

REPORT ON
THE 1950 WORLD CENSUS OF AGRICULTURE

Volume II

CENSUS METHODOLOGY

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 1958

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31: 63
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 Eng. ed
 vol. 2
 caps. 2

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INTRODUCTION

As stated in the first volume of this report, the *FAO Report on the 1950 World Census of Agriculture* deals with three different aspects. The census results by countries are published in one volume, this second volume provides a methodological study of the various national censuses, while a third volume will comprise an analysis of the main subjects included in the census.

Volume I — *Census Results by Countries* — is gradually being published in loose-leaf form. The present second volume deals with the methodological aspects of the census. It is mainly based on census questionnaires and instructions. Additional information has been drawn from the census reports and other sources insofar as it could further clarify the sense of questionnaires and instructions. In a number of cases official translations of the questionnaires and instructions have been used for the analysis instead of the original documents. The concern here is thus primarily with the intentions of the census offices at the time the questionnaires were prepared. Later changes from this original standpoint are reported for each country in Volume I — *Census Results by Countries*.

A few countries which discontinued their collaboration with FAO at an early stage (Czechoslovakia, Hungary and Romania) have only made available information on their censuses which appears to be incomplete. In these cases, therefore, the analysis given here cannot claim to be exhaustive.

The material included in this volume has already been largely taken into account in preparing the Program of the 1960 World Census of Agriculture. It is hoped that the publication of this material may be useful to countries planning an agricultural census and particularly to those planning to participate in the 1960 World Census of Agriculture.

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HISTORICAL DEVELOPMENT

1. THE GROWTH OF THE IDEA

A world census of agriculture is a relatively new conception. Early attempts at preparing international statistics (including statistics of agriculture), such as those made by the International Statistical Congress held in The Hague in 1870, were concerned only with presenting in comparable form statistical information that was already available in various countries. Although the International Institute of Agriculture almost from its inception had been urging governments to take agricultural censuses, it did not propose at that time to take such censuses in the same or about the same year along similar lines and on the basis of uniform principles. On the contrary, the General Assembly of the Institute adopted in 1909 a resolution in which it expressed its refusal to propose any method of collecting statistics, or the uniform application of a method, because it was of the opinion that such methods should be chosen by the governments in accordance with the conditions of each country.

The basic notion of a world census of agriculture was thus explicitly rejected. At the next session however, with the experience it had already gained in the compilation of international statistics, the Institute adopted a different attitude. In a resolution the General Assembly expressed its view that an international statistical information service could not function normally unless the national systems of collecting information on the area, condition, development and harvests of crops were based on uniform principles.

Although it was stated that the resolution was not for the time being intended to modify the principles of the 1909 decision, but only to provoke an exchange of ideas on the matter, the adoption of the resolution was actually a complete reversal of the earlier policy. After this resolution a change of ideas quickly came about. In 1913 the General Assembly invited the Permanent Committee of the

Institute to state, product by product, the improvements which each of the countries should introduce in its statistical system so as to establish the international statistical information service on a firm basis. In another resolution the General Assembly proposed a standard classification of livestock for adoption by its member countries. In 1920 the first session after World War I confirmed these resolutions in their essentials.

A few years later, in 1923, the League of Nations, which was finding a need for comparable international statistics, together with the International Statistical Institute, appointed a committee of experts to study the best methods for making economic statistics comparable between countries. Its agricultural subcommittee, codifying to a large extent the rules already used by the International Institute of Agriculture, made recommendations on censuses of areas and censuses of livestock. These recommendations were based on the principles of simultaneity and of uniformity in classification for the various countries. Although it was recommended that the livestock census should be taken in the same year as the census of areas, the importance of determining by holdings the inter-relationship between areas and livestock as recorded in an undivided agricultural census, was not yet clearly recognized.

The conclusions of the committee of experts were approved by the International Statistical Institute in its Fifteenth Session held in Brussels in 1923.

2. THE FIRST WORLD CENSUS OF AGRICULTURE

The first action toward a world census of agriculture was taken in 1924 when the General Assembly of the International Institute of Agriculture, after having considered a report from its Chief of the General Statistical Service, Dr. V. Dore, authorized the Institute to take steps to induce the adhering

governments to carry out a general agricultural census in accordance with a uniform plan to be prepared by the Institute. The proposal attracted the attention of the International Education Board (Rockefeller Foundation) which undertook to make a grant of \$10,000 per annum for the five years 1925 to 1929 to defray the salaries of a Director and an Assistant Director and the travelling expenses involved in visiting the various governments.

A special bureau charged with this particular work was created at the Institute in 1925. After some preliminary investigations, a standard form was prepared for use in taking the census, in which a census by holdings was proposed for the enumeration of areas and livestock in one operation. The form was revised in the first instance by a Committee of the International Scientific Council of the Institute, and subsequently by the Committee of Statisticians of the General Assembly. On the report of this committee, the General Assembly approved in principle the revised standard form. This form was then printed in three languages — French, English and Spanish, and a pamphlet containing the form, together with some explanatory information, was circulated to all governments.

The Director of the Census then visited various countries in order to interest them in the census and to discuss the technical details with their statistical authorities. The standard form was further discussed and improved by another Committee of Statisticians, delegates of the different governments, called especially to Rome on the occasion of the General Assembly of 1928, and was ultimately approved in its final form by the Ninth General Assembly in October 1928.

Sixty-three countries (including colonies) participated in the World Census of Agriculture of 1930 by carrying out a complete census, by making special enquiries or by attempting to obtain for the International Institute of Agriculture information more complete and exact for the census year than that normally available. In 46 countries the census was taken by holdings. Six others adopted the commune or other administrative unit as the unit of enumeration. The remaining countries participated in the initiative of the Institute as far as they could. The Institute compiled the results of the census on lines as uniform as possible and published them separately for each country in English and French.

In addition, the Institute prepared and published a methodological study of the questions asked in the schedules of the census, and also published certain details of the way in which the results were compiled in different countries.

3. THE SECOND WORLD CENSUS

It was the intention of the Institute that the 1930 census should be the first of a series of censuses to be taken at intervals of ten years. Another world census of agriculture was therefore planned for 1940.

Prior to the Second World Census of Agriculture the Institute assembled all the documents of the first census and reprinted them in five volumes and in two separate editions — English and French. After having submitted the documents so collected to the various governments, the International Institute of Agriculture requested all interested countries to send experts to Rome in order to discuss the program of the Second World Census of Agriculture in a conference which was expressly convoked at the headquarters of the Institute.

A first conference, which was held in 1936, examined various questions in connection with the proposed census and suggested, on the basis of the experience of the first inquiry, a number of amendments to the standard form used in 1930. After considering these suggestions, the Statistical Bureau of the Institute prepared a standard form for 1940 and submitted it to the various governments for examination and advice. A second conference of agricultural statisticians was then convoked at the Institute to examine both the project itself and the observations and suggestions made by different governments. This conference was held in Rome in December 1937. It suggested further modifications of the form to be drawn up for the second census and the recasting of the explanatory and other introductory notes for the use of the governments, and also made some recommendations as to the manner of organizing and preparing the census and tabulating and publishing the returns.

The various suggestions and recommendations were duly taken into account and a booklet entitled *Programme of the World Agricultural Census of 1940* was finally prepared and forwarded to all governments.

This preliminary work having been completed, each government was requested: (a) to join the World Census of Agriculture by taking a special census in its own country and (b) when organizing its national census to be guided by the program and the standard form drawn up by the Institute.

According to a decision taken by the Second Conference of Agricultural Statisticians in December 1937, the Institute undertook to supply each interested country with all documents prepared for the census in other countries as soon as they were available. The Institute forwarded to each of the countries participating in this exchange the documents supplied by the others up to the moment when the outbreak

of war and the interruption of communications made it impossible to do so.

As soon as the program of the census was definitely established, the Institute drew up a number of questionnaires by means of which the various countries could communicate the census results to the Institute. Thus the national offices engaged in the census work were enabled to organize their tabulation according to a general plan and the Institute could obtain data on a uniform basis as soon as possible. The questionnaires were sent to all countries in March 1940.

As soon as some countries began publishing their returns, or as these gradually became available, the Institute printed them as appendices to its *Monthly Crop Report and Agricultural Statistics*. World War II interfered with the full accomplishment of the program.

4. FAO ORGANIZES THE 1950 WORLD CENSUS OF AGRICULTURE

After World War II, FAO took over the responsibilities of the International Institute of Agriculture. From the beginning, the project for a world census of agriculture has received the special attention of this Organization. The First Session of the FAO Conference in 1945 asked for a study of the possibility of taking a world census by 1950, or as soon as practicable thereafter.

An informal meeting of experts on FAO's statistical, scientific and technical information services, held in London in April 1946 to advise the Director-General on various aspects of the work, was strongly of the opinion that a world census of agriculture by 1950, or as soon as practicable thereafter, was most desirable, and further recommended that FAO decide upon a minimum schedule of information to be requested, make enquiries among countries as to their census plans and consider what it might do to assist various countries to complete the censuses.

FAO's Standing Advisory Committee on Statistics, meeting for the first time in August 1946 at Wassenaar near The Hague, laid down the general plan for carrying out the census. The recommendations included the preparation of draft proposals for the census, using the experience gained in 1930 and 1940, as well as the work of the Inter-American Statistical Institute. The Committee also urged FAO's active participation in national programs by training census personnel and by providing technical assistance to countries. The Second Session of the Conference endorsed these proposals.

Following this conference a small ad hoc committee was convened in Washington to formulate the census

program. The Committee developed a minimum list of items, together with comments and definitions, which was submitted to Member and nonmember Governments early in 1947. The governments were asked to submit comments and suggestions concerning this program and were informed that a number of regional meetings were to be arranged to consider it more fully. The first of the regional meetings was held in Rome in March 1947. This meeting examined the minimum program and also a more extended list of items which was distributed to the members of the group, and suggested a number of modifications. It was also pointed out at this meeting that the collection of census data in non-self-governing territories presented special difficulties. A special subcommittee was constituted to consider what modifications would be necessary in these areas.

Another regional meeting, this time for all American countries, was held in Washington in September 1947. The Inter-American Statistical Institute had arranged to convene a meeting of its Committee on the 1950 Census of the Americas (COTA), which worked through three subcommittees, one on population, one on agriculture and one on housing and general census administration. The Subcommittee on Agriculture discussed the proposed program for the 1950 World Census of Agriculture and recommended that governments give careful consideration to that program and submit simultaneously to COTA and FAO any modifications which they proposed to introduce in the light of their special conditions and requirements. Following a suggestion made during the Rome meeting and a recommendation of the Second Session of the FAO Conference, a special meeting was held in London in December 1947 on invitations issued by FAO to consider the program for the 1950 World Census of Agriculture, with special reference to the difficulties that might be encountered in underdeveloped areas. These difficulties, chiefly those resulting from the vast distances to be traversed and the illiteracy of the population, hamper or render impracticable methods of enumeration applicable elsewhere. The majority of the inhabitants of such areas are incapable of completing questionnaires and are unable to define their cultivated area in known terms. Bearing these facts in mind, the meeting concluded that the most satisfactory way of dealing with this problem was to advise the governments concerned of the nature and importance of the basic facts desired by FAO, and suggest that an attempt be made to obtain such information as was possible by methods and means best suited to local circumstances and to the facilities available. The report of the meeting contains further a series of suggestions about the information to be

collected.¹ FAO's minimum list was accepted except for a few small modifications.

The Third Session of FAO's Standing Advisory Committee on Statistics, held in September 1948, devoted a major portion of its time to consideration of the 1950 World Census of Agriculture. It reviewed all the suggestions made by technicians in various parts of the world and completed the *Program for the 1950 World Census of Agriculture* which was issued and dispatched to member countries in December 1948. The Program was issued in the three official languages of the Organization.

Further regional meetings were convened to examine the application of FAO's Program to the conditions in the countries of the Western Hemisphere. During the Second Session of the Committee on the 1950 Census of the Americas assembled in Rio de Janeiro in February 1949, a Subcommittee on Agriculture was appointed to consider FAO's final Program. Because of lack of time, only very general resolutions were adopted on this occasion. A detailed review of the Program, however, was made in Bogotá in July 1949 at a special meeting promoted by FAO and convened under the auspices of the Government of Colombia. At this session the agricultural census technicians from the American countries reviewed the minimum list of items and comments, as well as the recommendations and definitions included in the Program and considered provisionally the minimum set of tables recommended by FAO. In addition, some of the national schedules presented by the delegates of countries represented were studied.

The Third Session of the Committee on the 1950 Census of the Americas, held in Bogotá in January 1950, examined the conclusions of the special session of American technicians. During this session the minimum program of FAO, amended in accordance with the suggestions and revisions made at the various inter-American meetings was finally adopted as a program for the censuses in the American countries.

During the Fourth Session, held in Washington, D.C., in June 1951, the minimum set of tables approved by the Third Session was further discussed. Some changes were introduced and some of the tables were placed in the optional category. In accordance with a recommendation adopted, the Inter-American Statistical Institute had prepared a set of additional tables relating to livestock products, agricultural machinery and forest products, to be considered under

¹Food and Agriculture Organization of the United Nations, G/E/2, *World Census of Agriculture. Report of a meeting held in London, December 15-19, 1947 to consider the census program in colonial and underdeveloped areas.* Washington, D.C., January 1948.

the 1950 census program. The additional tabulations were adopted with some changes and added to the Inter-American minimum for the 1950 World Census of Agriculture.

5. FAO'S ASSISTANCE TO COUNTRIES

The Second Session of the Conference of FAO had recommended that the Organization should make financial arrangements for its share of the work proposed for the World Census, including technical advice and assistance to countries requesting it. Several countries were expected to take an agricultural census for the first time, and therefore had no census experience. Assistance to these countries has been given by FAO in various forms. In the first place, a number of regional training centers were organized by FAO, in co-operation with the United Nations and several governments to help to train census personnel. These were as follows:

- Latin-American Training Center on Statistics and Censuses, Mexico, 1948;
- Statistical Training Course, Baghdad, 1948;
- European Center of Applied Agricultural and Demographic Statistics, Paris, 1949;
- International Training Center on Statistics and Censuses for the Near East Countries, Cairo, 1949;
- International Training Center on Censuses and Statistics for Southeast Asia and Oceania, New Delhi and Calcutta, November 1949 to February 1950;
- Laboratory for the Tabulation of Agricultural Census Data, Rio de Janeiro, 1951.

Two hundred and forty-one trainees from 42 countries participated in these centers.

FAO further appointed Regional Statisticians in various parts of the world, whose duties included the promotion of agricultural censuses in the countries of their region. They were consulted by several governments in organizing and implementing the census program.

When the United Nations Expanded Program of Technical Assistance was initiated, funds became available for sending experts to countries which requested assistance in undertaking their census. Six countries have been provided with this assistance for periods varying from one to two years.

The regional meetings, together with the training centers and the technical assistance under the regular program as well as under the Expanded Technical Assistance Program, prepared the ground for a wide participation of countries in FAO's Program for the 1950 World Census of Agriculture.

PARTICIPATION IN FAO'S PROGRAM

The number of countries, including territories, which took a census in the framework of the 1950 World Census of Agriculture in the period 1948 to 1955 amounts to 106, compared with 68² which participated in the 1930 World Census. They are listed below with the year in which the census was taken.

TABLE 1. COUNTRIES AND TERRITORIES WHICH PARTICIPATED IN THE 1950 WORLD CENSUS OF AGRICULTURE

Countries	Year
EUROPE	
Austria	1951
Belgium	1950
Czechoslovakia	1950
Denmark	1949
Finland	1950
Germany, Federal Republic	1949
Greece	1950
Hungary	1948
Ireland	1949
Luxembourg	1950
Malta and Gozo	1950
Netherlands	1950
Norway	1949
Portugal	1952-1954
Romania	1948
Saar	1948
Sweden	1951
Switzerland	1950
United Kingdom	1950
Yugoslavia	1951
NORTH AND CENTRAL AMERICA	
Alaska	1950
Bahamas	1950
Barbados	1950
Bermuda	1950
British Honduras	1950
Canada	1951
Costa Rica	1950
Cuba	1952
Dominican Republic	1950
El Salvador	1950
Guatemala	1950
Haiti	1950

²Volume I of the report on *The First World Agricultural Census (1930)* states the number of participating countries as 63. For comparison with the 1950 figure it should be counted as 68.

Countries	Year
Honduras	1952
Jamaica	1950
Leeward Islands	1950
Mexico	1950
Panama	1950
Puerto Rico	1950
Trinidad and Tobago	1951
United States	1950
Virgin Islands (U.S.)	1950
Windward Islands	1950
SOUTH AMERICA	
Argentina	1952
Bolivia	1950
Brazil	1950
British Guiana	1950
Chile	1955
Colombia	1951
Ecuador	1954
Falkland Islands	1950
Uruguay	1951
Venezuela	1950
ASIA	
Aden Protectorate	1950
Brunei	1950
Burma	1953-1954
Ceylon	1952
Cyprus	1950
India	1954
Iraq	1952
Israel	1950-1951
Japan	1950
Jordan	1953
Malaya, Federation of	1950
North Borneo	1950
Philippines	1948
Ryukyu Islands	1951
Sarawak	1950
Singapore	1950
Thailand	1951
Turkey	1950
AFRICA	
Algeria	1950-1951
Bechuanaland	1950
Belgian Congo	1950
British Somaliland	1950
Egypt	1950
Gambia	1950
Gold Coast and British Togoland	1950
Kenya	1954

Countries	Year
Mauritius	1950
Mozambique	1951
Nigeria and British Cameroons	1950
Northern Rhodesia	1950
Nyasaland	1950
Seychelles	1950
Sierra Leone	1950
Southern Rhodesia	1950
St. Helena	1950
Swaziland	1950
Tanganyika	1950
Tunisia	1949-1950
Uganda	1950
Union of South Africa	1950
Zanzibar and Pemba	1950

OCEANIA

American Samoa	1950
Australia	1950
British Solomon Islands	1950
Cook Islands	1950
Fiji	1950
Gilbert and Ellice Islands	1950
Guam	1950
Hawaii	1950
New Guinea (Australia) and Papua	1951
New Hebrides	1950
New Zealand	1950
Tonga	1950
Western Samoa	1950

A regional analysis of the number of countries participating in the Censuses of 1930 and 1950 shows divergent developments in various parts of the world.

TABLE 2. NUMBER OF COUNTRIES AND TERRITORIES WHICH TOOK CENSUSES IN 1930 AND 1950

	1930	1950	Both in 1930 and 1950
Europe	24	20	16
North and Central America	12	22	12
South America	5	10	4
Asia	6	18	5
Africa	11	23	10
Oceania	10	13	10
TOTAL	68	106	57

The decrease of the number in Europe is partly due to the changes in the political pattern of Eastern Europe, partly to the fact that France, Italy, Iceland and Spain, which participated in the 1930 Census, did not take a census in the period under consideration.³ The increase in Oceania, where the coverage was already high in 1930, has been only small. In the rest of the world the number of participating countries is more than double that of 1930.

The 1950 World Census of Agriculture covered 58.6 percent of the world's agricultural area and, excluding U.S.S.R. and China, 71.0 percent. Although the participation in the 1950 Census, in regard to the number of countries, was so much wider than in 1930, the Census still covered only a little more than half the world's agriculture.

The following table gives the coverage by regions.

TABLE 3. AGRICULTURAL AREA COVERED BY THE COUNTRIES WHICH PARTICIPATED IN THE 1950 WORLD CENSUS OF AGRICULTURE

Region	Agricultural Area		
	All countries	Participating countries	Percent
	<i>Million hectares.</i>		
Europe	249	116	46.6
North and Central America	643	642	99.8
South America	329	298	90.6
Asia	780	246	31.5
Africa	867	419	48.3
Oceania	402	400	99.5
U.S.S.R.	349*	—	—
WORLD TOTAL	3,619	2,121	58.6
WORLD, EXCLUDING U.S.S.R. AND CHINA	2,985	2,121	71.0

*Unofficial figure.

