Institute,
Alexandria
- Mr. Ahmed Amin Youssef
Secretary, Permanent Research Committee
Ministry of Agriculture, Cairo

UNITED ARAB REPUBLIC (Contd.):

Mr. Hassan Abdallah
Director, Foreign Relations Division
Ministry of Agriculture, Cairo

Dr. K. Kusbari
Director, Foreign Relations Division
Ministry of Agriculture, Damascus

Dr. Safadi
Hydrologist, Ministry of Agriculture, Damascus

Mr. Zouheir Farah
Civil Engineer, Damascus

Mr. Ahmed Ehsan
Specialist, Foreign Relations Division
Ministry of Agriculture, Cairo

Mr. Hisham Ahdab
Ministry of Planning, Damascus

UNITED KINGDOM: Major Victor J. Castillo
Director of Agriculture, Malta

Mr. Rogiros C. Michaelides
Agricultural Officer, Cyprus

YEMEN: Mr. M. H. Hosni
Agricultural Expert

Mr. Ali Mohammad Abdo
Agricultural Engineer, Ministry of Agriculture

LIST OF OBSERVERS

HOLY SEE: Monsignor Vittore Ugo Righi
Director of Religious Affairs of the Holy See,
Damascus

ILO: Mr. Mohamed Aziz El Maraghi
ILO Representative, U.A.R. (Southern Region)

LEAGUE OF
ARAB STATES:

Mr. Mohamed Hussein
Agricultural Adviser, Cairo

MOROCCO:

Mr. Abbas Kissi
Director of Land Tenure

OIE:

Mr. Rene Vittoz
Secretary-General of the Committee for Asia of the OIE

SPAIN:

Mr. Pedro Antonio Cuyas y Ortis de la Vega
Consulate General, Damascus

Mr. Jose Luis de la Guardia Maestro
Consulate General, Damascus

STATISTICAL
SOCIETY FOR
ARAB COUNTRIES:

Mr. Adib Homsí
Chief, Department of Agricultural Statistics
Directorate of Statistics, Damascus

TURKEY:

Dr. Ihsan Akhun 1/
Chairman, Consultative Committee of Studies
Ministry of Agriculture

Mr. Adem Karaelmas
Chief, Soil Conservation and Farm Irrigation Division
Ministry of Agriculture

Mr. Celal Noyan
Deputy Director-General of Forests

UN:

Mr. Tagi Hasr
UN Resident Representative, Cairo

Mr. Frederic Tabah
United Nations Social Affairs Office, Beirut

Mr. A. S. Dajani
Information Centre, Cairo

UNESCO:

Mr. Jan Smid
Director, UNESCO Middle East Science Cooperation Office

UNICEF:

Mr. Rachid A. Koleilat
UNICEF Representative, Beirut

UNRWA:

Mr. A. L. Geaney
Chief, UNRWA Operations, Syrian Region

Miss Coenegracht, I.S.M.
Nutritionist, Beirut

1/ Vice-chairman of the Conference

USA:

Mr. Philip E. Haring
Acting Consul-General, Damascus

Mr. Robert G. Caldwell, Jr.
Consul, Damascus

Mr. Frank W. Ehman
Agricultural Attaché in Cairo

Mr. James W. White
Vice-Consul, Damascus

Mr. George V. Sayles
Information Attaché, Beirut

WHO:

Dr. Salwa Khuri-Otaqui
Regional Maternal and Child Health Adviser
WHO Alexandria Regional Office

LIST OF FAO CONFERENCE STAFF

Director-General

Dr. B. R. Sen

Personal Assistant to
Director-General

Miss J. Campbell

Regional Representative
for the Near East

Dr. A. R. Sidky (N.E.R.O.)

FAO Representative for
Northern Region, U.A.R.

Dr. D. J. Burden

Conference Officers:

General Secretary

Dr. A. M. Acock

Assistant Secretaries

Mr. N. Heseltine
Mr. J. H. Hammad (Information,
N.E.R.O.)
Mr. K. M. Abed (N.E.R.O.)