The coverage is nearly complete in the Western Hemisphere and Oceania. Europe and Africa are not even half-covered. In Asia the coverage is very low.

³ France took an agricultural census in 1956.

CHAPTER 2

THE SCOPE OF THE PROGRAM AS PROPOSED BY FAO

COMPARISON WITH THE 1930 AND 1940 PROGRAMS

In the 1950 World Census of Agriculture it was intended that each government would obtain comprehensive, accurate and comparable information on its agriculture, including particulars of:

- (a) the number of agricultural holdings and their principal characteristics, such as size, form of tenure, utilization of the area, utilization of labor, implements and mechanized power, etc.;
- (b) the number and characteristics of the people who obtain their livelihood from agriculture;
- (c) areas under crops and numbers of livestock;
- (d) the volume of production of all important agricultural products.

On comparing these objectives with those of the two preceding world censuses, a considerable evolution in the purpose of the census can be observed. The Committee of the International Scientific Council of the International Institute of Agriculture, appointed for the preliminary consideration of the draft schedules of the 1930 World Census, stated that "perhaps the most important object to be secured by the census is an approximately accurate knowledge of the various products entering into consumption". The Committee of Statisticians of the Eighth General Assembly of the Institute even called this "the ultimate object to be secured by the census".

In stating the objects of the 1940 World Census, its Program still placed in the forefront the determination of accurate and comparable information on the areas under crops of international importance and on the numbers of livestock, but the second object immediately followed: to determine the principal features of agricultural holdings.

The 1950 Program considered that to obtain information on the number of agricultural holdings and their principal characteristics was the first purpose

of the World Census. In the first draft of that Program, area under crops and livestock numbers were still mentioned first among the aims of the census. FAO's Standing Advisory Committee on Statistics, however, in revising the census program pointed out that the collection of information on holding characteristics should be considered as the primary purpose of an agricultural census.

These differences are not incidental. In the two decennia between the preparation of the First World Census of Agriculture and of the 1950 World Census, the views in many countries on the rôle of government in relation to agriculture had changed considerably. More consideration has been given to structural problems of agriculture, and the holding has been more and more recognized as of paramount importance for agricultural production.

While the 1930 Census aimed in the first place at determining the quantity of agricultural produce, the most recent world census tried to reveal the structural characteristics of agriculture. The different aims are reflected in the composition of the programs. For 1950 three new headings were introduced into the main body of the Program — land tenure, use of mechanical power and agricultural population. In 1930 land tenure was regarded merely as supplementary information; the problem was not considered at that time to be a matter of international interest. Agrarian reform was taken into account only because of its influence on agricultural production. The Committee of Agricultural Statisticians of the Ninth General Assembly of the International Institute of Agriculture, meeting in 1928, accepted a recommendation that those countries which had adopted methods of agrarian reform should be asked to include in their census, questions as to whether the size of each holding had increased or decreased as a result of agrarian reform, or whether the holding had been newly created. In the 1940 Program land tenure still figured in the list of less essential questions.

The 1930 Program, or "Standard Form", as it was called, considered among the supplementary questions as "a subject in regard to which it is very desirable to collect information", the stock of farm machinery and equipment. The enumeration proposed was *de facto* in character: the machinery on the holding on the date of the census had to be taken into account, regardless of ownership. The purpose of these questions in 1930 was not very clearly defined. The question covered not only machinery, such as harvesters, threshers and power machinery, indicating a certain degree of mechanization of agricultural operations, but also implements, such as plows and harrows, which are found on most agricultural holdings.

The purport of the questions on agricultural machinery emerged more clearly in the 1940 Program. That program provided for the inclusion only of machines and installations which throw light on the degree of mechanization at a high technical level, as characterized by agricultural holdings in western countries. The 1950 Program probed more deeply than its predecessors into the problem of mechanization. Questions were asked about the kind of power used. Numbers only were required in regard to machinery, the presence of which on the holding indicates a considerable degree of mechanization of agricultural work. The question also took into account the large number of holdings in certain parts of the world on which human labor is the only source of power in agricultural production. One of the very important measures of the level of living of agricultural people, the 1950 Program pointed out, is the extent to which cultivation of the soil and other agricultural work is dependent upon human power alone. For this reason it proposed that every government should include in its census of agriculture such simple questions as whether (a) animal, or (b) mechanical power was used in agricultural work, the answers in each case to be "yes" or "no". It was not necessary to ascertain for this purpose whether or not the holder owned draft animals, engines or motors, but rather whether he had them available for his own use. Insight into the value of information on agricultural machinery and equipment has grown considerably since 1930 when, as noted above, the *stock* of farm machinery and equipment was considered as "a subject in regard to which it is very desirable to collect information".

The original draft of the 1930 Standard Form contained a number of questions in regard to the persons living on the farm. The Committee of the International Scientific Council of the International Institute of Agriculture considered "that enquiries relating to farm population would overlap with the census of population", and the revised form accordingly had

no question on this subject. In the discussions on the 1940 Program it was suggested by the Second Conference of Agricultural Statisticians that it would be useful if governments, when submitting their figures of agricultural labor, would at the same time give the total agricultural population. At the time of the 1930 and 1940 inquiries, there was some interest in the total agricultural population as compared with the agricultural labor force. Both census programs however failed to recognize the importance of enumerating agricultural population in relation to holdings.

The 1950 Program took the view that a census of population can provide more data on agricultural population than can an agricultural census. Promotion of the welfare of the rural population being one of the main objectives of FAO, the Program stressed, however, the necessity of collecting some information through the agricultural census. It proposed a number of questions on this subject, stating that the second purpose of the census was to obtain information on the number and characteristics of the people who obtain their livelihood from agriculture.

2. THE DEVELOPMENT OF THE 1950 PROGRAM

A comparison of the first draft (dated 6 December 1946) of the 1950 Program and the final issue of December 1948 gives useful indications as to the evolution of the Program. The discussions in the Standing Advisory Committee of Statistics in 1948 brought out more clearly the main purposes of an agricultural census. Not all the changes that were successively made in the development of the 1950 Program are of equal importance. Some changes were merely a matter of better wording; others, however, represent a real development in the subject matter concerned, and a few introduce completely new elements into the census. Only the last two changes will be further considered.

A question concerning the *location of the holding* was introduced during the drafting of the Program. In the first place, this information is a useful adjunct to the name of the holder as an aid in controlling the enumeration. The location of the holding, especially when it is given in accordance with the rule indicated in the B list ("in legal terms") renders possible the classification of the data according to the administrative divisions of the country. If the administrative units used for this purpose are sufficiently small, such a classification may be the basis for a regionalization of the census data, i.e., tabulation of the census data according to agricultural regions. The addition of the question concerning

the location of the holding may thus be considered a valuable addition to the census program.

As regards *tenure*, the first draft was far too simple, and, apart from ownership and tenancy, it provided for only *one* other form of tenure. To a certain extent, the final draft took into account the great variety of land tenure systems in different parts of the world, and asked for a full explanation of the *various* forms of tenure apart from simple ownership and tenancy.

In the section on land utilization of the draft program, a practical method of separating *temporary meadows* from *permanent meadows and pasture* was introduced. The 1930 Program considered as artificial meadows those plowed in 1929 or in one of the preceding four years. This very specific distinction was not made in the 1940 Program or in the first draft for the 1950 one, probably because it was too specific and therefore did not take sufficiently into account the variety of practices in different countries. In the final Program of the 1950 Census the same principle of separation between temporary and permanent meadows and pasture was adopted as in 1930, but it was generalized so as to cover a greater diversity of practices. The final Program indicated that, whenever possible, temporary meadows should be defined objectively, for example, as land used only for mowing or pasture which was plowed within a specified number of years.

The subdivision of *wood or forest* land into *grazed and not grazed* in the preliminary draft was not retained in the final primary list, but was included in the expanded list.

Between the first draft and the final Program a new concept was introduced as regards the *agricultural population*. The first draft, in accordance with the principle of enumeration by holdings, contained a question concerning the number of occupied dwellings or dwelling units on the holding and another question relating to the number of persons living in these dwellings. The questions were restricted to the holding, except that the dwelling of the holder or the farmer had to be included, whether located on the holding or not. The final Program introduced the *household concept*, in asking for the members of the holder's household, i.e., the holder or farm operator, together with members of his family and unrelated persons living in his household, regardless of whether they resided on the holding or not. In accordance with this concept, the title of this section was changed from "Farm Population" to "Agricultural Population".

Few changes were made in the *list of crops*. Sorghum was included with millet in one item. Soybeans, which in the first draft were excluded from

the pulse crops, were included as a separate item in the final list. Pulses were subdivided into "Edible dry beans" and "Edible dry peas". As it was not regarded as practicable for countries to state areas under particular vegetables, etc., in cultivation under glass, only the total area of each cultivation was asked in the B list, and the area under vegetables and melons was changed to relate only to crops in the open, as a single area on the A list, and in detail on the B list.

In the first draft the total area under grapes for wine, raisins and fresh use was asked. In the final Program only the *productive* area, as more important for the calculation of production, was included. An analogous change was made for other tree crops: instead of the *total* number of plants and trees, the number of trees of *bearing* age was to be included in the questionnaire. The item on *firewood* cut on the holding was deleted from the final A list but retained in the B list.

The first draft included only *one* question on the *use of animal or mechanical power*. If the answer to this question was "yes" it was not known whether animal power only or mechanical power only, or both, were used. Clarification would result from asking separate questions about animal and mechanical power.

A significant change was also made in the *age classification of horses*. The draft program distinguished animals of one year of age and over from those under one year, the usual point of separation when interest is focussed on horse breeding and the development of the stock of horses. In the final Program, however, the distinction was rather between animals which can be used for work and those which have not yet reached that stage. For this purpose horses were separated into those of three years of age and over and those under three years.

In the livestock section of the first draft *no totals* were included for those kinds of livestock for which several subitems were proposed. Such totals were introduced in the final list, as they are useful for checking purposes.

For *cattle*, young stock under two years of age which was an undivided item in the draft program was separated into subitems for male and female animals. Buffaloes, a very important item for many countries in the Far East, were not included in the preliminary program, although a note suggested the inclusion for those countries where domesticated buffaloes are common. In the final Program specific items for these animals were included, following the same pattern as the subdivision for cattle.

The preliminary program contained a number of items on *livestock products*, namely on milk and egg

production. Those items were deleted from the Program, as the methods normally used at an agricultural census are not considered the most suitable for collecting information on production.

Two important changes were also made in the wider definitions of the Program.

The time of reference of the census underwent some change between the first draft and the final Program. The first draft proposed the calendar year 1949 uniformly for crops harvested in the Northern Hemisphere. This proposal was modified in the final Program for some portions of the Far East to provide for harvests continuing into the early part of 1950, as these harvests were considered to belong essentially to the 1949 harvest cycle.

As regards the area to be reported, the main emphasis in the first draft was laid on area harvested. For several countries, however, assessment of the area under crops after the crops have left the field is not considered the best practice for obtaining area figures by interview. The final Program therefore placed less emphasis on the "area harvested" concept, in recognizing that some censuses are taken during the growing season of the crops, in which case either "area sown" or "area under crops at the census date" was to be reported. The final Program emphasized rightly the importance of defining clearly the area reported — especially in connection with the application of yield estimates to area figures for the calculation of production.

In the original plan of the census program a minimum list of items was envisaged, but it was realized that this list would not be sufficient for countries wishing to include additional crops or to use a more complete list, or more refined classifications of livestock. Therefore a supplemental list was later developed. In the first instance only a more complete listing of crops had been submitted.

In comparing this listing with the crops included in the first draft of the preliminary program, the following changes may be observed:

(1) For wheat, rice, barley, sugar cane, cotton, separate subitems were introduced for *area irrigated* and *area not irrigated*.

(2) To the group "Grasses, legumes and grains for hay, pasture, green fodder and silage", a subgroup was added for "Other fodder crops not included elsewhere", namely, cabbage for fodder, pumpkins for fodder and other crops, such as sunflower for fodder. "Chicory for greens" was added to the vegetables listed in the final Program.

(3) From the group "Glasshouses, flowers and bulbs", bulbs were separately distinguished, evident-

ly as being a complete and separate form of cultivation.

(4) Under "Crops grown for seed", clover and alfalfa, distinguished as separate items in the first draft, were removed to residual headings and instead of these, "Vegetable seed" and "Maize hybrids and parent strains" were separately listed.

(5) Changes in the proposed enumeration of *tree crops* were made in accordance with those in the minimum list. For grapes, as well as for field crops, the first draft of the supplemental list proposed the enumeration of the area harvested. The final Program asked for the productive area of grapes. According to the preliminary program, other tree crops were to be measured by the total number of trees or plants of all ages, bearing and nonbearing. The final Program restricted this to the number of trees or plants of *bearing age* only, and specified that whenever possible the nonproductive grape area, and the number of trees or area under trees not of bearing age, should also be given under a separate heading.

(6) The final Program made "Black pepper" a separate item in the group of "Trees, bushes and vines yielding spices, condiments and aromatic products".

(7) Mandarines and tangerines, which were classified in the item for lemons in the first draft, were included as a separate item in the subgroup "Citrus fruits" of the final Program. Litchis were deleted as a separate item in the subgroup "Other planted or cultivated fruit trees".

Cearea rubber trees (*manihot*) were replaced by Guayule (*Parthenium argentatum*) as a separate item in the subgroup "Rubber, gum and resin plants".

Finally it may be mentioned that the problem of *associated and mixed crops* has been more clearly elaborated in the final Program than in the first draft. The principle that the area under associated or mixed crops should be distributed on the basis of the area covered by each crop, whenever this could be determined, was maintained.

If such a distribution could not be made, both the preliminary and the final Program proposed the allocation of the total area to the item of land utilization corresponding with the most important crop. The preliminary program suggested a similar procedure for classifying the area in the crop list, at the same time proposing to repeat the figure against the other crop or crops in a column entitled "Associated secondary crops" which was to be excluded from the total. The final Program however suggested that an estimate be made of the amount of land to be attributed to each crop.

COMPARISON OF THE SHORT AND EXPANDED LISTS OF ITEMS

In the previous section it has been pointed out in the original plan of the census program, a minimum list of items was envisaged, but that it was realized that this list would not be sufficient for some countries, as some governments would wish to include additional crops, and others to use a more complete or more refined classifications of livestock. In addition to the short list, a more expanded list was developed for ensuring comparability with other countries. The short list was not adequate. The expanded list contains a number of sections which were not included in the short list, namely: D. Employment in agricultural work connected with the holdings; H. Fertilizers and soil dressings; I. Irrigation and drainage; J. Fragmentation; and K. Wood and fisheries products. It was expected that only countries with a more developed system of agricultural statistics would be in a position to include these sections in their agricultural census. The other sections which are included in the short as well as the expanded list are usually much more detailed in the latter. Some of the more important differences will be mentioned below.

The *area rented from others* is subdivided in the expanded list into: (a) area rented on a fixed cash basis; and (b) area rented for a share of the products, since these forms of rent have completely different economic implications.

As in several countries the yields of crops may be very different according to whether the land is artificially supplied with water or not, in the section "Land utilization" as well as in the section "Crops", a distinction was made between *land irrigated* and *land not irrigated*. In several regions livestock keeping may depend to a considerable extent on forest grazing. Wood or forest land was therefore subdivided into *grazed* and *not grazed*.

As the cultivation of *vegetables* has a specialized character in a number of countries, to the extent of being a different form of cultivation as compared with field crops, the area under specialized vegetable cultivation was designed to be reported, according to the expanded list, separately from all other arable land. The area of *uncultivated land producing some kind of utilized vegetable product*, such as reeds and rushes for matting and bedding for livestock, or wild berries, plants and fruits, had also to be enumerated according to the expanded list, as distinct from the other land in the remaining group.

The information on the *agricultural population* proposed for enumeration in the short list is limited to

the number of members of the holder's household. The more expanded list suggested in addition enumeration of other persons living on the holding. The expanded list attempted further to determine what part of the time the holder spends on paid work not connected with the operation of the holding, by proposing to collect information on the number of days spent on paid work, (a) in agriculture on other holdings, and (b) in nonagricultural pursuits. In a further effort to determine the degree to which the holder depended for his livelihood on the holding, principal nonagricultural occupations were also suggested for enumeration.

The *crop list* is much more detailed in the expanded than in the short list. The latter contains only a very limited number of the most important crops, those in which there is a world-wide interest and for which, therefore, comparable figures are needed from all countries. In particular, *fodder crops* and *vegetables*, the cultivation of which shows a considerably greater development in the highly developed countries, are much more detailed in the expanded than in the short list. *Cultivation under glass*, the growing of *flowers and bulbs in the open*, and the growing of *crops for seed* as commercial enterprises are practically confined to the more developed countries.

The short list includes only the most common *crops for industrial purposes*: sugar cane, sugar beets, cotton, groundnuts and tobacco. The numerous industrial crops included in the expanded list are not only crops grown in more developed countries. The list includes even crops which are mainly peculiar to certain areas, as for instance abaca and jute. Countries which were mainly following the short list were expected to select from the expanded list, for inclusion in their census questionnaire, such items as are of special importance for their agriculture. In the expanded list, crops for industrial purposes have been subdivided (according to the type of product they yield) into:

1. Sugar crops
2. Fiber crops
3. Oilseed crops
4. Spices, condiments and aromatic plants
5. Essential oil plants
6. Other industrial crops.

The number of *tree crops* included in the short list is also very small, being confined to grapes, citrus fruits, bananas and plantains, coffee, tea and coconut. The large number of tree crops included in the B list has been classified as follows:

1. Grapes
2. Olives
3. Trees, bushes and vines yielding spices, condiments and aromatic products
4. Fruit trees
5. Cultivated edible nut trees
6. Cultivated small fruits
7. Other cultivated fruits
8. Miscellaneous cultivated trees, shrubs and vines
9. Rubber, gum and resin plants
10. Nurseries.

In the groups 7, "Other cultivated fruits" and 10, "Nurseries", a number of crops have been included which are not tree crops at all, such as *pineapples* and *perennial flower plants*. For these crops there was no proper place in the Program. As they occupy land, not, like field crops, just for one crop season, but sometimes for a considerable time, and therefore show more similarity with tree crops, they were allocated to this group.

As regards the section for *livestock and poultry*, wherever a subdivision is made, the short list classifies

each kind of livestock according to sex and age in such a way that younger animals are distinguished from the more mature, while in addition, the expanded list separates out very young animals of certain types as an indication of the future development of the kind of livestock concerned. In list B, horses, cattle, buffaloes, sheep, goats and pigs are distinguished according to the use made of the animals. Guinea fowl, rabbits, bees, fur-bearing animals and domesticated animals peculiar to certain countries such as camels, llamas, guanacos and vicunas, zebras, reindeer and elephants, as well as silkworms, figure in the expanded list only.

On *agricultural technology* only the two basic questions, namely whether animal or mechanical power, respectively, was used in the holding, were included in the short list. The expanded list contains a considerable number of detailed items concerning the mechanization of agricultural work on the holding.

Items in the sections on *fertilizers and soil dressings*, *irrigation and drainage*, *fragmentation*, and *wood and fisheries products* were not deemed to be required from all countries, and therefore were included only in the expanded list.

THE SCOPE OF THE NATIONAL CENSUSES

1. FACTORS DETERMINING THE SCOPE OF THE AGRICULTURAL CENSUS

Most of the participating countries approached the census with the same general aim as that of the FAO Program: to create a broad statistical basis for a structural knowledge of the country's agriculture. Many of the national questionnaires, however, cover only part of the FAO Program, while many go further by including more subject matter or more detail on the FAO subject matter. Extension of the national censuses beyond the FAO Program cannot be analyzed here in full detail: only the most important features of this kind will be briefly mentioned. The limitations are roughly outlined in the first of the synoptic tables (by entire sections) and listed in detail in the other synoptic tables and the footnotes to them. To some extent the limitations are due to inadequate resources being available for census work, but in many instances they are due to traditional features in the organization of the country's statistics, whereby some items are covered by other branches of statistics as, e.g., in the case of statistics of the agricultural population. Several items in the FAO Program are not of interest in all parts of the world and could not reasonably have been asked in countries where they had no or negligible relevance.

Some of the countries where annual agricultural returns are based on enquiries by holdings produced a census merely by making tabulations by size of holding from the material collected for the annual returns. The scope of the census is thereby essentially limited to the set of items habitually included in the annual returns.

A very short set of questions on agriculture was included in the population census questionnaires of Hungary and Haiti. Switzerland limited its census to crop areas and machinery and did not aim at producing tabulations by size of holdings. Yugoslavia's was mainly a livestock census, with the addition of

a few questions on crops and other subjects. Portugal, taking its first agricultural census, limited the quantitative questions to livestock and to a brief crop list similar to that usually included in the annual returns. Most of the questionnaire consisted of qualitative questions of the type to be answered by "yes" or "no". For a number of British dependencies, participation in the World Census was in accordance with lines laid down in the report of a meeting held in London in December 1947¹. However, the census taken in Bechuanaland included only crop areas and crop production, and those of the Bahamas and British Somaliland extended to livestock numbers only. The latter limitation also applied to the census of Cuba.

A peculiar form of deviation from comprehensiveness is that occurring when a country's agriculture, for census purposes, is subdivided into sectors for which different questionnaires were used. The Hungarian census covered only the "private sector", while State farms (then including about 5 percent of the arable land of the country) were excluded, since no physical person could make population census returns on their behalf. Mexico used different questionnaires, with some variation in questions, on individual holdings and *ejido* (collective) holdings. Israel used a simpler questionnaire for the holdings of Arabs, Druzes and other minorities than for Jewish holdings; among the latter also, a somewhat different set of questions was asked on *kibbutzim* (collective farms) than on the individual holdings. Ceylon used different questionnaires on estates and on small holdings, several of the questions being different. Turkey used a special questionnaire for interviewing the *mukhtars* (village headmen) on behalf on their whole village

¹Food and Agriculture Organization of the United Nations, G/E/2. *World Census of Agriculture. Report of a meeting held in London, December 15-19, 1947, to consider the census program in colonial and underdeveloped areas.* Washington, D.C., January 1948.

(the census thus not being by holdings). The same questionnaire was used also for large farms outside the village communities; these questions partly overlapped those asked on individual questionnaires for sample holdings, but partly went beyond them.

A number of countries, mainly in Africa, distinguished native or underdeveloped agriculture from European or developed agriculture. Belgian Congo thus used a rather lengthy questionnaire for Europeans and developed negroes, and a much shorter list for questioning underdeveloped negroes, on a village basis. Northern and Southern Rhodesia both took a shorter and more summary census of African agriculture than of European holdings. The Union of South Africa distinguished farms of "white" holders (including, for census purposes, Asians and "colored" persons among "white" holders) on the one hand, and native farming on the other; the shorter questionnaire applied to the latter was also used in connection with the resources allocated to natives residing on holdings of "whites". The census of Western Samoa used individual questionnaires for planters, missions and schools, while native agriculture was investigated on a village basis. The censuses taken in Kenya and Mozambique are limited to the holdings of European and Asian settlers and give no information on indigenous agriculture. The census of Colombia used a special and shorter questionnaire for indigenous zones. These various sector divisions may, in several ways, impair the uniformity of coverage of the questions.

A few among the large countries used different questionnaires in different parts of the country. In the United Kingdom, different questionnaires were used in England and Wales, in Scotland, and in Northern Ireland; the two former show only slight diversity, except as regards items not existing everywhere, while the questionnaire for Northern Ireland was significantly different. In the synoptic tables, the United Kingdom has been taken as one country, although the differences between the three questionnaires have been noted. In Australia, a separate questionnaire was drafted for each state and territory; as the basis is in essence identical, however, Australia has been treated as one country in the tables below. Canada and the United States used the system of a federal model questionnaire which was adapted for each province or state by excluding items of no significance in the area. These differences have not been noted below but are listed in the national census reports.

Several censuses used a simpler questionnaire for very small holdings (in general those which could not be regarded as farms). This practice may also, to some extent, impair the comparability of the data to be produced under the questions. Different rules

have also been applied with regard to the agricultural land existing within the administrative confines of urban agglomerations.

2. ACTUAL SCOPE OF THE CENSUSES

In order to exhibit the degree of conformity of the national censuses with the FAO Program, synoptic tables have been drawn up and are presented below, by sections and parts of sections of the Program. For each item in the Program, a cross indicates that the question was asked in the national census, a dash that it was not. Each table lists only those countries which asked one or more of the questions in that table.

In a number of cases, the FAO Program proposed questions of the type "other", giving examples of what was expected to be covered by these questions. All such specifications in the Program have also been investigated as separate items, in order to clarify the frequency with which they were asked for in national censuses.

In some national censuses, items of the type "other" are accompanied by the word "specify" or some equivalent expression ("catch-all" questions). When examples of kinds to be specified are indicated in the questionnaire, or in the instructions attached to it, then all items thus listed have also been regarded in the synoptic tables as census items in the national census. On the other hand, items occurring in national census reports without having been asked for on questionnaires or instructions, are not included on the synoptic tables in this chapter.

A brief synthesis of the synoptic tables is presented as Table 4. Each section of the FAO Program is represented by one column only (except Sections A and K, where the diversity of the subject matter required division into two subsections each). A cross in a column then means that the census asked one or more questions included in that section of the FAO Program; a dash, that it did not ask any question included in that section. The general scope of the national censuses can thus be grasped.

At the head of the table are indicated the headings and codes of the sections according to the Expanded List of the FAO Program (its Part B), and also the corresponding codes in the Short List (Part A of the Program) to the extent that the sections in the former were represented by items in the latter.

The number of countries asking questions belonging to each section is also indicated at the head of the table. Thus the three countries of the United Kingdom have been treated as one country only, with footnotes to show the differences. The "sectorized" censuses (Israel, the Rhodesias, etc.) are counted only

TABLE 4. CONFORMITY OF NATIONAL CENSUSES WITH THE FAO PROGRAM, BY SECTIONS OF THE PROGRAM

SECTION	Holder	Tenure	Land utilization	Agricultural population	Employment in agriculture	Crops	Crop production	Livestock and poultry	Agricultural technology	Fertilizers and soil dressings	Irrigation and drainage	Fragmentation	Wood products cut on the holding	Aquatic products
Code in the Expanded List	A1-3	A4-6	B	C	D	E	E bis	F	G	H	I	J	K1	K2
Code in the Short List	I: 1-3	I: 4-6	II	III	—	IV	Table 7	VI	V	—	—	—	—	—
Number of countries asking some questions belonging to the section	73	53	96	66	65	101	78	104	52	16	42	20	12	1
COUNTRY														
EUROPE														
Austria	X	X	X	X	X	X	—	X	X	—	—	—	—	—
Belgium	X	X	X	X	X	X	—	X	X	—	—	X	—	—
Czechoslovakia	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Denmark	X	—	X	X	X	X	—	X	—	—	—	—	—	—
Finland	X	—	X	X	X	X	X	X	X	—	X	—	—	—
Germany (Federal Republic)	X	X	X	X	X	X	—	X	X	—	X	X	—	—
Greece	X	X	X	X	—	X	—	X	X	X	X	X	—	—
Hungary	X	X	X	—	X	—	—	X	—	—	—	—	—	—
Ireland	X	—	X	—	X	X	—	X	X	—	—	—	—	—
Luxembourg	X	X	X	X	X	X	—	X	—	—	X	X	—	—
Malta and Gozo	X	—	X	X	X	X	X	—	—	—	X	—	—	—
Netherlands	X	X	X	X	X	X	—	X	X	—	—	X	—	—
Norway	X	—	X	X	X	X	—	X	X	—	—	—	—	—
Portugal	X	—	X	—	X	—	—	X	—	—	X	X	—	—
Romania	X	X	X	—	X	—	—	X	X	—	—	X	—	—
Saar	X	X	X	X	X	X	—	X	—	—	—	—	—	—
Sweden	X	X	X	—	—	X	—	X	X	—	X	—	—	—
Switzerland	X	X	X	—	—	X	—	—	—	—	—	—	—	—
United Kingdom	X	X	X	—	^a X	X	—	X	X	—	—	—	—	—
Yugoslavia	—	—	X	X	—	X	—	X	X	—	—	X	—	—
NORTH AND CENTRAL AMERICA														
Alaska	X	X	X	X	X	X	X	X	X	—	—	—	X	—
Bahamas	—	—	—	—	—	—	—	X	X	—	—	—	—	—
Barbados	—	—	X	—	X	X	X	X	—	—	—	—	—	—
Bermuda	—	—	X	X	—	X	X	X	—	—	—	—	—	—
British Honduras	—	—	X	—	X	X	X	X	—	—	—	—	—	—
Canada	X	X	X	X	X	X	X	X	X	—	X	—	X	—
Costa Rica	X	X	X	X	X	X	X	X	X	X	X	X	—	—
Cuba	X	—	X	—	—	—	—	X	—	—	—	—	—	—
Dominican Republic	X	X	X	X	X	X	X	X	X	—	X	X	—	—
El Salvador	X	X	X	—	X	X	X	X	X	X	X	—	—	—
Guatemala	X	X	X	X	X	X	X	X	X	—	X	X	X	—
Haiti	X	—	X	—	—	X	X	X	—	—	—	—	—	—
Honduras	X	X	X	—	X	X	X	X	X	—	—	X	—	—
Jamaica	X	—	—	—	—	X	X	X	—	—	—	—	—	—
Leeward Islands	X	X	X	X	—	X	X	X	X	X	—	—	—	—
Mexico	X	X	X	X	X	X	X	X	X	X	X	—	X	—
Panama	X	X	X	X	X	X	X	X	X	—	—	—	—	—
Puerto Rico	X	X	X	X	X	X	X	X	X	—	X	—	—	—
Trinidad and Tobago	—	—	X	X	—	X	X	X	—	—	—	—	—	—
United States	X	X	X	X	X	X	X	X	X	—	X	—	X	—
Virgin Islands	X	X	X	X	X	X	X	X	X	—	X	—	—	—
Windward Islands	—	—	X	X	—	X	X	X	—	—	—	—	—	—

^a Scotland and Northern Ireland.

TABLE 4. CONFORMITY OF NATIONAL CENSUSES WITH THE FAO PROGRAM, BY SECTIONS OF THE PROGRAM

Code in the Expanded List	A1-3	A4-6	B	C	D	E	E bis	F	G	H	I	J	K1	K2
SOUTH AMERICA														
Argentina	X	X	X	X	X	X	—	X	X	—	—	—	X	—
Bolivia	X	X	X	X	—	X	X	X	X	—	—	—	—	X
Brazil	—	—	X	—	X	X	X	X	—	—	—	—	—	—
British Guiana	—	—	X	—	X	X	X	X	X	X	X	—	—	—
Chile	X	X	X	—	X	X	X	X	X	X	X	X	—	—
Colombia	X	X	X	—	X	X	X	X	X	—	X	X	—	—
Ecuador	X	X	X	—	X	X	X	X	—	—	—	—	—	—
Falkland Islands	—	—	X	X	X	X	X	X	—	—	X	—	—	—
Uruguay	X	X	X	X	X	X	X	X	X	X	X	—	X	—
Venezuela	X	X	X	X	X	X	X	X	X	X	X	—	—	—
ASIA														
Aden Protectorate	—	—	—	—	—	X	X	X	—	—	—	—	—	—
Brunei	—	—	X	X	—	X	X	X	—	—	X	—	—	—
Burma	X	X	X	X	—	X	X	X	X	—	X	—	—	—
Ceylon	X	X	X	X	X	X	X	X	—	X	X	X	—	—
Cyprus	X	X	X	X	X	X	—	X	—	X	X	X	—	—
India	X	X	X	—	X	X	X	X	X	—	X	—	—	—
Iraq	X	X	X	X	X	X	X	X	X	—	X	X	—	—
Israel	X	X	X	X	X	X	X	X	X	—	X	—	—	—
Japan	X	X	X	X	—	X	X	X	X	—	X	—	—	—
Jordan	X	X	X	—	X	X	X	X	—	—	—	—	—	—
Malaya, Federation of	—	—	X	—	X	X	X	X	—	—	—	—	—	—
North Borneo	—	—	X	—	X	X	X	X	X	—	X	—	—	—
Philippines	X	X	X	X	X	X	X	X	—	X	—	—	—	—
Ryukyu Islands	X	X	X	X	—	X	X	X	—	—	—	—	—	—
Sarawak	—	—	X	X	—	X	X	X	—	—	—	—	—	—
Singapore Island	X	X	X	X	X	X	X	X	X	—	X	—	—	—
Thailand	X	—	—	X	X	X	X	X	X	—	X	—	—	—
Turkey	X	—	—	X	X	X	X	X	X	—	X	—	—	—
AFRICA														
Algeria	X	X	X	—	X	X	—	X	X	—	X	X	—	—
Bechuanaland	—	—	X	—	—	X	X	X	—	—	—	—	—	—
Belgian Congo	X	X	X	X	X	X	—	X	—	—	—	—	—	—
British Somaliland	—	—	—	—	—	—	—	—	—	—	—	X	X	—
Egypt	X	X	X	—	X	X	—	X	—	—	—	—	—	—
Gambia	—	—	X	X	—	X	X	X	—	—	—	—	—	—
Gold Coast and British Togoland	—	—	X	—	X	X	—	X	X	—	—	—	—	—
Kenya	X	—	X	—	X	X	—	X	X	—	—	—	—	—
Mauritius	X	—	X	—	X	X	X	X	X	X	X	X	—	X
Mozambique	—	—	X	—	X	X	X	X	—	—	—	—	—	—
Nigeria and British Cameroons	—	—	X	—	X	X	X	X	X	X	X	X	—	—
Northern Rhodesia	X	X	X	X	X	X	X	X	—	—	—	—	—	—
Nyasaland	—	—	X	—	X	X	X	X	—	—	—	—	—	—
Seychelles	X	—	X	—	X	X	X	X	—	—	—	—	—	—
Sierra Leone	—	—	X	X	—	X	X	X	X	X	—	X	—	—
Southern Rhodesia	X	X	X	X	X	X	X	X	—	—	—	—	—	—
St. Helena	—	—	X	X	—	X	X	X	—	—	—	—	—	—
Swaziland	—	—	X	X	—	X	X	X	—	—	—	—	—	—
Tanganyika	—	—	X	—	X	X	—	X	X	—	X	X	—	—
Tunisia	X	X	X	—	X	X	—	X	X	—	—	—	—	—
Uganda	—	—	X	—	X	X	X	X	X	—	X	—	—	X
Union of South Africa	X	—	X	X	X	X	X	X	X	—	—	—	—	—
Zanzibar and Pemba	—	—	X	—	—	X	X	X	X	—	—	—	—	—

TABLE 4. CONFORMITY OF NATIONAL CENSUSES WITH THE FAO PROGRAM, BY SECTIONS OF THE PROGRAM

Code in the Expanded List	A1-3	A4-6	B	C	D	E	E bis	F	G	H	I	J	K1	K2
OCEANIA														
American Samoa	X	—	—	—	—	X	X	X	—	—	—	—	—	—
Australia	X	X	X	X	X	X	X	X	X	X	X	—	—	—
British Solomon Islands	—	—	X	—	—	X	X	X	—	—	—	—	—	—
Cook and Niue Islands	—	—	X	—	—	—	—	X	—	—	—	—	—	—
Fiji	—	—	X	X	—	X	X	X	—	—	—	—	—	—
Gilbert and Ellice Islands	—	—	X	X	—	X	X	X	—	—	—	—	—	—
Guam	X	—	—	—	—	—	—	—	—	—	—	—	—	—
Hawaii	X	X	X	X	X	X	X	X	X	X	X	X	X	—
New Hebrides	—	—	—	X	—	X	X	X	—	—	—	—	—	—
New Zealand	X	X	X	X	X	X	X	X	X	X	X	—	—	—
Papua and New Guinea	—	—	—	X	—	X	—	X	—	—	—	—	—	—
Tonga	—	—	X	X	—	X	X	X	—	—	—	—	—	—
Western Samoa	X	—	X	X	X	X	X	X	X	—	—	—	—	—

once each ; if only one of the "sectors" asked questions belonging to the section, this was taken as representing the census with a positive answer. The total number of censuses analyzed is 106, and the figures for section participation frequency are therefore rather close to being percentages.

When reading this table it should be kept in mind that the number of censuses asking some of the questions A 1-3 is identical with the number of censuses taken by enumeration by holdings. This fact establishes a ceiling for the possible degree of conformity both for questions A 4-6, where only in exceptional cases could returns be made otherwise than by holdings, and for sections G-K, which were not included in the London Program for colonial and underdeveloped areas. The latter program was the basis of almost all the censuses taken by means other than enumeration by holdings. The London Program also excluded section D ; in practice, some of the censuses based on the London Program answered some question on employment in agriculture rather than on the agricultural population, which somewhat lowers the frequency in section C and correspondingly raises it in section D.

If these observations are kept in mind, then it will appear that the frequency of participation is high in all those sections of the FAO Program which were represented in the Short List. It is also high in sections D and I, and far from negligible in section J. Sections H and K have met with a very limited response.

Section E bis (crop production) was not originally envisaged by the Program as a separate section. The lack of participation by most countries in Europe and North Africa may therefore be said to be due

to a different interpretation of the intentions of the Program. These countries, in general, estimate production independently of the census.

Sometimes a census has treated a topic proposed by the FAO Program, but with so different an approach that it cannot be said to have conformed with the Program, although the obvious intention was to obtain the kind of information envisaged by the Program. This factor, of course, has made the frequency of participation in various sections somewhat lower in form than it may be said to be in substance. Details of these deviating approaches will be listed in the notes and comments to each of the sections below. In this connection, it is necessary to mention only how far this factor has lowered the apparent frequency of participation in the various sections of the Program, as shown in Table 1.

Questions were asked on the topics of the Program in such a way that they cannot be said to be in formal accordance with it, in relation to :

(1) Section A 4-6 by Finland, Ireland, Norway, Portugal, Haiti, Turkey, Mozambique, Union of South Africa, American Samoa and Guam (nine censuses). Inclusion of these censuses would raise the frequency of participation in this subsection close to the ceiling put by the number of censuses by holdings.

(2) Section B by Turkey.

(3) Section C by Ireland, Brazil.

(4) Section D by Nigeria and British Cameroons and by England and Wales.

(5) Section G by Denmark, Hungary, Luxembourg, Portugal, Saar, Switzerland, Uruguay, Cyprus and Egypt (nine countries marked with dashes on the table), as well as Scotland and Northern Ireland.

Here also, inclusion of these countries brings conformity near the possible maximum.

(6) Section H by Belgium, Finland, Malta and Gozo, Guatemala, Belgian Congo, Egypt, Southern Rhodesia and Union of South Africa; in a certain sense also Norway, Alaska, Puerto Rico, Virgin Islands and Brazil; in a further different sense, Israel.

(7) Section I by Norway.

(8) Section K₁ by Austria, Norway, Finland, Panama, and Turkey.