Liaison with Host Government

Mr. Hani Keilany

Director-General's Subject-matter Representatives:

Nutrition	Dr. W. R. Aykroyd Miss M. Doss (N.E.R.O.)
Land and Water Use and Land Tenure	Dr. R. Schickele
Agricultural Institutions and Services	Dr. D. Kimmel Mr. S. T. Faroukhy (N.E.R.O.)
Animal Production	Mr. C. Castrioty
Plant Production and Locust Control	Mr. O. B. Lean
Seed Production	Dr. J. de Jong
Agricultural Economics	Mr. A. C. Janssen
Agricultural Statistics	Dr. S. H. Khamis (N.E.R.O.)
Forestry	Mr. K. Oedekoven (N.E.R.O.)
Fisheries	Mr. W. Beckman
Social Programs	Dr. I. Sweede
<u>Program and Budgetary Services:</u>	Mr. O. E. S. Lloyd
<u>Interpretation:</u>	Mr. C. H. Biass Mr. E. S. Hediger Miss R. Johnson Miss N. L. Jacoby
Interpretation Equipment:	Mr. G. Zukar

LIST OF DOCUMENTS1. Secretariat Papers

NERC 58/1	Provisional Agenda.
NERC 58/1a	Annotated Provisional Agenda.
NERC 58/2	Work of FAO in the Near East.
NERC 58/3	Recent Developments in the Food and Agricultural Situation in the Near East.
NERC 58/4	Policy Questions Arising out of Technical Meetings.
NERC 58/5	The Short-Term Outlook for the Main Food and Agricultural Commodities.
NERC 58/6	Orientation of Agricultural Production and Supplies in Relation to Demand.
NERC 58/7	The Improvement of Marketing Methods and Facilities in the Near East.
NERC 58/8	Nutrition in Relation to Food and Agricultural Policy.
NERC 58/9	Organization and Development of Research in Agriculture, Fisheries and Forestry.
NERC 58/10	Land Tenure and Settlement.
NERC 58/11	The Role of Government Departments in Planning, Implementing and Administering Rural Development.
NERC 58/12	Mediterranean Development Project.
NERC 58/13	The Need for a Regional Agreement for Preventing the Introduction of Plant Diseases and Pest into the Near East.
NERC 58/14	Desert Locust Control.
NERC 58/15	World Seed Campaign.
NERC 58/16	1960 World Agricultural Census.
NERC 58/17	Fishery Administration.
NERC 58/105	United Nations Special Fund for Economic Development. Resolution adopted by General Assembly of the United Nations.

NERC 58/111 The Short-Term Outlook for Food and Agricultural Products in International Trade.

NERC 58/113 Item 9 of the Agenda: Land Tenure and Settlement.
Introductory Comments by the Secretariat.

Address by Mr. B. R. Sen, Director-General.

Free-the-World-from-Hunger Year.

The Work of FAO in the Field of Agrarian Reform
prepared by Mr. Riad Ghonemy, Land Reform Consultant.

2. Papers Submitted by Delegations

ETHIOPIA Item 4 of the Agenda: Work of FAO in the Near East.

IRAN Land Tenure.

IRAQ Agrarian Reform Law No. 30 of 1958.

Rural Community Development Projects in the Republic of Iraq.

Organization of Research in Agriculture, Fisheries and Forestry.

JORDAN Recent Developments in the Food and Agricultural Situation in Jordan (1953-1957).

Organization and Development of Research in Agriculture in Jordan.

Land Tenure and Settlement.

Mediterranean Development Project.

The Role of Government Departments in Planning, Implementing and Administering Rural Development.

LEBANON Statement by Mr. Edouard Souma, Delegate. (Original in French).

SUDAN The Role of Government Departments in Planning, Implementing and Administering Rural Development.
Recent Developments in the Food and Agricultural Situation in the Sudan.
A Brief History of Sudan Fisheries.
National FAO Committee Report to the Food and Agriculture Organization of the UN.

UNITED ARAB REPUBLIC

Statement by H.E. Sayed Marei, Leader of Delegation.

The Present Status of Agriculture and Economy in the Syrian Region of the UAR.

Report on Fruit Production and Wood Trees in the UAR.

Statement by Dr. Ismail Abdou, Director, Nutrition Institute - Nutrition in Relation to Food and Agricultural Policy: Item 7 of the Agenda.

Statement by Dr. Ismail Abdou, Director, Nutrition Institute - Policy Questions arising out of FAO/WHO Meeting of Nutrition Technical Committee for the Near East.

Policy Questions arising out of Technical Meetings on Animal Health and Veterinary Education.

Statement on Item 6 of the Agenda: Orientation of Agricultural Production and Supplies in Relation to Demand.

Land Tenure and Settlement by Mr. Ibrahim Saad Hagrass, Sub-Director of Domain Department, Cairo.

Observations on Item 10 of the Agenda: The Role of Government Departments in Planning, Implementing and Administering Rural Development. (Original in French).

Statement on Desert Locust Control.

Report on the Regional Seed Campaign in the UAR by the Ministry of Agriculture, UAR.

Statement on Item 11(e) of the Agenda: Planning and Execution of 1960 Census of Agriculture.

Statement by Dr. Ahmed Rifaat, Sub-Director of the Hydrobiological Institute, Alexandria on Fisheries Administration.

Statement on Item 12 of the Agenda: The Future Orientation of FAO's Work in the Region.

Statement regarding the Need for a Regional Agreement for Preventing the Introduction of Plant Diseases, and Pests into the Near East. (English and Arabic).

3. Papers Submitted by Observers

LEAGUE OF ARAB STATES

Agriculture Census.

Nutrition and Agricultural Extension in Arab Countries.

Arab Organization for Veterinary Affairs and Animal Resources.

- (a) Anti-Desert Locust Campaigns in Arabia.
- (b) Some Aspects of Long-Term Policy in Desert Locust Control.

Cooperatives.

OIE

Note on the International Office of Epizootics.

WHO

Statement on Lines of Activity of the World Health Organization in the Field of Nutrition and on Joint WHO/FAO Activities.

Proposals for an Expanded Inter-Regional Project on Desert
Locust Control for Submission to the Managing Director of
the United Nations Special Fund for Economic Development

I Introduction

In Africa and southwestern Asia the Desert Locust can affect:

- (i) 64 territories
- (ii) 26 Member Countries of FAO (35%)
- (iii) 27 Member Countries of UN (35%)
- (iv) One eighth of the population of the world who live under the continual threat of depredation of their crops.

A recent survey indicated that control operations against the Desert Locust cost governments every year at least US \$12 million and about US \$30 million during years of high locust activity.

The standard of locust control operations has greatly improved during recent years, nevertheless many countries are still "not taking full advantage of recent developments in locust control techniques, which, if adopted, would increase the effectiveness of campaigns and reduce national and international expenditure", (1).

In recent years most countries have not experienced the devastating crop damage frequently inflicted by the Desert Locust before such comprehensive action was taken by so many governments. Nevertheless a recent assessment of crop damage indicated that the value of crop losses now averages about \$3.5 million and the example of Morocco in 1954, where damage amounted to \$14 million in one season, proves the potential danger of the Desert Locust. However, no estimates of crop damage "fully represent the effect of the Desert Locust upon the economy of countries. Destruction of crops sets into motion a chain of reactions with far-reaching effects including human nutrition and the feeding of livestock, with many consequent repercussions", (2).

In 1956 FAO convened a panel of experts on long-term policy of Desert Locust control. In its report this panel stated that the prevention of Desert Locust plagues, which would alleviate the drain on the resources of the countries liable to invasion, "was essential for their sound

-
- (1) Report of the Eighth Session, FAO Technical Advisory Committee on Desert Locust Control (1958)
 - (2) Report of the Fifth Session, FAO Desert Locust Control Committee, para. 11 (1958)

economic development" and added: "Whilst plagues of certain other locusts had been, and continued to be, prevented by practical application of scientific knowledge, the dynamics of Desert Locust plagues were still insufficiently known to formulate definite plans for their prevention. It could be affirmed, however, that such plans could be formulated when the essential aspects of Desert Locust plague dynamics were more fully understood". Since the introduction of preventative control against the Red Locust in Northern Rhodesia and Tanganyika and against the African Migratory Locust in French Sudan, the costs of the control of these two locusts has been reduced from many millions of dollars to about half a million dollars per annum expended collectively by the governments of the countries potentially threatened in the locusts' outbreak areas. Previously the Red Locust devastated crops throughout the southern half of Africa. Since the last plague ended in 1944 no damage has been caused. The African Migratory Locust periodically devastated nearly all Africa south of the Sahara. Again no damage has been caused since about 1940 when the last plague died out.

In addition to the emphasis placed by various sessions of FAO's Desert Locust technical committees upon the need for FAO to strengthen research and training, similar requests and recommendations have been made by the FAO Conference, which at all recent sessions has emphasized the importance of the Desert Locust project. In Resolution No. 19/55 the Eighth Session of the Conference requested the Director-General to support training in Desert Locust control work and research on the Desert Locust. In Resolution No. 18/57 the Ninth Session requested the Director-General to strengthen the Organization's anti-locust activities, including the training of personnel, and to pursue long-term investigations on the Desert Locust and new locust control techniques.

Owing to budgetary limitations it has proved impossible for FAO to implement such requests except to a very limited degree.