(9) Section K₂ by Finland, Ryukyu Islands, Turkey, Cook Islands and Western Samoa.

To some extent countries have added questions which cannot be fitted into any of the sections of the FAO Program. These are in general too scattered to be listed here. Among the more important seem to be the questions on handicraft or household industry asked in the censuses of Finland, Dominican Republic, Panama and Ecuador, and on local industrial plants on holdings for the processing of agricultural products, asked in the censuses of the Federal Republic of Germany, Portugal, Dominican Republic, Bolivia, Brazil, Chile, Ceylon (estate schedule) and Mozambique.

Section A. Holder and Tenure

Participation in this section of the Program is shown in Table 5. The number of countries listed is 73, of which 71 took a census by enumeration by holdings. The household censuses of Hungary and Haiti are also included in the list.

Questions A-1 and A-2, on the name of the holder and the location of the holding, are of vital importance to the procedure of enumeration by holdings. In one census (Switzerland) the question on the location of the holding was omitted; the address of the holder may in this country convey the same information. Three censuses (India, Turkey and Algeria) omitted the name of the holder from the schedule and used serial numbers for the indispensable identification purposes.

The question on the total area of the holding (A-3) was asked in 67 out of the 73 censuses. Five of the censuses omitting this question belong to the group of countries in which size of holding is measured according to a restricted area criterion rather than total area (this refers to Greece, Portugal, Switzerland, Cyprus and Mozambique), while the Turkish census aimed at producing data on holding size through a combination of questions.

Among the 18 censuses which did not ask any questions on land tenure as proposed by the FAO Program, at least nine approached the topic in a different way. Finland, Mozambique, Norway, Haiti the Union of South Africa and Guam asked the main

tenure status of the holder or of the entire holding, without referring to the area held under each tenure form. The census of American Samoa asked for the name of the owner if he were not the same person as the operator. The Portuguese census asked whether or not there was any land owned, leased or share-cropped and which of these forms was most important in the holding. Turkey approached the land tenure issue in the same indirect way as the area of the holding.

Questions on land under leasehold in some cases referred to the owner rather than the operational holdings. Such was the case with share-cropping in Australia, *colonos*, day-laborers, tolerated persons and others in Bolivia, and the kind of short-term leaseholders called *seareiros* in Portugal. The same rule applied to share-croppers in Brazil, when they are not deemed to have a fully independent status. In the United States, Hawaii, Puerto Rico and Virgin Islands, though a combination of questions was asked, the composition of mixed holdings does not emerge.

Among countries which asked some but not all of the questions on land tenure, a few adopted an approach to the omitted questions at variance with the Program. Thus, the census of Canada asked for fixed cash rent and share rent but, in doing so, assumed that all rented land on a holding belonged to one only of these categories. The censuses of the United States and Hawaii dealt with the distinction between rent in cash and kind in the same way.

Countries which regard a hired manager as equivalent to the holder (i.e., those where items A-1 and A-1.1 of the FAO Program were represented by one question only) asked a separate question on managerial status as a form of tenure. Reference to this treatment is omitted from Table 5.

Various additional questions in national censuses relate to the holding and land tenure in one way or another. The most frequently represented seems to be "value of land and buildings" which was asked for in eight national censuses; i.e., those of Ireland, Alaska, Canada, United States, Virgin Islands, Mexico, Brazil, Burma, Ceylon (estate schedule only), the Philippines and Hawaii.

Section B. Land Utilization

The questions proposed in this section of the FAO Program were conceived both as a means of promoting a standardized analysis of land utilization data in main categories and as a proposal for organizing the national census questionnaires in this respect. It was envisaged that many countries would want to ask more questions on land utilization than those

TABLE 5. PARTICIPATION IN SECTION A OF THE FAO PROGRAM

ITEM	Name of the holder	Name in full of the manager, if the holding is not personally directed by the holder	Location of the holding	Address of the holder, also if he does not live on the holding	Total area of the holding or farm	Amount of the total area owned by the holder	Amount of the total area rented by the holder from others	Area rented on a fixed cash basis	Area rented for a share of the product	Amount of the total area operated by the holder under a form of tenure not covered by items 4 and 5
Code in the Expanded List	A-1	A-1.1	A-2	A-2.1	A-3	A-4	A-5	A-5.1	A-5.2	A-6
Code in the Short List	1	—	2	—	3	4	5	—	—	6
Number of censuses asking the question	49	7	71	44	67	52	53	21	22	36
	22									
COUNTRY										
EUROPE										
Austria	X	—	X	X	X	X	X	—	—	—
Belgium	X	—	X	X	X	a X	a X	—	—	—
Czechoslovakia	X	—	X	X	X	X	X	—	—	Deputat land and land held for service; Reservation for retired farmers; Other tenure forms
Denmark	X	—	X	—	X	—	—	—	—	—
Finland	X	X	X	—	X	—	—	—	—	—
Germany (Federal Republic)	X	X	X	X	X	X	X	—	—	Heuerling land; Other land (i.e. land held for service, divided common land, etc.)
Greece	X	—	X	—	—	a X	a X	a X	a X	Other tenure (emphyteutis, etc. ^a)
Hungary	a X	—	a X	—	a X	X	X	—	X	Land held for salary, wage contract or in usufruct
Ireland	X	—	X	—	X	—	—	—	—	Area let to other persons in conacre or for 11 months ^{a, b}
Luxembourg	X	—	X	X	X	a X	a X	—	—	—
Malta and Gozo	X	—	X	X	X	—	—	—	—	—
Netherlands	X	—	X	X	X	a X	a X	—	—	—
Norway	X	—	X	X	X	—	—	—	—	—
Portugal	X	X	X	X	—	—	—	—	—	—
Romania	X	—	X	—	X	X	X	X	X	Rent-free usufruct
Saar	X	X	X	—	X	X	X	—	—	Heuerling land; Other area (land held for service; communal land allotted for sole usage; divided common land, usage right, etc.)
Sweden	X	—	X	X	X	a X	a X	—	—	—
Switzerland	X	—	—	X	—	—	a X	—	—	—
United Kingdom	X	—	X	X	X	a X	a X	—	—	Land taken in conacre ^b
Yugoslavia	X	—	X	—	X	—	—	—	—	—
NORTH AND CENTRAL AMERICA										
Alaska	X	—	X	X	X	X	X	—	—	Homestead land not yet patented
Canada	X	X	X	X	X	X	X	—	—	—
Costa Rica	X	X	X	X	X	X	X	X	X	Rent-free (as peon or particular); Occupied without permission; Occupied as <i>colono</i> ; other forms
Cuba	X	—	—	X	X	—	—	—	—	—
Dominican Republic	X	—	X	—	X	X	X	X	X	Colonato; Other concept

TABLE 5. PARTICIPATION IN SECTION A OF THE FAO PROGRAM

Code in the Expanded List	A-1	A-1.1	A-2	A-2.1	A-3	A-4	A-5	A-5.1	A-5.2	A-6
El Salvador		X	X	—	X	X	X	—	—	Colonato; Leasehold with promise of sale; Others
Guatemala		X	X	X	X	X	X	—	—	Other forms: (colonato; occupancy; as ejidatario with usufruct; comunero, etc.)
Haiti		aX	X	X	X	—	—	—	—	Ejidal (dominium utile); colonato; Occupancy
Honduras	X	—	X	—	X	—	—	—	—	Other tenure forms
Jamaica	X	—	X	—	aX	X	X	X	X	Other tenure forms
Leeward Islands	X	—	X	—	aX	X	X	X	X	Other tenure forms
Mexico: non-ejido holdings 5 hectares and over		X	X	X	X	X	X	X	X	Colonato; Occupancy according to law on free land; On lease (according to law on land); Other concepts (comunero, inventors, etc.)
Mexico: non-ejido holdings under 5 hectares	X	—	X	—	X	—	—	—	—	Ejido land: exploited individually, collectively; Non-ejido land: personal property, sharecropping, leasehold
Mexico: ejido holdings	X	—	X	—	X	—	—	—	—	Usufruct
Panama	X	—	X	—	X	X	X	—	—	Usufruct
Puerto Rico	X	—	X	—	X	X	aX	—	—	—
United States	X	—	X	—	X	X	X	—	—	—
Virgin Islands (U.S.)	X	—	X	—	X	X	X	—	—	—
SOUTH AMERICA										
Argentina	X	—	X	X	X	X	X	X	X	Loaned free of rent, from private persons; Fiscal land; Other tenure forms
Bolivia	X	—	X	X	X	X	X	—	—	Colonato ^a ; Laborers' land ^a ; Tolerated persons land; Others (specify) ^a
Brazil		X	X	X	X	X	X	—	—	Cession; Occupancy
Chile	X	X	X	X	X	X	X	X	X	Cession; Occupancy
Colombia	X	—	X	X	X	X	X	—	—	Without payment, and other tenure forms
Ecuador	X	—	X	X	X	X	X	X	X	Huasipunguero (Heuerling) land; comunero land; Colonato; other forms of tenure
Uruguay	X	—	X	X	X	X	X	X	X	Occupancy; Other forms
Venezuela	X	—	X	X	X	X	X	X	X	Occupancy
ASIA										
Burma		X	X	X	X	X	X	X	X	Leased on privileged term, i.e., for payment of revenue only; Other lease; Other type of tenure
Ceylon		X	X	—	X	X	X	X	X	Owned jointly with others; a) tatumaru, (b) other system; Area under other forms of tenure
Cyprus	X	—	X	—	—	—	—	—	—	Fixed crop rent ^c ; Other types of lease
India ^a	—	—	X	—	X	X	bX	cX	cX	Other forms of tenure
Iraq	X	—	X	X	X	aX	X	—	—	—
Israel	X	—	X	X	X	aX	X	—	—	—
Jewish holdings	X	—	X	—	X	X	X	X	cX	—
Arab holdings	X	—	X	—	X	X	X	—	—	Other tenure
Japan	X	X	X	X	aX	aX	aX	—	—	Neither owned nor rented ^a
Jordan	X	X	X	X	aX	aX	aX	—	—	Neither owned nor rented ^a

TABLE 5. PARTICIPATION IN SECTION A OF THE FAO PROGRAM

Code in the Expanded List	A-1	A-1.1	A-2	A-2.1	A-3	A-4	A-5	A-5.1	A-5.2	A-6
Philippines	X	—	X	X	X	X	X	—	—	—
Ryukyu Islands	X	—	X	X	X	X	aX	—	—	—
Thailand	X	—	X	—	—	—	X	X	aX	Both cash and kind; Rent free; Other forms
Turkey	X	—	X	—	—	—	—	—	—	—
AFRICA										
Algeria	—	—	X	—	X	aX	aX	aX	a,bX	—
Belgian Congo	X	X	X	—	X	X	X	—	—	Other system
Europeans and developed Negroes	X	—	X	—	X	X	aX	X	X	—
Egypt	X	—	X	—	—	—	—	—	—	—
Kenya	X	—	X	—	X	—	—	—	—	—
White and Asian settlers	X	—	X	—	X	—	—	—	—	—
Mauritius	X	—	X	—	—	—	—	—	—	—
Mozambique	X	—	X	—	—	—	—	—	—	—
Northern Rhodesia	X	—	X	—	X	X	X	—	—	—
European holdings	X	—	X	—	X	—	—	—	—	—
Seychelles	X	—	X	—	X	—	—	—	—	—
Southern Rhodesia	X	X	X	X	X	X	X	—	—	—
European holdings	X	—	X	—	X	aX	aX	aX	a,bX	—
Tunisia	X	—	X	—	X	—	—	—	—	—
Union of South Africa	—	X	X	X	X	—	—	—	—	—
"White" holdings	—	—	—	—	—	—	—	—	—	—
Native areas and farms	—	—	—	—	—	—	—	—	—	South African Native Trust owned, i.e., all Trust land, including scheduled native areas, mission reserves, trust farms, etc. Native-owned, i.e., tribal locations or farms and privately owned land. Mission stations, trading and other sites occupied by natives
OCEANIA										
American Samoa	X	—	X	—	X	—	—	—	—	—
Australia	X	—	X	X	X	X	X	X	aX	Crown land leased or licensed; Land in process of purchase from Crown
Guam	X	—	X	—	X	—	—	—	—	—
Hawaii	X	—	X	X	X	aX	aX	—	—	—
New Zealand	X	—	X	X	X	X	aX	—	—	Crown leases and licenses
Western Samoa	X	—	X	X	X	—	—	—	—	—
Planters, missions and schools	X	—	X	X	X	—	—	—	—	—

Belgium ^a) refers to agricultural area.
 Greece ^a) refers to agricultural and grazed forest area.
 Hungary ^a) because asked in the framework of a population census, the questions formally regard households rather than operational holdings.
 Ireland ^a) separate questions on land for grazing and for tillage.
 Ireland ^b) refers to land let out from the holding to which it belongs according to the holding concept of this census.
 Luxembourg ^a) same remark as under Belgium ^a).
 Netherlands ^a) same remark as under Belgium ^a).
 Sweden ^a) refers to arable area.
 Switzerland ^a) refers to agricultural area except mountain grazings.
 United Kingdom ^a) England and Wales and Scotland.
 United Kingdom ^b) Northern Ireland only.
 Haiti ^a) same remark as under Hungary ^a).
 Leeward Islands ^a) partly by enumeration, partly by estimation.
 Puerto Rico ^a) the questions do not refer directly to operational holdings so that the tenure structure of mixed holdings remains unknown.
 United States ^a) same remark as under Puerto Rico ^a).
 Bolivia ^a) refers to land let out from the holdings to which it belongs according to the holding concept of this census.
 Brazil ^a) separate questions on *aluguel* and *arrendamiento*.
 India ^a) independently of the questions on ownership and lease, questions are also asked as to the "land system", i.e., the broad system of collecting land revenue: permanently settled estate system, temporarily settled estate system, *ryotwari* system, and other systems.

India ^b) separate questions on "ownership", "tenancy", and "permanent occupancy" rights and, in each case, also as to whether or not there is a right to transfer of title.
 India ^c) separate questions as to whether rented with or without formal contract.
 Iraq ^a) separate questions on ownership titles called *tapu* and *jazma*.
 Israel ^a) including hereditary tenure.
 Israel ^b) separate questions on land farmed by the owner and uncultivated land.
 Israel ^c) payment in kind (no indication as to share in product or fixed kind rent).
 Jordan ^a) separate questions on irrigated and unirrigated land.
 Ryukyu Islands ^a) separate questions on contract by document and other contract types.
 Thailand ^a) same remark as under Israel ^c).
 Algeria ^a) separate questions on land held under *khammessat* and land based on family or salaried work.
 Algeria ^b) separate questions on share-cropping of European and Moslem type.
 Egypt ^a) also separate questions on area rented for a fixed amount of money, for a fixed amount of product, for a share in the product, and on other terms.
 Tunisia ^a, ^b) same remarks as under Algeria ^a) and ^b).
 Australia ^a) refers to land counted to the holding of the owner, not to that of the sharecropper.
 Hawaii ^a) same remark as for Puerto Rico ^a).
 New Zealand ^a) separate questions on land leased from private individuals, from public bodies, and from Maoris.

proposed by the FAO Program. The latter questions could, of course, be brought into conformity with the Program by suitable formulation, so that they could be assigned to the Program headings without overlapping.

The complicated and varying terminology of national questionnaires on the topic of land utilization has made it preferable to include all the definitions in the synoptic table (Table 6). The occurrence of an entry closely corresponding with the proposal of the FAO Program indicates that the country did ask the question as proposed, as far as can be seen from the questionnaire and other available information. Whether the question was or was not further specified in greater detail to provide data to add up to a subtotal in the national questionnaire was a circumstance of no direct concern for the table. The national census, in this case, is likely to be able to produce all the information envisaged by the FAO Program.

When countries asked two or more questions which to all appearances add up to an item proposed by the FAO Program, though without explicit sub-totalling in the questionnaire, then all the pertinent questions have been listed on the synoptic table, under the corresponding item of the Program. In these cases too, national censuses are likely to be able to produce all the information envisaged by FAO.

When a country asked a question corresponding to more than one item of the Program, then this fact is noted in the table as an entry between the items concerned. Where two or more questions, without allowing for the analysis the Program proposed, add up to a wider item embracing more than one of the Program's items, then these questions are also listed together as an entry between the Program items concerned. These countries are thus not likely to be in a position to furnish directly all the information proposed by the FAO Program, but may be able to do so in a limited and conditional way.

In drawing up the synoptic table, information was derived in the first instance from the land utilization sections of the national questionnaires. As far as such sections are concerned, the analysis should be exhaustive regarding the degree of conformity with the Program. When land utilization sections were lacking, or did not give all the information wanted under this section of the Program, additional information was obtained from crop lists and other parts of the national census material. This complementary procedure was applied insofar as there were totals or subtotals to show how these questions refer to total area. Such items were included where it was indicated that areas under double cropping should be counted only once. Individual crop items have not, as a rule, been entered on the table. This

means that, in practice, analysis of the statistics to be produced under the national questionnaires may in some cases result in the emergence of more of the items of the Program than are indicated on the synoptic table, in exact or approximate figures. This will be known only from an analysis of the census results rather than of the questionnaires.

Although the table is intended to give all the elements for understanding the systems of land utilization classification in the national questionnaires, it may be pointed out that the table gives merely the wording, as distinct from the concepts, used in the national questionnaires. As in other sections, this table should be interpreted in conjunction with the concept analysis in Chapter 4.

The table has been simplified by the exclusion of subitems which attracted small attention in the national questionnaires. Items B-1.1 (arable land under specialized vegetable cultivation) and B-1.2 (all other arable land), which meant a further specification of item B-1, were asked by very few countries; these cases appear from the specifications given under B-1. The Program further proposed that items B-1, B-2, and B-3 be subdivided into irrigated and nonirrigated land, and item B-4 into grazed and nongrazed forest. These specialized questions have also been asked by very few countries only; the few instances are mentioned in the footnotes.

Most of the countries asking questions on land utilization have aimed at a complete breakdown of the total area of the enumerated holdings, or in the case of censuses not taken by holdings, of the total area under review. The analysis was incomplete in the case of Greece (mountain grazings excluded), Portugal (arable land the only item asked for), Switzerland (excluding grassland in the Alps and the Jura mountains), Cuba (only grassland and balance), Iraq (no account of the balance of the holding), Haiti (only land actually under crops or having been under crops during the last 12 months), Brunei and Sarawak (no "other" area supposed to exist), the Ryukyu Islands (account of productive area only), Bechuanaland (arable land only), and Northern Rhodesia and Southern Rhodesia, both in their questionnaire for European holdings (no account of the balance of the holding).

Arable land was omitted from two censuses only (Cuba and Zanzibar and Pemba), land for growing trees, vines or shrubs in four (Portugal, Barbados, Cuba and Falkland Islands, plus the questionnaire on natives in South Africa). Fifteen countries omitted permanent meadows and pasture from their land utilization specification. Among these is the Jewish sector of Israel. The Arab sector included this ques-

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

ITEM	Arable land (including land under specialized vegetable cultivation)	Land for growing trees, vines and shrubs	Permanent meadow and pasture	Wood or forest land	Productive marsh land, heath land and other productive but uncultivated land	All other land
Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
Code in the Short List	7	8	9	10	—	11
Number of countries asking the question	74	66	72	79	17	78
	16				8	
						2
COUNTRY						
EUROPE						
Austria	Arable land Agriculture proper. Temporary grassland ^a . Fallow land. Vegetable crops. Flower crops. Seed crops. Various crops. Crops under glass	Vineyards. Orchards without other land utilization. Nurseries	Meadows ^a . Pastures ^b . Alpine grassland	Forests	Meadows for litter	Lakes, marshes, ponds, streams, rivers, rivulets. Built-on sites and yards. Other unproductive areas including roads
Belgium	Arable land. Market gardens	Garden land Orchards. Nurseries. Osiers	Permanent grassland ^a	Forests	—	Ornamental gardens and parks. Uncultivated areas. Farm buildings and dependencies
Czechoslovakia	Arable land. Market gardens	Orchards. Vineyards. Nurseries of fruit and ornamental trees. Osiers	Permanent meadows. Permanent pastures	Forest land	—	Fishponds. Other land under water. Built-on areas and yards. Ornamental gardens and parks. Other unproductive areas
Denmark	Crop areas (specified, without subtotal). Fallow areas. Rotation grasses for hay. Rotation grasses for grazing only.	Home gardens and allotments Professional fruit and market gardens. Private gardens ^a	Grass area not in the rotation ^b . Grass areas used for stacking of peat	Forest and plantations ^c	Heathery hills. Peat bogs	Built-on area and yards. Wind-breaking plantations. Drift-sand dune areas, marshes, stony areas, etc. Private roads and lanes. Clay and sand pits, ditches, dykes, etc. Lakes, ponds and streams.
Finland	Arable land	Garden land	Natural meadow Cleared pasture	Forest land	Marshes from which hay is harvested at intervals (also included among wasteland)	Built-on sites, roads, etc. Waste-land (including marshes from which hay is harvested at intervals)

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
Germany (Federal Republic)	Arable land	Orchard used only for fruit production. Vineyards. Nurseries. Osiers	Meadows for hay ^a . Pastures. Alpine grassland	Forest and wooded areas	Uncultivated peat bog areas. Meadows for litter	Private parks, lawns, ornamental gardens, etc. Uncultivated and wasteland, including stone pits, sand pits, etc. Areas under water, ponds, lakes, rivulets, water pits, etc. (including fish ponds). Built-on sites and yards, private roads and all other areas
Greece	Arable land without trees. Arable land with scattered trees	Land planted exclusively with trees ^a . Vineyards ^b .	Meadows for hay. Pastures: in plain land with trees, without trees.	—	—	—
Hungary	Arable land	Home gardens	—	—	—	—
Ireland	Arable land	Vineyards, garden and orchards	—	—	—	—
Luxembourg	Arable land. Market gardens and rose and flower cultures	Crops and pasture. Rough grazings	—	Woods and plantations	Turf bog	Remainder of farm
Malta and Gozo	Arable land	Orchards. Vineyards in production. Vineyards not in production. Nurseries. Osiers	—	Forests and hedges	—	Other areas
Netherlands	Arable land	Home gardens ^a	Permanent grassland	—	—	Wasteland
Norway	Arable land. Temporary meadows	Land for growing trees, vines or shrubs	—	—	—	—
Portugal	Arable land with or without trees ^a	Garden land	—	Productive forests: Coniferous Nonconiferous	—	Other area
Romania	Arable land. Irrigated vegetable gardens	Agricultural area	Natural meadows. Pasture	Forests	—	Yards. Other and unproductive land

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
Saar	Arable land	Orchards. Tree nurseries. Vineyards. Osiers	Nonirrigated meadows ^a . Irrigated meadows ^b . Permanent pastures	Wood and forests	Meadows for litter	Wasteland: a) uncultivated; b) unsuitable for agricultural use; c) uncultivated as a result of war events. Uncultivated marsh areas; Built-on sites and yards; railroads, roads and streets; graveyards and public establishments; sport places, aerodromes, exercise (military) areas, including those used by the occupation forces. Water areas, rivers, rivulets, ditches, lakes, ponds, dykes and channels. Ornamental gardens, private parks, lawns, etc. Area reserved around waterfalls. Other land
Sweden	Arable land	Home and small gardens	—	—	—	—
Switzerland	Open land	Yard sites and gardens ^a	Natural meadows. Cultivated pasture	Forest area ^b	—	—
United Kingdom^a	Temporary grassland	Small fruit area. Vineyards	—	—	—	—
Yugoslavia	Arable land and gardens	Area under crops and fallow ^b	Permanent grassc Rough grazing ^c	Woodlands, osiers and willows, copses, spinneys and shelter belts	—	All other land
NORTH AND CENTRAL AMERICA	Arable land and gardens	Orchards. Vineyards	Meadows. Pastures	Woodland	Reedbanks, marshes and fish ponds	Wasteland
Alaska	Arable land	Cropland harvested where all crops completely failed last year	Other land pastured or grazed that could be plowed for crops without additional clearing or draining	Woodlands	—	Other land not pastured or grazed, which was not suitable for growing crops
Barbados	Arable land	—	Permanent meadows and pasture	Wood or forest land	—	All other land
Bermuda	Arable land	Land for growing tree-crops, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	All other land
British Honduras	Arable land	Land for growing tree-crops, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	All other land

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
Canada	← Summer fallow Area under crops for harvest this year →	→ Improved land for pasture or grazing	Woodland	—	—	Area in barnyards, lanes, roads and any improved land that will be idle this year. All other land such as unimproved hay-land, rough pasture, slough, marsh, wasteland, etc.
Costa Rica	Area where annual crops were obtained. Fallow land. All other cultivated land (crop failure or crops yet to be harvested).	Area under permanent crops	Pastures	Woodland	—	Brushwood (charrales). All other land (buildings, marshes, etc.)
Cuba	—	—	Grassland	—	—	Balance of holdings
Dominican Republic	Cultivated land with non-perennial crops. Fallow land.	Permanent crops (except grass)	Cultivated grassland. Natural grassland	Woods and forests	Other uncultivated but productive land	Agriculturally unproductive land (occupied by lakes, buildings, swine-sheds, stables, etc.)
El Salvador	Arable land	Permanent crops	Natural grassland except that under forest. Sown grassland except that under forest	Woods and forests, natural and sown (do not include trees shadowing coffee and cocoa)	—	Noncultivated land (swamps, buildings, roads, etc.)
Guatemala	Arable land harvested or for harvesting. Arable land with crop failure. Arable land fallow	Land planted to fruit trees, vines and coffee	Natural permanent grassland	Woods (natural or planted) forests. Brushwoods (charrales). Thorny bushes (brenales)	—	Other land: (land occupied by the center of the holdings, marshes, rivers, strands, arid land, etc.)
Haiti	← Land actually under crops or having been under crops during the last 12 months →	—	—	—	—	—
Honduras	Nonpermanent crops. Land fallow the whole year	Permanent crops (sugar cane, bananas, plantains, fruit trees, coffee, etc.)	Grassland	Woodlands (trees for fuel and timber)	—	Brushwoods (of no use for livestock or for fuel or timber). Other kinds of land (lakes, wasteland, rocks, buildings, etc.)
Leeward Islands	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	All other land
Mexico: ejido and non-ejido holdings over 5 hectares	Rainfed land. Naturally humid land. Irrigated land	Land under fruit trees, plantations and agaves	Grassland on plain land. Grassland on slopes	Woods with dominating timber trees	Uncultivated productive land (with Opuntia, prickly pear), Guayule, Lechuguilla (Ayar heterocantha), Candelilla, forest fruit trees, etc.)	Woods with dominating non-timber species (brushwoods), thorny bushes (brenales, etc.). Agriculturally unproductive land (stony areas, rocky ground, wasteland, roads, lakes, salty land, etc.)

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
Panama	Sown grassland. Fallow land (formerly cultivated but not so in the census year)	—	Natural grassland	← Other land that has never been cultivated: forest, bush, swamp, etc. →	—	—
Puerto Rico	← Area cultivated with cereals, tuber and root crops, industrial crops, fruit plants and trees, and vegetables → ← Cultivated land →	→ Cereals, tuber and root crops, industrial crops, fruit plants and trees, and vegetables →	Grassland; that might be cultivated; that could not be cultivated	← Land neither cultivated nor grazed. All other land in the holding →	—	—
Trinidad and Tobago	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	All other land
United States	← Cropland ^a . Other pasture (other than cropland pasture or woodland pastured) →	→ Cropland ^a →	Permanent meadows and pasture	Woodland	—	House lots, barn lots, lanes, roads, ditches and wasteland
Virgin Islands	Arable land	Land for growing trees, vines and shrubs	Permanent meadows and pasture	Woodland	—	House lots, barn lots, lanes, roads, ditches and wasteland
Windward Islands	Arable land	Land for growing trees, vines and shrubs	Permanent meadows and pasture	Wood or forest land	—	All other land
SOUTH AMERICA						
Argentina	Land under annual crops in the census year	Permanent crops (fruit trees, vines, yerba mate, cultivated forest trees, etc.)	Permanent meadows and pasture	Natural forests and woods	—	Land suitable for agriculture though not cultivated or used for grazing. Area of no agricultural utility (marshes, lakes, dunes, roads, houses, gardens, etc.)
Bolivia	Land under annual crops. Land with crop failure. Fallow land normally under rotation	Land for growing trees, vines and shrubs	Permanent meadows and pasture	Woods and forests (natural or planted)	—	All other land (including building lots, roads, lanes etc., in general all land not included in preceding items)
Brazil	← Land under permanent and semipermanent crops → Area under temporary crops including all cultivated grass for hay	Area of permanent crops	Natural grassland. Planted (though permanent) grassland excluding all such destined for hay	Natural wood and forest area. Reforested area	Uncultivated but productive land (fallow, brushwood, thin forest, river banks, etc., not actually used but suitable for some kind of crops or for grazing)	Area of unproductive land (i.e. not suitable for cultivation, production of any crops, as sand fields, steep slopes, rocky land, etc.; include areas covered by building, roads, dams for irrigation, lake etc.)

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
British Guiana	← Arable land and land for growing tree-crops, vines or shrubs →		Permanent meadows and pasture	Wood or forest land	—	All other land
Chile	Crops (on arable land). Fallow (arable) land. Fodder crops. Natural grassland on arable land (that has been plowed at least once during the last 10 years)	Fruit trees and vines	Natural grassland on uncultivated land (not plowed the last 10 years)	Natural woods. Natural forests and replanting on nonarable land suitable for production of fuel and charcoal. Forest plantations	—	Sterile areas without plant production (damaged by erosion, deserts, river banks, etc.) and land occupied by houses, internal roads, canals, etc.
Colombia	Cultivated land ^a	Permanent crops	Artificial grassland. Natural grassland	Woods and forests	Area of marshes, brushwood and uncultivated productive land	Waste or agriculturally unproductive land
Ecuador	Nonpermanent and semipermanent crops. Artificial grassland and alfalfa area. Fallow or resting land	Permanent crops	Natural grassland and highland grazing	Woods and forests	Brushwood, thickets and uncultivated productive land	Sterile, agriculturally unproductive land and land used for nonagricultural purposes.
Falkland Islands	Arable land	—	Permanent meadows and pasture	—	—	Other land
Uruguay	Arable land. Horticultural land. Artificial grassland. Fallow land (cultivated till 1-2 years ago)	Orchards and vineyards	Natural grassland	Natural forest. Artificial forest	—	Unproductive land (sand fields, rocky areas, marshes, alkaline flats, lakes, roads, buildings, etc.)
Venezuela	Nonpermanent and semipermanent crops. Fallow and unused cultivated area	Permanent crops or orchards	Cultivated grassland. Natural grassland.	Nonexploited forests. Exploited forests. Clean-out area	—	Land not usable for agricultural purposes
ASI/A						
Brunei	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	—
Burma	Total arable land	Area under trees, vines and shrubs	—	Woodland (land under wood and bamboo, jungles not yet brought under cultivation, also land relapsed into jungle)	Productive wasteland (include marshland, bushes, etc., wild growths which produce thatch material, rope material, etc.)	Other land (include land occupied by buildings, houses, field huts, cattle sheds, barns, granaries, paths, drains, ponds, etc.)
Ceylon	Arable land	Land under permanent orchard and other tree-crops	Pasture land (not under trees)	Wood or forest land	—	Other lands (include land occupied by buildings, roads, lanes, wasteland, land under water and any other land not reported above) ^a

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
Cyprus	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	All other land
India	← Area under crops. Fallow land →	Vine and orchards	Permanent meadows and pasture	Forest, miscellaneous tree crops, etc.	—	Barren and uncultivated land. Cultivable wasteland (jungles, wild groves, uncultivated ground adjacent to house site, land once cultivated but lying fallow for five or more consecutive years; others). Land put to nonagricultural use (house-sites, buildings and huts, temples, mosques, etc. tanks and ponds, other water areas). Put to use other than cultivation (e.g., brick field, etc.)
Iraq	Land planted this year. Land fallow this year	Land devoted to growing trees, shrubs or vines	Pastures	Woodland or forest	—	Uncultivable land
Israel Jewish holdings	← (Total land under cultivation excluding orchards) ^a →	Orchards	—	Woodlands	—	Fish ponds. Wasteland, buildings and farm yards, roads and ditches
Arab holdings	Total extensive winter crops. Total extensive summer crops. Total vegetable (physical) area. Total tobacco.	Total orchards	Pastures ^b	← Uncultivated land ^c →	—	—
Japan	Paddy field. ^a Ordinary field. Fodder field. Field of shifting cultivation. Fallow or not sown field	Land for fruit trees. Tea field. Mulberry field. Other orchard	Meadows for cutting fodder. Pasture used for grazing	Wood or forest land. Woodland used for grazing	—	Land occupied by buildings. Desolated land, water area, ponds, permanent farm paths, etc.
Jordan	Land cultivated in the census year. Land fallow in the census year	Land in orchards and vineyards	—	Forest land	—	Uncultivated lands. Other lands
Malaya, Federation of	Arable land	Land for growing trees, vines or shrubs	—	Wood or forest land	—	Other land
North Borneo	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	Other land
Philippines	← Area cultivated during the year. Area lying idle or land in summer fallow and not used for pasture during the year. Area used only for pasture or grazing during the year which could be plowed and used for crops without additional clearing →	—	—	Area covered with forest growth, etc.	—	All other land
Ryukyu Islands	Paddy land. Cultivated upland. Fallow land	Fruit orchard land	Grassland	Forest	Other productive land	—

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
Sarawak	Arable land	Land for growing trees, vines or shrubs	—	Wood or forest land	—	—
Singapore Island	Arable land	Land for growing trees, vines or shrubs	—	Wood or forest land	—	Other land
Thailand	Arable land ^a	Land for growing trees, vines and shrubs ^a	—	Wood or forest land	Productive marshland and other productive but uncultivated land	Other lands, not specified above
AFRICA						
Algeria	Arable land	Vineyards. Orchards in compact plantations and nurseries	Natural permanent meadow. Pasture and grazing (except those bushy)	Forest, woods and alfa zones	—	Unproductive land (building sites, yards, private roads, etc.)
Bechuanaland	Arable land	—	—	—	—	—
Belgian Congo European holdings as well as those of developed Negroes	—	Total area under crops or cleared	Uncultivated land without forest cover, suitable for grazing	Uncultivated land with natural forest; the same with planted forest	—	Uncultivated land without forest, not suitable for grazing. Area covered by buildings, roads, lanes, etc.
Egypt	Areas under crops and vegetables	Areas under fruit, timber trees and nurseries	Natural pastures	—	—	Swamp areas. Waste areas. Areas occupied with buildings and barns
Gambia	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	Other land
Gold Coast and British Togoland	Arable land	Land for growing trees, vines or shrubs	—	Wood or forest land	—	Other land
Kenya	—	Acres of crops including grass leys	Acres used for grazing excluding leys	Acres of forest (including planted trees)	—	Undeveloped or unused land. Other, including a) wasteland, b) buildings, roads, etc. c) used by African employees
Mauritius	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	Other land
Mozambique	Cultivated with annual crops (including fallow up to 2 years). Fallow over 2 years	Cultivated area with permanent agricultural crops	Natural grassland	Natural forest ^a . Cultivated area with forest trees	—	Unproductive area. Unused area. Use not known
Nigeria and British Cameroons	Land under farm crops. Fallow	Land under tree crops	Grazing	Forest reserves	—	Nonagricultural land, uncultivated bush and waste, land excluded from survey

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
Northern Rhodesia European holdings	Land under crops ^a . Fallow land	Perennial crops ^a	Planted pasture (irrigated) Planted pasture (nonirrigated)	Natural woodland. Planted forests	—	—
Nyasaland	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	Other land
Seychelles	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	Other land
Sierra Leone	—	Arable land and land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	Other land
Southern Rhodesia European holdings	Total acreage under summer crops. Total acreage under winter crops ^a . Land lying fallow	Orchards and tung : number of trees ^a	Natural unplanted pasture	Acres under planted trees. Natural woodland	—	—
St. Helena	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	Other land, including bare rocks
Swaziland	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land	—	All other land
Tunisia	Arable land	Vineyards. Orchards in compact plantations and nurseries	Natural permanent meadows. Pasture and grazings (except those bushy)	Forests, woods and alfa zones	—	Unproductive lands (building sites, yards, private roads etc.)
Uganda	Arable land	Land for growing trees, vines or shrubs	—	Wood or forest land	—	Other land
Union of South Africa "White" farms	Area for native crops ^a . Area used for all other crops. Area of fallow land	Area under orchards and vineyards	—	—	—	—
Native areas and farms	Total area used for growing of all crops ^a . Total area of land that has been cultivated recently but allowed to rest during 12 months ended 31 August 1950	—	—	—	—	—
Zanzibar and Pemba	—	Land for growing trees, vines or shrubs.	Permanent meadows and pasture	Wood or forest land	—	All other land
OCEANIA						
Australia	Area under crops, land sown grasses and clovers. Other cleared ground now used for grazing or lying idle	—	—	—	—	—
					Balance of holding	

TABLE 6. QUESTIONS IN NATIONAL CENSUSES ON MAIN ITEMS OF LAND UTILIZATION

Code in the Expanded List	B-1	B-2	B-3	B-4	B-5	B-6
British Solomon Islands	Arable land	Land for growing trees, vines, or shrubs	Permanent meadows and pasture			
Cook Islands	Area in productive gardens. Area cleared from bush this year	Area suitable for tree-crops only				
Fiji	Arable land	Land for growing trees, vines or shrubs	Permanent meadows and pasture	Wood or forest land		Other land
Gilbert and Ellice Islands	Arable land	Land for growing trees, vines or shrubs		Wood or forest land		Other land
Hawaii	Croplands. Any other land that could be plowed for crops without additional clearing, draining or irrigating.	Orchard - registered - bearing; the same not bearing; Orchard not registered bearing - the same not bearing; Areas planted in vines. Areas planted in passion fruit vines; Areas planted in hop vines; Market gardens (small fruit); Nurseries of trees and bushes.	Land other than woodland not suitable for growing crops, pastures or grazed	Woodland		Other land, including land occupied by buildings and roads; any land other than woodland not suitable for growing crops neither pastured nor grazed
New Zealand	Areas of grain, root, etc. crops, less area of any such crops sown along with grasses and clovers; Grasses (including lucerne) sown since 31 January 1949 on land which has been in pasture or under cultivation previously; Bare fallow during the whole season. Vegetable crops for sale. Vegetable seedlings (nursery)	Orchard - registered - bearing; the same not bearing; Orchard not registered bearing - the same not bearing; Areas planted in vines. Areas planted in passion fruit vines; Areas planted in hop vines; Market gardens (small fruit); Nurseries of trees and bushes.	Grasses (including lucerne) sown since 31 January 1949 on virgin land. Old pasture (including lucerne) established before 31 January 1949. Tussock. Naturally established Dantchonia	Standing native bush or forest. Plantations of timber trees. Conifers (pines). Eucalyptus and broadleaved trees	Phormium (New Zealand flax)	Residence, outbuildings, parks, private gardens and grounds (including orchard area of less than 1/4 acre). Barren areas used less for grazing and incapable of being made productive (sand, shingle, etc.) also internal roads, dams, drains, water-races, etc.; Fern, scrub, second growth, etc.
Tonga	Arable land	Land for growing trees vines or shrubs		Wood or forest land		Swamps and lakes. All other land
Western Samoa	Total area in plantations or cultivated crops	Total area in plantations or cultivated crops		Total area in forest	Total area in secondary growth, scrub or weeds	Area of buildings and grounds

tion, so that there is an overlap of one unit in the frequency figure on the table.