II Purpose

The overall purpose of the present proposals is to achieve more effective control of the Desert Locust at considerably reduced expenditure in order to relieve all affected countries of the economic burden presently experienced from the costs of control operations and the extent of crop damages. This purpose is to be achieved through two concurrent main lines of approach:

(a) The ultimate aim is the long-term development of a preventative policy of control, comparable to that successfully practised against other locust species, whereby the build-up of new locust plagues is prevented in relatively limited areas.

(b) Whilst work in this direction proceeds, and as locust plagues will continue until the primary objective is reached, the second requirement is to demonstrate how expanded collective action, based on the most modern techniques can check an existing locust plague, it being appreciated that similar methods may also be required in preventing the build-up of new plagues.

III Requirements

The recommendations of the FAO Technical Advisory Committee on Desert Locust Control show that the following are some major immediate basic requirements to supplement existing national and international programs for achieving a more rational approach to the Desert Locust problem throughout its invasion area by learning more about the locust itself and methods for its control.

It is considered that developments along such lines, if undertaken on a scale greatly in excess of what at present is possible at national or international levels, will appreciably advance the time when the Desert Locust is brought under control and when the affected countries can, through concerted action and without outside assistance, maintain an adequate level of preventative measures.

(i) Surveys

Expansion of the ecological survey of the main breeding areas of the Desert Locust, recommended by the FAO Panel of Experts; and already initiated on a limited scale in cooperation with UNESCO.

(ii) Research

Intensification of research on the Desert Locust, particularly in the field, and on methods of control.

(iii) Training

Provision of increased training facilities for nationals of all countries affected by the Desert Locust.

(iv) Pilot Projects

Pilot projects for the testing and demonstration of locust control operations by the most modern techniques.

Much of such a program would benefit not only the economic development of countries affected by the Desert Locust but could have an important influence on countries infested by other species of locusts, notably in South and Central America.

IV Proposals

(i) FAO/UNESCO Desert Locust Ecological Survey

A recent major development has been the initiation in 1958 of the above Survey which was recommended by the FAO Panel of experts in 1956.

The purpose of this Survey, originally planned as a three-year project, may be summarized as follows:

- (a) The general distribution of the Desert Locust is very vast, covering a large part of Africa and the countries of south-western Asia, as far as India, but within this distribution area the existence and breeding of locust populations are known to be connected with certain insufficiently investigated ecological conditions occurring seasonally in different parts of the whole region.
- (b) Conditions required for the survival and breeding of the Desert Locust include certain types of vegetation cover, which in turn depend on the land forms, soil and the current weather.
- (c) Many local ecological surveys have been undertaken by national anti-locust services, but the diversity of approach and of the survey techniques has made it impossible to produce a general picture of the various combinations of ecological conditions favourable to the locust and to discuss what causes them.
- (d) The existing incomplete knowledge of the problem suggested that a general survey carried out by a team consisting of a locust expert and a plant ecologist was essential in order to study the conditions in each of the various areas, to compare their points of resemblance and of difference so as to arrive at an understanding of the essential ecological requirements of the locust. The understanding of those requirements will make it possible to assess the potentialities of any area with regard to locust breeding at a given season. Such a background of ecological knowledge would then be of great value in locust control, because it would facilitate forecasting and make it possible to concentrate control efforts on both the short and long-term basis.

Because of the expected far-reaching results of the Survey it is suggested that it should be planned for four instead of three years and that the Special Fund allocation should, at least during the period 1959, 1960, 1961 and 1962, finance the Survey, enlarging and facilitating its operations beyond what is now possible, by providing for:

		<u>Estimates</u> US\$'00				
		<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>Total</u>
(a)	The cost of existing staff and operating expenses at present level:	25	50	50	50	175
(b)	One junior technician:	6	13	13	13	45
(c)	One technical/administrative assistant and one vehicle mechanic; salaries, allowances and travel:	10	20	20	20	70
(d)	Increased travel of the Survey team:	6	12	12	12	42
(e)	Travel of members of the Inter-Agency Advisory Group and consultants to meetings and to the field:	3	5	5	3	16
(f)	Vehicles and maintenance:	45	10	30	30	115
(g)	Additional scientific equipment:	10	2	2	1	15
(h)	Periodical charter of survey aircraft and aerial photography:	60	60	60	60	240
(i)	Meteorological services:	4	4	4	4	16
(j)	Publication of results (three languages with many maps, charts and photographs):				40	40
TOTAL		169	176	196	233	774

(ii) Research

(a) Supporting and strengthening existing national field research stations and assisting governments to establish new stations. Estimated cost during 5 years, \$340,000.