Among the 10 censuses not included in the table, Turkey asked various questions the answers to which are likely to allow for the making of estimates of the various classes of land utilization. The 9 censuses not dealing with the topic are Bahamas, Jamaica, Aden Protectorate, British Somaliland, Tanganyika, American Samoa, Guam, New Hebrides and Papua-New Guinea. Participation is incomplete in Northern Rhodesia and Southern Rhodesia, where no such questions were asked on behalf of "native" areas and farms, and in Belgian Congo, where "undeveloped negroes" were not asked questions belonging to this section.

Section C. Agricultural Population

As indicated in Table 7, the section on agricultural population including a question on the age of the holder and a few particulars of the activity of the holder other than on the holding, has met with some kind of response from about two thirds of the censuses. The FAO Program pointed out that a population census can provide for more data on this segment of the population than were proposed for inclusion in the agricultural censuses. A great many countries took a population census at about the same time as the agricultural census, and it may then have seemed undesirable to include demographic questions also in the agricultural questionnaire.

Two countries (Hungary and Haiti) took their agricultural censuses by including a section of questions on agriculture in their population census questionnaires; in these cases, it is a moot point whether the agricultural census may be deemed to contain demographic questions or not.

Among the 65 censuses asking some of the questions belonging to this section, 48 asked for the central topic of the section, contained in questions C-1 and C-2. The large number of cases in which these two questions were amalgamated into one is partly the result of the adherence of colonial and underdeveloped areas to the London Program. The response from such areas, moreover, would have been even higher, had not a few of them preferred asking for population engaged in, rather than dependent on, agriculture, which represents a modification of the London Program (see below under Section D).

As regards the response to the other sections of the Program, which were not included in the Short List, nor recommended by the London Program, some regional preferences can be traced. The questions about the age of the holder and his employment outside the holding interested mainly countries in

North and Central America, but other continents only to a small extent. The last question, about the principal nonagricultural occupation of the holder, was asked mainly in European countries.

Among countries not asking for farm population (that is, not asking any of the questions C-1 or C-2), the Federal Republic of Germany, the Saar, and Norway asked only for members of the holder's family. Among countries not asking the question about the principal nonagricultural occupation of the holder, three countries (Burma, Ryukyu Islands and Turkey) asked instead for off-farm work of the whole farm family (without special questions on the holder). Questions on income from sources other than the farm were asked in the censuses of Colombia and Israel.

Among countries not formally asking any of the questions in this section of the FAO Program (and therefore not entered on Table 4), Ireland asked for the number of persons who had a meal or meals on the farm "yesterday", while Brazil asked for the number of families residing on the farm.

Section D. Employment in Agriculture

The section on employment in agriculture was included only in the Expanded List of the FAO Program. A little over half the number of participating countries and territories asked one or more of the questions proposed in this section of the Program. This number includes a few of the censuses taken according to the London Program for colonial and underdeveloped areas; the latter program had proposed only a question on agricultural population but this was in some instances replaced by a question on manpower.

The FAO Program proposed two main sets of questions, one referring to the number of persons employed during the census week (item D-1 and subdivisions), the other to persons employed during the census year (item D-2 and subdivisions). A single item (D-3) was designed to ascertain the amount of cash paid to hired labor during the past year.

As foreseen by the Program, almost all the countries which asked any of these questions made a choice between the two main groups, preferring either the questions referring to the census week or those referring to the census year. Only two countries (Dominican Republic and Thailand) asked questions belonging to both groups, and in the case of Thailand the questions complement each other, without covering the same field.

As also anticipated by the Program, most of the countries preferred the questions referring to the census week. The participation in this part of the

TABLE 7. QUESTIONS IN NATIONAL CENSUSES ON AGRICULTURAL POPULATION

ITEM	Members of the holder's household	Other persons living on the holding	Age of the holder	Number of days in the past 12 months spent by the holder on paid work not connected with the operation of the holding	Days spent on paid work in agriculture on other holdings	Days spent on paid work in non-agricultural pursuits	Principal non-agricultural occupation (if any) of the holder
Code in the Expanded List	C-1	C-2	C-3	C-4	C-4.1	C-4.2	C-5
Code in the Short List	12	—	—	—	—	—	—
Number of countries asking the questions	17	4	18	12	—	—	15
	34						
COUNTRY							
EUROPE							
Austria	1, a X	—	—	—	—	—	X
Belgium	1, a X	—	—	—	—	—	X
Czechoslovakia	—	a X	X	X	—	—	a X
Denmark	—	—	X	—	—	—	a X
Finland	—	—	X	—	—	—	—
Germany (Federal Republic)	X	—	—	—	—	—	a X
Greece	X	—	—	—	—	—	—
Luxembourg	—	1, 2 X	—	—	—	—	X
Malta and Gozo	a X	—	X	X	—	—	X
Netherlands	—	—	X	—	—	—	X
Norway	—	—	X	—	—	—	—
Portugal	—	—	—	—	—	—	—
Saar	X	—	—	—	—	—	—
Yugoslavia	—	—	—	—	—	—	—
NORTH AND CENTRAL AMERICA							
Alaska	—	X	—	—	—	—	—
Bermuda	—	—	—	—	—	—	—
Canada	—	—	—	—	—	—	a X
Costa Rica	—	X	—	—	—	—	—
Dominican Republic	X	X	—	—	—	—	—
Guatemala	—	X	—	—	—	—	3 X
Leeward Islands	—	—	—	—	—	—	—
Mexico: non- <i>ejidal</i> holdings 5 hectares and over	1, 2 X	a X	X	—	—	—	a X
Panama	—	—	—	—	—	—	—
Puerto Rico	—	X	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—	—
United States	—	—	—	—	—	—	—
Virgin Islands	—	X	—	—	—	—	—
Windward Islands	—	—	—	—	—	—	—
SOUTH AMERICA							
Argentina	a X	1 X	—	—	—	—	X
Bolivia	—	—	a X	—	—	—	—
Colombia	—	X	—	—	—	—	—
Falkland Islands	—	1, 2 X	—	—	—	—	—
Uruguay	a X	—	—	—	—	—	—
Venezuela	—	—	—	—	—	—	—
ASIA							
Brunei	—	X	—	—	—	—	—
Burma	—	—	—	X	—	—	—
Cyprus	1 X	—	—	—	—	—	—

TABLE 7. QUESTIONS IN NATIONAL CENSUSES ON AGRICULTURAL POPULATION

Code in the Expanded List	C-1	C-2	C-3	C-4	C-4.1	C-4.2	C-5
India	1, 2, a X	—	—	—	—	—	—
Israel	—	a X	—	b X	—	—	—
Jewish holdings	—	X	a X	—	—	—	—
Arab holdings	a, b X	—	—	—	—	—	a X
Japan	—	—	—	—	—	—	—
Philippines	—	—	3 X	—	—	—	—
Ryukyu Islands	2 X	—	—	—	—	—	—
Sarawak	—	X	—	—	—	—	—
Singapore	—	X	—	—	—	—	—
Thailand	—	—	X	—	—	—	—
Turkey	1, 2 X	—	—	—	—	—	—
AFRICA							
Belgian Congo	—	X	—	—	—	—	—
Europeans and developed Negroes	—	a X	—	—	—	—	—
Undeveloped Negroes	—	X	—	—	—	—	—
Gambia	—	X	—	—	—	—	—
Gold Coast	—	X	—	—	—	—	—
Northern Rhodesia	—	a X	—	—	—	—	—
Nyasaland	—	X	—	—	—	—	—
St. Helena	—	1 X	—	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—	—
Europeans	—	1, a X	—	—	—	—	—
Sierra Leone	—	X	—	—	—	—	—
Swaziland	—	X	—	—	—	—	—
Tanganyika	a X	—	—	—	—	—	—
Union of South Africa	—	—	—	—	—	—	—
"White" farms	—	1, 2, a X	—	—	—	—	—
OCEANIA							
Australia	—	1 X	—	—	—	—	—
Fiji	—	X	—	—	—	—	—
Gilbert and Ellice Islands	—	X	—	—	—	—	—
Hawaii	—	—	X	X	—	—	—
New Hebrides	—	X	—	—	—	—	—
New Zealand	1, 2 X	1, 2, a X	—	—	—	—	—
Papua and New Guinea	—	a X	—	—	—	—	—
Tonga	—	X	—	—	—	—	—
Western Samoa	—	1, a X	—	—	—	—	—

1) separate questions on males and females,
 2) separate questions on two or more age strata,
 a) refers to the operator (holder or manager, as the case may be).
 Austria a) separate questions on persons employed in agriculture living in the holder's household and on the nonworkers who were continuously receiving board and lodging.
 Belgium a) separate questions on the holder, helpers, other persons belonging to the household and domestic servants.
 Czechoslovakia a) separate questions on the operator and his family members, including relatives, administrative personnel and their family members; other permanent employees and their family members, and seasonal workers and their family members.
 Finland a) only main profession considered.
 Germany (Federal Republic) a) same remark as under Finland a).
 Luxembourg a) same remark as under Finland a).
 Netherlands a) separate questions on the holder and his family members, and other persons belonging to the household.
 Costa Rica a) number of weeks rather than days.
 Dominican Republic a) separate questions on occupation, and on subsidiary nonagricultural occupation.
 Guatemala a) with no reference to manager-operated holdings.
 Panama a) excludes holders of other agricultural holdings and their households.
 Puerto Rico a) refers only to work done outside the holding.
 Bolivia a) separate questions on males, females, and children 14 years of age or less.

Venezuela a) number of persons in the charge of the holder, excluding paid workers.
 India a) members of landholder's household.
 Israel a) not asked on kibbutzim (collective farms).
 Israel b) on the kibbutzim (collective farms), the question was asked on behalf of all personnel, with detail on branches of employment.
 Japan a) asked only on behalf of individual households, not on behalf of farms belonging to a co-operative, partnership, corporation, experimental station, school or institute, or other institutions.
 Japan b) age, sex, and whether he or she is a domestic servant or not, was to be reported for each person.
 Belgian Congo a) on a village basis, separately for workers and others.
 Northern Rhodesia a) Europeans only.
 Southern Rhodesia a) Europeans only.
 Tanganyika a) separate questions on tax-payers, other adult males, married women and children.
 Union of South Africa a) separate questions on whites and nonwhites.
 New Zealand a) separate questions on farm employees other than members of family, but excluding casual and temporary workers; casual and temporary workers; and all other residents on farm, including domestic boarders, members of farm employees' families, etc.
 Papua and New Guinea a) refers to resident population of the village.
 Western Samoa a) among males, separate questions on tamameamea, tamaiti, tanleleā and matai, and among females on teimemeamea, tēmeiti, teimemuli and fafine.

TABLE 8. PERSONS EMPLOYED DURING THE CENSUS WEEK

ITEM	Number of persons employed during the census week	Holder and members of his family not receiving full wages in money	15 years of age and over	14 years of age and under		Persons working for pay on the holding	15 years of age and over	14 years of age and under							
				D-1.1				D-1.2		D-1.2.i					
				male	female			male	female	male	female				
Code in the Expanded List	D-1	D-1.1	D-1.1.i	male	female	D-1.2	D-1.2.i	male	female	D-1.2.ii	male	female			
Number of countries asking the question	41	26	23	22	20	19	14	14	28	17	16	13	13	11	11
COUNTRY															
EUROPE															
Austria	aX	b,c,dX	c,e,fX	c,e,fX	c,e,fX	c,eX	c,eX	c,eX	b,c,dX	c,e,f,gX	c,e,f,gX	c,e,f,gX	c,e,gX	c,e,gX	c,e,gX
Belgium	aX	aX	aX	bX	bX	aX	X	X	aX	aX	cX	cX	cX	cX	cX
Czechoslovakia ^a	a,bX	a,bX	a,b,cX	b,c,dX	b,c,dX	b,cX	bX	bX	b,cX	X	X	X	X	X	X
Denmark	aX	aX	b,c,dX	b,c,dX	b,c,dX	b,c,dX	b,c,dX	b,c,dX	f,g,h,i,jX	—	—	—	—	—	—
Germany (Federal Republic)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hungary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ireland ^a	aX	a,bX	a,bX	bX	bX	bX	—	—	a,bX	b,dX	b,dX	b,dX	b,dX	b,dX	b,dX
Luxembourg	aX	aX	aX	bX	bX	bX	—	—	—	—	—	—	—	—	—
Malta and Gozo	bX	bX	bX	bX	bX	bX	—	—	—	—	—	—	—	—	—
Netherlands ^a	aX	a,b,cX	b,c,d,eX	b,c,d,eX	b,c,d,eX	b,c,d,eX	—	—	a,cX	b,c,dX	b,c,dX	b,c,dX	b,c,dX	b,c,dX	b,c,dX
Saar	a,b,cX	a,dX	—	—	—	—	—	—	—	—	—	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
NORTH AND CENTRAL AMERICA															
Barbados	aX	—	—	—	—	—	—	—	—	—	—	—	—	—	—
British Honduras	aX	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canada	—	—	—	—	—	—	—	—	aX	—	—	—	—	—	—
Costa Rica ^a	bX	X	bX	bX	bX	bX	—	—	bX	bX	bX	bX	bX	bX	bX
Dominican Republic	X	aX	bX	bX	bX	bX	—	—	cX	dX	dX	dX	dX	dX	dX
El Salvador ^a	bX	cX	X	X	X	X	—	—	bX	bX	bX	bX	bX	bX	bX
Guatemala ^a	bX	bX	b,cX	cX	cX	cX	—	—	bX	bX	bX	bX	bX	bX	bX
Honduras	aX	bX	aX	bX	bX	bX	—	—	—	—	—	—	—	—	—
Panama ^a	X	—	cX	—	—	—	—	—	—	—	—	—	—	—	—
Puerto Rico ^a	bX	—	bX	—	—	—	—	—	—	—	—	—	—	—	—
United States	aX	—	bX	—	—	—	—	—	—	—	—	—	—	—	—
SOUTH AMERICA															
Argentina	aX	bX	—	—	—	—	—	—	c,dX	—	—	—	—	—	—
Brazil	a,bX	aX	aX	—	—	—	—	—	aX	aX	cX	cX	aX	cX	cX
British Guiana	aX	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Uruguay	a,bX	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Venezuela	aX	bX	bX	bX	bX	bX	—	—	cX	cX	cX	cX	cX	cX	cX
ASIA															
Cyprus	a,bX	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	a,bX	X	—	—	—	—	—	—	bX	bX	bX	—	—	—	—
Israel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Jewish holdings ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Arab holdings	aX	b,cX	—	—	—	—	—	—	—	—	—	—	—	—	—
Japan	aX	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaya, Federation of	aX	—	—	—	—	—	—	—	—	—	—	—	—	—	—
North Borneo	—	aX	—	—	—	—	—	—	—	—	—	—	—	—	—
Thailand	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 8. PERSONS EMPLOYED

URING THE CENSUS WEEK

Code in the Expanded List	D-1	D-1.1	D-1.1.i	male	female	D-1.1.ii	male	female	D-1.2	D-1.2.i	male	female	D-1.2.ii	male	female
AFRICA															
Belgian Congo	a,b,c X	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Egypt	a X	a,b X	a X	X	X	a X	X	X	a X	a X	X	X	a X	X	X
Kenya	—	—	—	—	—	—	—	—	a,b X	—	—	—	—	—	—
Mauritius	X	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mozambique	a X	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Northern Rhodesia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
European holdings	a X	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Seychelles	X	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
European holdings	a X	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Union of South Africa	—	—	—	—	—	—	—	—	a,b,c X	—	—	—	—	—	—
"White" farms	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
OCEANIA															
Australia	a X	—	a X	b,c X	b,c X	—	—	—	d,e X	—	—	—	—	—	—
Hawaii	a X	b X	—	—	—	—	—	—	X	—	—	—	—	—	—
New Zealand ^a	b X	b X	b X	c X	c X	b X	X	X	b X	b X	c X	c X	b X	X	X
Western Samoa	a X	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Austria ^a) by addition of the subitems.
Austria ^b) separate questions on permanent and casual workers.
Austria ^c) no distinction between salaried and nonsalaried family workers, or of family and nonfamily salaried workers.
Austria ^d) separate questions on males and females.
Austria ^e) age limit: 14 years.
Austria ^f) by subtraction of males and females under 14 years of age from their totals.
Austria ^g) permanent workers only.
Belgium ^a) same remark as under Austria ^a).
Belgium ^b) separate questions on five age strata.
Belgium ^c) separate questions on salaried family members and others and, among the latter, on Belgians and foreigners.
Czechoslovakia ^a) same remark as under Austria ^b).
Czechoslovakia ^b) separate questions on the operator and his family workers.
Czechoslovakia ^c) separate questions on three age strata.
Denmark ^a) by addition of the subitems.
Denmark ^b) excluding the holder and his wife.
Denmark ^c) age limit: 14 years.
Denmark ^d) separate questions on three age strata.
Denmark ^e) separate questions on two age strata.
Denmark ^f) refers to persons 14 years of age and over not at school.
Denmark ^g) same remark as under Austria ^d).
Denmark ^h) same remark as under Austria ^b).
Denmark ⁱ) among permanent workers, separate questions on helpers with and without own households.
Denmark ^j) among permanent workers without own households, separate questions on three age strata for males and two age strata for females.
Germany ^a) by addition of the subitems.
Germany ^b) separate questions on holder and his family members permanently and not permanently employed.
Germany ^c) age limit: 14 years.
Germany ^d) no distinction between salaried and nonsalaried family workers or of family and nonfamily salaried workers.
Germany ^e) separate questions on permanent and casual workers and among the former, on 4 occupation status.
Hungary ^a) same remark as under Austria ^g).
Ireland ^a) separate questions on males 14 and under 18 years of age and 18 years of age and over.
Ireland ^b) same remark as under Austria ^b).
Luxembourg ^a) by addition of subitems.
Luxembourg ^b) same remark as under Austria ^c).
Luxembourg ^c) separate questions on three age strata.
Luxembourg ^d) separate questions on permanent and casual workers.
Luxembourg ^e) age, sex, etc. were to be reported for each permanent worker.
Malta and Gozo ^a) by addition of the subitems.
Malta and Gozo ^b) same remark as under Austria ^e).
Malta and Gozo ^c) same remark as under Austria ^b).
Malta and Gozo ^d) same remark as under Austria ^d).

Netherlands ^a) same remark as under Austria ^g).
Netherlands ^b) by addition of the subitems.
Netherlands ^c) separate questions on persons 15-20 years of age and 21 years and over.
Saar ^a) same remark as under Austria ^a).
Saar ^b) same remark as under Austria ^b).
Saar ^c) same remark as under Austria ^c).
Saar ^d) same remark as under Austria ^e).
Saar ^e) separate questions on the holder and his family members.
United Kingdom ^a) Northern Ireland only.
United Kingdom ^b) same remark as under Austria ^b).
United Kingdom ^c) same remark as under Austria ^d).
United Kingdom ^d) including all family workers, also those receiving payment.
United Kingdom ^e) Scotland and Northern Ireland only.
United Kingdom ^f) separate questions on four age strata among the males (in Scotland).
United Kingdom ^g) excluding paid family workers (in Northern Ireland).
United Kingdom ^h) same remark as under Austria ^g).
Barbados ^a) same remark as under Austria ^d).
British Honduras ^a) same remark as under Austria ^d).
Canada ^a) separate questions on four categories, according to duration of employment.
Costa Rica ^a) also a separate question on maximum number of workers during the agricultural year.
Costa Rica ^b) same remark as under Austria ^a).
Dominican Republic ^a) same remark as under Austria ^d).
Dominican Republic ^b) same remark as under Austria ^e).
Dominican Republic ^c) same remark as under Austria ^a).
El Salvador ^a) also a separate question on maximum number of workers during the agricultural year.
El Salvador ^b) separate questions on two age strata.
El Salvador ^c) same remark as under Austria ^a).
El Salvador ^d) same remark as under Austria ^b).
Guatemala ^a) also a separate question on maximum number of workers in the busiest month of the year, according to sex.
Guatemala ^b) same remark as under Austria ^a).
Guatemala ^c) same remark as under Austria ^e).
Guatemala ^d) separate questions on employees and day-laborers.
Honduras ^a) same remark as under Austria ^a).
Honduras ^b) same remark as under Austria ^d).
Panama ^a) also a separate question on maximum number of workers in the busiest month of the year.
Panama ^b) same remark as under United Kingdom ^d).
Panama ^c) same remark as under Austria ^a).
Panama ^d) same remark as under United Kingdom ^g).
Panama ^e) separate questions on permanent salaried workers, occasional salaried workers, and day-laborers bringing their own draft animals with them.

Puerto Rico ^a) same remark as under Austria ^e).
Puerto Rico ^b) same remark as under Austria ^a).
Puerto Rico ^c) separate questions on the holder and his family members.
Puerto Rico ^d) separate questions on employees and day-laborers, the latter distinguished as having worked at least two days, or less, during the last week.
United States ^a) same remark as under Austria ^a).
United States ^b) separate questions on the holder and his family members who worked 15 hours or more during one week before the census date at farm work or chores and for the holder, separate questions on five kinds of working hours during last week.
United States ^c) those who worked any time (no lower limit) - further two separate questions on two categories according to the expected duration of employment.
Argentina ^a) same remark as under Austria ^a).
Argentina ^b) same remark as under United Kingdom ^d).
Argentina ^c) same remark as under United Kingdom ^g).
Argentina ^d) separate questions on permanent and casual workers.
Brazil ^a) by addition of the subitems.
Brazil ^b) separate questions on over and under 15 years of age.
Brazil ^c) four separate sets of questions on permanent employees; on temporary employees; on *parceiros* and *meeiros* (i.e. sharecroppers who are not considered as independent enterprisers), including their families and employees insofar as working on their account, living on the holding, and the same categories not living on the holding.
British Guiana ^a) same remark as under Austria ^d).
Uruguay ^a) same remark as under Austria ^d).
Uruguay ^b) separate questions on those 14 years and over; 13 years and under. The questions regard only residents on the holding, and include persons working in the household.
Venezuela ^a) same remark as under Austria ^a).
Venezuela ^b) same remark as under Puerto Rico ^c).
Venezuela ^c) same remark as under Austria ^b).
Cyprus ^a) same remark as under Austria ^d).
Cyprus ^b) separate questions on persons living in the holder's household being 14 years of age and over and working on the holding, and on paid regular employees not living in the household.
Iraq ^a) same remark as under Austria ^d).
Iraq ^b) on behalf of males, also separate questions on those over and under 14 years of age.
Israel ^a) except the *kibbutzim* (collective farms) on which employment was asked for in terms of man-days only.
Israel ^b) age limit 17 years.
Japan ^a) same remark as under Austria ^a).
Japan ^b) separate questions on regular workers, persons giving direction to work, assistant workers throughout the year, and persons engaged in farm work temporarily during the busy season.
Japan ^c) also separate questions on males and females.
Japan ^d) full-time workers.

Japan ^e) also separate questions on persons with and without their own household.
Malaya ^a) same remark as under Austria ^d).
North Borneo ^a) same remark as under Austria ^d).
Thailand ^a) persons living on the holding. Separate questions on persons having worked on holding more and less than one-third of the time required for the whole season.
Belgian Congo ^a) same remark as under Austria ^g).
Belgian Congo ^b) also separate questions on males and females.
Belgian Congo ^c) also separate question on maximum number of temporal workers at a time.
Egypt ^a) same remark as under Austria ^a).
Egypt ^b) same remark as under Puerto Rico ^c).
Kenya ^a) same remark as under Austria ^d).
Kenya ^b) separate questions on Africans and non-Africans and among the former, on adult and juvenile workers, and among the latter on full and part-time workers and further on Europeans and non-Europeans.
Mozambique ^a) nonindigenous personnel.
Northern Rhodesia ^a) separate questions on Europeans and Africans and among the former on owners or occupiers, managers, learners and other employees.
Seychelles ^a) separate questions on males, females and children.
Southern Rhodesia ^a) separate questions on white males, white females, native males from Southern Rhodesia, native males from other territories, and coloreds; among whites, also on owners or occupiers working on farm, managers, learners, and other white employees.
Union of South Africa ^a) same remark as under Austria ^g).
Union of South Africa ^b) same remark as under Austria ^d).
Union of South Africa ^c) separate questions on "white" and "non-white" workers, the latter including squatters.
Australia ^a) same remark as under Austria ^a).
Australia ^b) same remark as under Austria ^g).
Australia ^c) same remark as under Puerto Rico ^c).
Australia ^d) same remark as under Austria ^e).
Australia ^e) same remark as under Austria ^d).
Hawaii ^a) same remark as under Austria ^b).
Hawaii ^b) separate questions on the holder working any time and family members working 15 hours or more during the census week.
New Zealand ^a) refers to persons residing on holdings where they work; also separate questions on full-time and part-time family workers, and on regular and casual hired workers.
New Zealand ^b) same remark as under Austria ^a).
New Zealand ^c) separate questions on two age strata.
Western Samoa ^a) separate questions on permanent and casual workers, among the former, on Europeans, local Europeans and Samoans; for the latter, average daily-use of Samoan casual workers had to be reported.

Program can be seen from Table 8. In this table, the "census week" condition is regarded as having been fulfilled in cases where the census date or any other short period close to the census date was envisaged by the national census. In some cases, the period of reference ("week" or "year") was not previously stated, but had to be inferred from the form of the questions asked.

The participation in item D—2 (and subdivisions) of the FAO Program may be seen from Table 9. In order to reduce the amount of unused space on the table, the detailed specification of item D—2.2 has been omitted from the table, because it was used by only very few countries; the cases may be seen from footnotes to item D—2. The Program subdivision included four classes as to the duration of employment, each of these subdivided into men of 15 years of age and over, women 15 years of age and over, and boys and girls 14 years of age and under.

The last item of Section D of the FAO Program, D—3 ("Amount of cash paid or to be paid on the holding during the past year") was asked in 12 censuses, most of them in American countries, i.e., Alaska, Canada, Mexico (on non-*ejido* holdings), Panama, Puerto Rico, United States, Virgin Islands, Burma, Ceylon (estates), Ryukyu Islands, Australia and Hawaii. Among these countries, Canada asked separate questions on wages paid to hired farm labor (in cash or kind), and amount paid for custom work (to other farmers and to nonfarmers separately). The Australian census asked separate questions in regard to males and females and to permanent and casual workers.

In a number of instances, deviations in approach have further diminished or even excluded conformity with the FAO Program. In this connection, it may be of interest to observe that England and Wales excluded the holder and his wife from the enumeration of manpower. Because at the same time no distinction was made between family and nonfamily workers, no item emerges which corresponds to an item of the FAO Program. Denmark and Norway also excluded the holder and his wife from the enumeration of manpower. As, however, a distinction was made between family and nonfamily workers, this modification precludes conformity with the Program items only as regards family labor.

As regards casual labor, several countries preferred asking the number of days worked by nonpermanent workers rather than the number of these workers on each holding. This approach was adopted by Belgium, Czechoslovakia, Denmark, Hungary, Luxembourg, the Netherlands, Norway, Romania, Ceylon (estate schedule), Israel (Jewish holdings; on individual holdings with reference to hired labor

and on *kibbutzim* or collective holdings with reference to all labor), Japan, and Belgian Congo. In addition to this, in the census schedules of Algeria and Tunisia, the questions on numbers of casual workers were asked mainly as a component of a question on the number of days worked (a technical way of asking the same question). As a complement to its questions on permanent workers, the Finnish census asked the total number of days worked by those living on the holding, both on work within and outside the holding. Thus, there were 15 censuses, most of them in Europe or under European influence, which tried to assess the volume of casual labor by this approach. The Union of South Africa asked a special question on the amount of cash paid to seasonal and occasional laborers, from which obviously the quantum of such labor can be estimated.

Section E. Crops and Crop Production

Almost all of the participating countries asked some questions on crops. With regard to the questions on areas under crops and number of trees, as proposed in the FAO Program, the general degree of conformity was high. Difficulties with the classification system proposed in the Program have occurred as regards fodder crops, in which case many countries followed systems widely differing from that proposed by the FAO Program.

The Program listed crops which were supposed to be of importance at least in some countries. Additional questions were proposed on "other" items within each main group, with tentative indications as to the extent of these items.

The participating countries, in general, have accepted this principle in that they have asked about those crops which were of greatest importance in the country. No country can be supposed to have asked particulars of all crops, including even those grown in very small quantities. Ambitions are likely to have been different, in this respect, from country to country. There is no common measure as to how important a crop should be to be included in the national census program. Some countries do not specify vegetables, others treat fruit trees as one item only. Minimum measures at the holding level for returning a crop, which were applied in some countries, also varied from country to country.

Comparisons of countries as to the extent to which the area under specified crops covered the total crop area can only be made by a thorough analysis of the tabulated results. Among the territories applying the London Program for colonial and underdeveloped territories, some appear to have restricted their inquiries into an investigation of only important export

crops. For instance, a comparison between the three colonies of British Borneo clearly reveals that the census office for Sarawak investigated only crops grown to the extent of a thousand acres each or more, while those for Brunei and North Borneo were also interested in items grown to a very small extent.

As a whole, a comparison of the length of the national crop lists is rendered difficult through differences between the countries in climatic conditions and the level of general development. It is even impaired through the different size of the countries. Comparison of the crop list of Luxembourg with that of Belgium (or the Netherlands) would not reveal how far the former is exhaustive in comparison with the latter, because a small country is likely to grow fewer crops, and fewer that reach a size to justify their separate identification. The manner in which the general schedule for the United States was applied in the various states, territories and dependencies, is instructive on this point.

However, a few examples can be given to show that the census offices have not always aimed at the same degree of exhaustiveness. Specification is most complete in the case of censuses which asked for details of each mixed item ("catch-all" questions). These cases can be seen from the synoptic tables. Most censuses, however, required only a single figure for miscellaneous headings. If countries in the same geographical zone, on a similar level of general development, and of the same order of size, are compared, then, for instance, it will be seen that Scotland asked about more crops than Northern Ireland, and the latter for more than the Irish Republic. Austria, which had vegetables as a single item only, asked for the specification of other field crops under 33 items, while Czechoslovakia wanted answers to 57 questions belonging to the same sector, in addition to about 30 questions on specified kinds of vegetables. Among the countries of Central America which are of such a size that they can reasonably be compared, the Dominican Republic and Guatemala asked some 60 to 70 crop questions each, while Costa Rica, El Salvador, Panama and Honduras asked 20 to 30 each, and Haiti only 14, the latter completed by a "catch-all" question. In South America and Asia, the differences in size of the various countries, which for other reasons might be compared, make it difficult to reach conclusions.

A deviation which sometimes diminishes conformity with the FAO Program occurs when a census asks only questions to be answered by "yes" or by "no". This is the case in the Portuguese census with most of the crops (among them all the tree crops listed). El Salvador and Guatemala added a number of questions of this type to their lists of tree crops. In

Cyprus, the questions on tree crops related not to the total number of existing trees but only to the number of newly planted trees. As these questions were asked in the framework of annual returns, in the long run the figures will probably make feasible estimates of the total number of trees.

When the FAO Program was being drawn up, it was considered that data on crop production could be better collected in ways other than through a census by holdings. For this reason, the Program section on crops was confined to questions on crop areas and number of plants, with no mention of crop production. However, as part of the minimum tabulation program, Table 7 asked for particulars of crop production in the Short List of census items. It was considered that these data would ordinarily be obtained by crop estimation methods rather than through a census by holdings; this is mainly the reason why Table 7 did not require classification according to the size of holdings. In a footnote, however, it is mentioned that, "Where production data are collected as part of the census, they should be reported in a table comparable to Table 6, giving area", thus involving classification by size of holdings.

At the censuses, however, the unexpected happened. Most countries taking censuses by holdings asked questions on the production of most of the enumerated crops. The main exceptions are in Europe, where only a few countries asked questions on crop production, and in North Africa, where no country did so. The territories participating in the World Census in accordance with the London Program for colonial and underdeveloped areas, in general, asked for particulars of crop production to the same extent and with the same methods as for crop areas.

The censuses by holdings which asked questions on crop production, did so, in most cases, for the whole or for the greater part of their crop lists. There are no cases in which the Short List was clearly selected for this purpose, except, of course, when this list was itself the basis for crop area reporting. Several countries have, however, asked crop production questions regarding only part of their crop items. The limitations vary from one census to another. The extreme case is Thailand, where only one item of crop production was asked for — rice.

On the other hand, there are instances where a census asked for production data without asking the corresponding question on area or number of plants. Certain questions on production of grass seed refer to production obtained from the same area as that under hay crops; production of cotton seed is regularly a by-product from the same area as that under cotton for fiber. There are also individual cases of a longer list of crop production items than

TABLE 9. QUESTIONS IN NATIONAL CENSUSES ON EMPLOYMENT IN AGRICULTURE DURING THE CENSUS YEAR

ITEM	Number of persons employed during the census year	Holder and members of his family not receiving full wages in money	Men 15 years of age and over	Women 15 years of age and over	Boys and girls 14 years of age and under	Persons working for pay on the holding at any time during the past 12 months	(Subdivisions of item D-2.2, as to duration of employment, sex and age, see text)
Code in the Expanded List	D-2	D-2.1	a	b	c	D-2.2	D-2.2 (specifications)
Number of countries asking the question	12	12	9	9	8	17	4
			2				
COUNTRY							
EUROPE							
Finland ^a	bX	X	X	X	X	cX	—
Norway ^{a,b,c}	X	dX	dX	dX	—	e,fX	—
Romania	—	—	a,bX	—	—	a,b,c,dX	—
NORTH AND CENTRAL AMERICA							
Dominican Republic	X	aX	bX	bX	cX	dX	—
Mexico	aX	a,bX	b,cX	b,cX	b,c,dX	e,fX	—
SOUTH AMERICA							
Chile	X	X	X	X	aX	b,cX	b,dX
Colombia	—	a,bX	bX	bX	b,cX	dX	—
Ecuador	—	a,bX	a,bX	a,bX	a,b,cX	d,e,f,gX	—
Venezuela	aX	—	—	—	—	—	—
ASIA							
Burma	aX	bX	—	—	—	cX	c,dX
Ceylon	—	—	—	—	—	—	—
Estates	aX	bX	b,cX	b,cX	b,c,dX	e,fX	—
Small holdings	aX	bX	b,cX	b,cX	b,c,dX	aX	eX
India	—	—	—	—	—	aX	—
Ryukyu Islands	—	—	X	—	—	—	—
Thailand	—	—	—	—	—	aX	a,bX
Turkey	—	—	—	—	—	aX	—
AFRICA							
Algeria	aX	b,c,dX	—	—	—	b,c,eX	—
Mozambique	—	—	—	—	—	aX	—
Nigeria and British Cameroons	aX	—	—	—	—	—	—
Tunisia	aX	b,c,dX	—	—	—	b,c,eX	—

Finland ^a) permanent workers only.
 Finland ^b) by addition of the subitems.
 Finland ^c) sex and age discrimination as for family workers.
 Norway ^a) same remark as under Finland ^a).
 Norway ^b) no distinction between salaried and nonsalaried family workers.
 Norway ^c) household work included; separate questions on two subsequent half-years.
 Norway ^d) excluding holder and his wife.
 Norway ^e) separate questions on males and females.
 Norway ^f) separate questions on those living in the farm household, and those having their own household.

Romania ^a) same remark as under Norway ^b).
 Romania ^b) persons 14 to 65.
 Romania ^c) separate questions on permanent and casual workers.
 Romania ^d) separate questions referring to three types of payment.
 Dominican Republic ^a) by addition of the subitems years of age only. In D-2.2, this refers to permanent workers only.
 Dominican Republic ^b) same remark as under Romania ^b).
 Dominican Republic ^c) separate questions on males and females.
 Dominican Republic ^d) distinguished as permanent and temporary, and with same age and sex discrimination as for family workers.
 Mexico ^a) same remark as under Finland ^b).

of crop area items. Details of these differences will be seen from the synoptic tables and the footnotes to them.

It will also be seen that the degree of conformity with the Program is not always the same in regard to the crop area items and the crop production items; the difference varies sharply from item to item. The fact that most of the countries not asking crop production questions are outside the tropics has given rise to some characteristic features. For instance, among the countries asking for areas under manioc, sweet potatoes and arrowroot, almost all have also asked for the production of these crops. Production of the ordinary potato, on the other hand, was asked for by only two thirds of the countries asking for crop area under potatoes. The degree to which the World Census represents world production of crops is thus less homogeneous than is the case with the data on crop areas and number of plants.

However the bearing of the questions may vary, the set of synoptic tables concerning the degree of conformity with the FAO Program will reveal the

importance the census offices of the participating countries have attached to collecting information on each crop listed. For obvious practical reasons, the tabular system has had to be divided into a number of subsections, corresponding to more or less homogeneous groups of items (Tables 10 through 31). On each table, only those countries are listed which asked one or more of the questions on that table. Questions on crop areas or number of plants are indicated by a cross, those on crop production by an asterisk. A dash and an asterisk indicates the exceptional case of a question on production without any corresponding question on area or number of plants.

All additional crops asked for in national censuses, though not proposed in the FAO Program, are listed with their names in the last column of each table, the "other" crops of the group. In a few cases, where this list is very long, it is removed to a footnote in order not to disturb the layout of the table too much. The Program had proposed "miscellaneous" items at the end of most groups, and made tentative suggestions as to what crops might be included in such

[Text continued on page 105]

Mexico ^b) on the *ejido* holdings, the question refers to *ejido* members and members of their families.

Mexico ^c) not asked on non-*ejido* holdings of less than 5 hectares.

Mexico ^d) same remark as under Norway ^e).

Mexico ^e) same remark as under Finland ^c).

Mexico ^f) on non-*ejido* holdings of 5 hectares and over, separate questions were also asked on day-laborers who are not chiefs of holdings, and others.

Chile ^a) same remark as under Norway ^e).

Chile ^b) same remark as under Finland ^b).

Chile ^c) separate questions on six specialized functions, and on maximum number of day-laborers employed at a time.

Chile ^d) same remark as under Finland ^c).

Colombia ^a) same remark as under Finland ^b).

Colombia ^b) those who worked at least 2 days per week or 4 months a year.

Colombia ^c) same remark as under Norway ^e).

Colombia ^d) separate questions on persons paid by the month and by a share in the product, and on maximum number of day-laborers employed at a time.

Ecuador ^a) same remark as under Norway ^b).

Ecuador ^b) referring to those who worked at least 30 days during the census year.

Ecuador ^c) age limit 14 years.

Ecuador ^d) same remark as under Finland ^b).

Ecuador ^e) separate questions on employees and day-laborers who worked permanently.

Ecuador ^f) same remark as under Finland ^c).

Ecuador ^g) also a separate question on maximum number of day-laborers employed at a time.

Venezuela ^a) separate questions for each of the 12 months.

Burma ^a) same remark as under Finland ^b).