(b) Establishing, equipping and maintaining a central field research station to provide:

- (1) Facilities for research on the biology, ecology and population dynamics of the locust in the field and in a field laboratory.
- (2) Facilities for personnel from national organizations to take part in such research, as a direct method of training.

- (3) Facilities, including technical assistance, transport, camping equipment and laboratory accommodation to visiting scientists who may wish to investigate problems of locust biology.
- (4) Facilities for carrying out field tests of control methods, including experiments in ecological control.
- (5) Facilities for training and refresher courses in locust biology and control.

A small permanent staff at the station should consist of: 1 Scientific Director, 2 Research Assistants, with supporting administrative and subordinate staff.

Initial capital cost	US\$ 120,000
Annual expenditure	" 110,000
Total for five years	<u>US\$ 670,000</u>

(c) Research and research training fellowships

These fellowships would be awarded to:

- 1. Research workers of high calibre to extend their studies at foreign institutions, including the central field research station.
- 2. More junior research students for extending their research experience at foreign institutions under the guidance of recognized authorities.

At least five per annum during 5 years at an average of \$5,000, total \$125,000.

(d) Strengthening the International Desert Locust Information Service (IDLIS)

The exchange of locust information, the analysis of such information and its correlation with weather data is an essential foundation for the study of the desert locust.

It is proposed that the existing IDLIS should be strengthened by additional staff and facilities at an estimated cost of US\$ 135,000 over a five year period.

(iii) Training

- (a) Three training courses for about three months in 1960, 1962 and 1964, each for 25 trainees at the central field station. Some courses to be conducted during the summer and some during winter.

The syllabus of these courses with lectures, demonstrations and field exercises; conducted by visiting recognized experts, would cover such subjects as:

Locust behaviour	Control techniques
Locust physiology	Laboratory research techniques
Plant ecology	Field survey techniques
Locusts and weather	Transport organization and
Locust reporting and plotting	maintenance

Estimated cost each course \$70,000, total \$210,000.

(b) Grants for exchange of personnel and field demonstrations

Five grants per annum over five years for foreign visits of an average of three months each; the practical benefit that can be derived from the exchange of locust control technical personnel has been frequently stressed. These grants would allow for selected staff to visit other countries for periods varying from one to six months to study and participate in anti-locust operations.

Estimated cost \$12,000 per year.

In addition the need exists for the training of lower grade locust control personnel where foreign travel may not be justified and where the objective can be achieved better by sending experts to different countries for periods up to four weeks for intensive local demonstration and training.

Estimated costs \$5,000 per year.

(iv) Pilot Projects

During recent years much progress has been made in developing new and improved locust control techniques. Furthermore there is an increasing appreciation of the need for a strategic approach to locust plague control, i.e. where and when locust control effort should be concentrated to secure maximum results. It has become apparent that there is an essential need for regional action with highly mobile striking forces based mainly on aerial spraying. The thorough testing of such a large scale operation which would inevitably extend across national frontiers is beyond the resources of any individual government or groups of countries without appreciable international financial assistance and backing. The FAO Desert Locust Control Committee in 1957 requested FAO to study problems involved in making the best use of available anti-locust aircraft and in organizing a pilot scheme for their inter-territorial use.

It is therefore proposed that a large scale project over a period of two years, preferably extending from late 1959 into 1961, on the strategic use of aircraft for locust plague control should be organized under the direction of an expert group. The area of operations should extend into the Arabian Peninsula.

Estimated cost, including charter of 10 aircraft, insecticides, ground control and technical advisory and assessment staff US \$1,400,000.

V Execution of Project

The execution and coordination of the above program should be the primary responsibility of FAO but in certain directions, especially the Desert Locust Ecological Survey, FAO should share this responsibility with UNESCO and WMO. It may also be desirable to secure the cooperation of such regional organizations as CCTA.

VI Provisional Summary Budget

		US \$'000					
		1959	1960	1961	1962	1963	1964 Total
1.	Desert Locust Ecological Survey	169	176	196	233		774
2.	Research						
	- National Research Stations	20	80	60	60	60	340
	- Central Field Research Station	120	110	110	110	110	670
	- Research Fellowships		25	25	25	25	125
	- International Desert locust Information Service	10	25	25	25	25	135
3.	Training - Training Courses		70		70		210
	Exchange of Personnel		17	17	17	17	85
4.	Pilot Project	200	800	400			1400
	TOTAL	519	1303	833	540	237	307 3739

Note

In the above summary and in preceding tables an attempt has been made to provide annual costs. Whilst these may be taken as an indication, it is impossible to forecast precisely how the funds allocated should be distributed over the several items of the total project or how expenditure should be spread annually.