Burma ^b) separate questions on persons working up to 1 month, 1 to 3 months, 4 to 5 months, 6 to 11 months, and 12 months.

Burma ^c) separate questions on household members working on wages, and outsiders.

Burma ^d) same remark as under Burma ^b) (means application of Program items D-2.2.i, ii, iii, iv, with a further subdivision of D-2.2.iii into two groups).

Ceylon: estates ^a) same remark as under Finland ^b).

Ceylon: estates ^b) separate questions on owners (working proprietors or other directors working, but not in receipt of a definite wage), and members of the owner's family or friends not receiving a definite wage.

Ceylon: estates ^c) age limit 16 years.

Ceylon: estates ^d) same remark as under Norway ^e).

Ceylon: estates ^e) same remark as under Finland ^c).

Ceylon: estates ^f) also a separate question on the monthly average number of regular workers (resident or not) on the payroll in the year of return, with the same sex and age discrimination as for persons working on the estate.

Ceylon: small holdings ^a) same remark as under Finland ^b).

Ceylon: small holdings ^b) separate questions on persons employed less than a month, 1 to under 5 months, 5 to 11 months, and the whole year.

Ceylon: small holdings ^c) same remark as under Romania ^b).

Ceylon: small holdings ^d) same remark as under Norway ^e).

Ceylon: small holdings ^e) same remark as under ^b) above, which means approximate application of Program items D-2.2.i, ii, iii, iv, though modifying item D-2.2.ii to embrace 5 to 11 instead of 6 to 11 months. Also subdivision of each stratum as to sex and age as for family workers.

India ^a) number of permanent farm servants.

Thailand ^a) refers to persons not living on the holding and having been hired to work on holding at any time during a year prior to the census date.

Thailand ^b) separate questions on three strata of duration of employment of which one corresponds to Program items D-2.2.ii jointly, one to item D-2.2.iii, and one to item D-2.2.iv.

Turkey ^a) asked from *mukhtars* (village headmen), not on individual sample questionnaires.

Algeria ^a) same remark as under Finland ^b).

Algeria ^b) same remark as under Norway ^e).

Algeria ^c) separate questions on French and alien subjects.

Algeria ^d) separate questions on holder and working members of his family.

Algeria ^e) separate questions on salaried permanent workers, on *khammessat*, *khaddarat*, etc. (payment in kind or in function of the harvest), and temporary workers, the latter without any distinction between family and nonfamily workers, or between males and females.

Mozambique ^a) indigenous workers; separate questions on males, females and children.

Nigeria and British Cameroons ^a) male tax-payers engaged in agriculture, specified as full-time farmers, part-time farmers, and plantation workers.

Tunisia ^a) same remark as under Finland ^b).

Tunisia ^b) same remark as under Norway ^e).

Tunisia ^c) separate questions on Europeans and Tunisians.

Tunisia ^d) same remark as under Algeria ^d).

Tunisia ^e) same remark as under Algeria ^e).

TABLE 10. QUESTIONS IN NATIONAL CENSES ON CEREALS HARVESTED FOR GRAIN

ITEM	Wheat	Winter wheat	Spring wheat	Rye	Rice	Millet and Sorghum	Millet	Sorghum	Maize	Barley	Oats	Spelt	Maslin	Other mixed grains	Other cereals harvested for grain (buckwheat, quinoa, etc.)
	E-1.1	a	b	E-1.2	E-1.3	E-1.4	a	b	E-1.5	E-1.6	E-1.7	E-1.8	E-1.9	E-1.10	E-1.11
Code in the Expanded List	13	—	—	14	15	16	—	—	17	18	19	—	—	—	—
Code in the Short List	54	14	14	32	57	24	25	19	75	47	40	7	4	18	31
Number of censuses asking the question on crop areas	33	3	3	13	53	21	20	14	60	27	22	2	2	5	14
Number of censuses asking the question on crop production															
COUNTRY															
EUROPE															
Austria	X	—	—	X	—	—	—	—	X	X	X	—	—	a X	Other cereals for grain (mixed grains as summer crops, buckwheat, millet)
Belgium	a X	X	X	c X	—	—	X	—	X	b X	X	X	—	X	Buckwheat
Czechoslovakia ^a	b X	X	X	X	—	—	—	—	—	X	X	—	—	X	Buckwheat
Denmark	X	—	—	—	—	—	—	—	—	X	X	—	—	X	—
Finland	*a X	*X	*X	*b X	—	—	—	—	—	*X	*X	—	—	*X	—
Germany (Federal Republic)	a X	X	X	b X	—	—	—	—	X	b X	X	X	—	b X	All other cereals and pulses (also buckwheat, millet and lentils for grain)
Greece ^a	X	—	—	X	X	—	—	—	X	X	X	—	—	X	Other cereals
Ireland	a X	X	X	b X	—	—	—	—	—	X	X	X	—	X	Buckwheat
Luxembourg	a X	X	X	—	—	—	—	—	—	*X	—	—	c X	X	—
Malta and Gozo	*X	—	—	—	—	—	—	—	X	b X	—	—	X	d X	Canary seed
Netherlands	a X	X	X	b X	—	—	—	—	—	X	X	—	—	X	—
Norway	a X	X	X	X	X	—	—	—	X	X	X	—	—	—	—
Portugal ^a	X	—	—	b X	—	—	—	—	X	b X	X	X	—	b X	Buckwheat, Grains and pulses mixed. All other cereals and pulses for grain (also millet for grain)
Saar	a X	X	X	—	—	—	—	—	—	—	—	—	—	—	—
Sweden	a X	X	X	b X	—	—	—	—	X	X	X	X	—	c X	—
Switzerland	a X	X	X	X	—	—	—	—	—	b X	X	—	—	c X	Mashlum (oats mixed with beans or peas) ^b
United Kingdom	a X	b X	b X	X	—	—	—	—	—	X	—	—	—	—	All cereals including maize
Yugoslavia	—	—	—	—	—	—	—	—	X	—	—	—	—	—	—
NORTH AND CENTRAL AMERICA															
Alaska	*X	—	—	—	—	—	—	—	—	*X	*X	—	—	*a X	Other grains (give name)*
Barbados	—	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
British Honduras	—	—	—	—	—	—	—	—	*X	—	—	—	—	*X	Buckwheat*
Canada	*a X	*X	*b X	*c X	*b X	*a X	—	—	*X	*X	*X	—	—	—	—
Costa Rica ^a	—	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
Dominican Republic	*X	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
El Salvador	*X	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
Guatemala	*X	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
Haiti	*X	—	—	—	—	*a X	—	—	*X	—	—	—	—	—	—
Honduras	—	—	—	—	—	—	—	—	*X	—	—	—	—	—	—
Jamaica	—	—	—	—	—	*X	—	—	*X	*X	*X	—	—	—	—
Leeward Islands	*a X	—	—	—	—	*a X	—	—	*X	—	—	—	—	—	—
Mexico	—	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
Panama	—	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
Puerto Rico	—	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
Trinidad and Tobago	*X	*X	*a X	*X	*X	—	—	—	*X	*X	*X	*X	*X	*b X	Buckwheat*, Popcorn.* Other grains threshed*
United States	—	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
Virgin Islands	—	—	—	—	—	—	—	—	*X	—	—	—	—	—	—
Windward Islands	—	—	—	—	—	—	—	—	*X	—	—	—	—	—	—

TABLE 10. QUESTIONS IN NATIONAL CENSUS ON CEREALS HARVESTED FOR GRAIN

Code in the Expanded List	E-1.1	a	b	E-1.2	E-1.3	E-1.4	a	b	E-1.5	E-1.6	E-1.7	E-1.8	E-1.9	E-1.10	E-1.11
SOUTH AMERICA															
Argentina	X	—	—	X	X	a, b	X	X	X	bX	X	—	—	—	Canary seed
Bolivia	*X	—	—	—	*X	a, b	X	—	*X	*X	*X	—	—	—	Quinoa*
Brazil ^a	*X	—	—	—	*X	—	—	—	*X	*X	*X	—	—	—	Canary seed*
British Guiana	—	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
Chile ^a	bX	—	—	bX	*X	—	—	—	*X	*X	*X	—	—	—	—
Colombia ^a	*X	—	—	*X	*X	—	—	—	*X	*X	—	—	—	—	Other cereals*
Ecuador	*X	—	—	—	*X	—	—	—	*X	*X	*X	—	—	—	Canary seed*
Uruguay	*X	—	—	*X	*X	—	—	X	*X	*X	—	—	—	—	—
Venezuela	*X	—	—	—	*X	—	X	—	*X	*X	—	—	—	—	—
ASIA															
Aden Protectorate	*X	—	—	—	—	a	X	*X	—	*X	—	—	—	—	—
Brunei	—	—	—	—	*X	—	—	—	*X	—	*X	—	—	—	Other cereals
Burma	*X	—	—	—	*X	—	X	—	*X	—	—	—	—	—	Other cereals*
Ceylon ^a	—	—	—	—	*X	c, d	X	—	*X	—	*X	—	—	—	—
Cyprus	*X	—	—	—	—	—	X	X	X	X	—	—	—	—	Other cereals
India	X	—	—	—	X	—	X	—	*X	*X	—	—	—	—	—
Iraq ^a	*X	—	—	—	*X	—	—	—	*X	*X	—	—	—	—	—
Israel	—	—	—	*X	—	—	—	*X	*X	*X	*X	—	—	—	—
Jewish holdings	*X	—	—	—	—	—	—	*X	*X	*X	—	—	—	—	—
Arab holdings	*X	—	—	*X	*X	b, c	X	*X	*X	*X	—	—	—	—	Buckwheat*, Job's tears (Coix Lacrima-Jobi)
Japan	—	—	—	—	—	—	—	*X	*X	*X	*X	—	—	—	—
Jordan ^a	*X	—	—	—	*X	—	—	*X	*X	—	*X	—	—	—	—
Malaya, Federation of	—	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
North Borneo	—	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
Philippines	—	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
Ryukyu Islands	—	—	—	—	*X	—	—	—	—	—	—	—	—	—	"Mugi", (group of wheat, barley and naked barley)* Other cereals*
Sarawak	—	—	—	—	*X	—	—	—	—	—	—	—	—	—	—
Thailand	—	—	—	—	*X	—	—	—	—	—	—	—	—	—	Job's tears (Coix Lacrima-Jobi)
Turkey	*X	—	—	*X	*X	—	X	—	*X	*X	*X	*X	—	*X	Canary seed*
AFRICA															
Algeria	aX	—	—	X	—	—	—	X	X	X	X	—	—	—	Millet, canary seed, and other cereals
Bechuanaland	—	—	—	—	—	—	—	*X	*X	—	—	—	—	—	—
Belgian Congo	—	—	—	—	*X	—	—	—	*X	—	—	—	—	—	Other cereals*
Europeans and developed Negroes	—	—	—	—	—	—	—	—	*X	—	—	—	—	—	—
Undeveloped Negroes	—	—	—	—	bX	—	—	—	bX	X	—	—	—	—	—
Egypt ^a	X	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
Gambia	—	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
Gold Coast and British Togoland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Cereals
Kenya	—	—	—	—	*X	—	X	*X	*X	*X	*X	—	—	—	—
Mauritius	—	—	—	—	*X	—	X	*X	*X	*X	*X	—	—	—	—
Mozambique	*X	—	—	*X	*X	—	—	*X	*X	—	—	—	—	—	—
Nigeria and British Cameroons ^a	*X	—	—	—	*X	—	—	—	*X	*X	*X	—	—	—	—
Northern Rhodesia	—	—	—	—	—	—	X	X	X	X	X	—	—	—	—
European holdings	*X	—	—	—	—	—	—	—	*X	—	—	—	—	—	—
African agriculture	*X	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
Nyasaland	—	—	—	—	—	—	—	—	*X	—	—	—	—	—	—
Seychelles	—	—	—	—	*X	—	—	—	—	—	—	—	—	—	—
Sierra Leone	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—	X	—	*X	*X	*X	—	—	—	—
European holdings	*X	—	—	*X	*X	—	—	*X	*X	—	—	—	—	—	—
African agriculture ^c	—	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
Swaziland	—	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
Tanganyika	—	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—
Tunisia	aX	—	—	X	—	—	—	—	X	X	X	—	—	—	Millet, canary seed and others
Uganda	*X	—	—	—	*X	—	—	—	*X	—	—	—	—	—	—

TABLE 10. QUESTIONS IN NATIONAL CENSUSES ON CEREALS HARVESTED FOR GRAIN

Code in the Expanded List	E-1.1	a	b	E-1.2	E-1.3	E-1.4	b	E-1.5	E-1.6	E-1.7	E-1.8	E-1.9	E-1.10	E-1.11
Union of South Africa														
"White" farms (excluding natives)	*X	—	—	*X	—	*aX	*X	*X	*X	*X	—	—	—	Buckwheat*
Native areas and farms and native farming on "white" farms	*X	—	—	—	—	*aX	*X	*X	—	—	—	—	—	Other winter cereals*
Zanzibar and Pemba	—	—	—	—	*X	*X	—	—	—	—	—	—	—	—
OCEANIA														
Australia	*X	—	—	*X	*X	*aX	*X	*cX	*dX	*X	—	—	—	Canary seed*
British Solomon Islands	—	—	—	—	*X	—	—	*X	—	—	—	—	—	—
Fiji	—	—	—	—	*X	X	—	*X	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	*X	—	—	—	—	—	—
Hawaii	—	—	—	—	*X	—	—	*X	*X	*X	—	—	—	—
New Zealand	*X	—	—	—	—	—	—	*X	—	—	—	—	—	—

Austria a) winter crops.
 Belgium a) by addition of the subitems.
 Belgium b) separate questions on autumn and spring sown crops.
 Czechoslovakia a) questions on crop production are known to have been asked, although the details are not available to show which crops were thus investigated.
 Czechoslovakia b) same remark as under Belgium a).
 Czechoslovakia c) same remark as under Belgium b).
 Finland a) same remark as under Belgium a).
 Finland b) separate questions on autumn, spring, and midsummer sown rye.
 Germany (Federal Republic) a) same remark as under Belgium a).
 Germany (Federal Republic) b) same remark as under Belgium b).
 Greece a) separate questions on first and second crops.
 Ireland a) same remark as under Belgium a).
 Luxembourg a) same remark as under Belgium a).
 Luxembourg b) same remark as under Belgium b).
 Luxembourg c) separate questions on mixed bread grains with more than 50 percent wheat and such with less than 50 percent wheat.
 Netherlands a) same remark as under Belgium a).
 Netherlands b) same remark as under Belgium b).
 Netherlands c) separate questions on white and yellow oats, and blackoats.
 Netherlands d) separate questions on wheat mixed with other grains (than rye), and other mixtures of grains (to be specified).
 Norway a) same remark as under Belgium a).
 Norway b) same remark as under Belgium b).
 Portugal a) separate questions on irrigated and nonirrigated crops.
 Saar a) same remark as under Belgium a).
 Saar b) same remark as under Belgium b).
 Sweden a) same remark as under Belgium a).
 Sweden b) same remark as under Belgium b).
 Sweden c) including mixtures of grains and pulses.
 Switzerland a) same remark as under Belgium a).
 Switzerland b) same remark as under Belgium b).
 Switzerland c) separate questions on mixtures containing bread grains and other mixtures.
 United Kingdom a) in Scotland, same remark as under Belgium a).
 United Kingdom b) in Scotland only.

United Kingdom c) in England and Wales; including mixtures of grains with pulses, or of pulses only; in Northern Ireland: same remark as under Sweden c).
 Alaska a) same remark as under United Kingdom c) (referring to England and Wales).
 Canada a) same remark as under Belgium a).
 Canada b) a separate question on durum wheat.
 Canada c) separate questions on winter and spring crops.
 Costa Rica a) separate questions on sole and associated crops.
 Costa Rica b) same remark as under Greece a).
 Dominican Republic a) same remark as under Portugal a).
 Dominican Republic b) same remark as under Costa Rica a).
 El Salvador a) same remark as under Costa Rica a).
 El Salvador b) separate questions on crops sown in May, in September, and in other seasons.
 Guatemala a) same remark as under Costa Rica a).
 Guatemala b) separate questions on first or only sowing, and second sowing.
 Honduras a) separate questions on early and late crops.
 Jamaica a) separate questions on swamp and hill rice.
 Jamaica b) same remark as under Belgium b).
 Mexico a) separate questions on crops on rainfed land, naturally humid land, and irrigated land.
 Mexico b) separate questions on common and hybrid maize, and among the former, on sole and associated crops.
 Panama a) separate questions on first and second crop and, among the former, on sole and associated crops.
 United States a) same remark as under Canada b).
 United States b) separate questions on various mixtures.
 Argentina a) same remark as under Belgium a).
 Argentina b) separate questions on barley for malt and for fodder.
 Bolivia a) in the production question, separate questions on cleaned and uncleaned rice.
 Bolivia b) Cañahua (Peruvian millet).
 Brazil a) same remark as under Costa Rica a).
 Chile a) same remark as under Costa Rica a).
 Chile b) same remark as under Portugal a).
 Colombia a) same remark as under Costa Rica a).

Ecuador a) same remark as under Belgium b).
 Ecuador b) separate questions on dry and green maize.
 Uruguay a) separate questions on wheat for bread, for noodles, and for fodder.
 Uruguay b) same remark as under Argentina a).
 Aden Protectorate a) same remark as under Belgium a).
 Burma a) separate questions on five species of rice.
 Ceylon a) separate questions on the Yala and the Maha crop season. Production data asked on small holdings only, not on estates.
 Ceylon b) separate questions on paddy and hill paddy.
 Ceylon c) same remark as under Belgium a).
 Ceylon d) Kurakkan (*Eleusine coracana*).
 India a) same remark as under Belgium a).
 India b) separate questions on bajra, ragi, common millet, Italian millet and small millet.
 Iraq a) the questions on crop production refer to another crop year than those on crop areas.
 Japan a) separate questions on paddy rice and upland rice.
 Japan b) same remark as under Belgium a).
 Japan c) separate questions on proso millet (*Panicum miliaceum*), ragi or co-rakan (*Eleusine coracana*), Italian millet (*Setaria italica*), barnyard millet (*Panicum crusgalli*) and pearl millet (*Pennisetum typhoides*).
 Japan d) separate questions on barley, barley for brewery and naked barley.
 Jordan a) same remark as under Portugal a).
 Jordan b) slender wild oats (*Avena fatua*).
 Malaya a) same remark as under Ceylon d).
 Philippines a) separate questions on first crop lowland, second crop lowland, and upland-and-kaiñgin crop.
 Philippines b) separate questions on first, second, and third crop.
 Ryukyu Islands a) separate questions on first and second period.
 Thailand a) separate questions on floated rice, garden rice, upland rice and glutinous rice of all kinds.
 Turkey a) separate questions on soft and hard millet.
 Algeria a) separate questions on hard and soft wheat.
 Bechuanaland a) by addition of the subitems.
 Egypt a) same remark as under Costa Rica a).
 Egypt b) separate questions on summer crops and flood crops.

Mozambique a) same remark as under Belgium a).
 Nigeria a) separate questions on main farm land and dry season land and, within each, on first and second crop.
 Nigeria b) same remark as under Belgium a).
 Nigeria c) separate questions on Guinea corn and Masakwa.
 Northern Rhodesia a) same remark as under Belgium a).
 Southern Rhodesia a) same remark as under Portugal a).
 Southern Rhodesia b) separate questions on hybrid and other maize.
 Southern Rhodesia c) on production, separate questions on production under sole crop and that under mixed crops.
 Southern Rhodesia d) same remark as under Belgium a).
 Southern Rhodesia e) also separate questions on small grains (munga and kaffir corn [i.e. sorghum] together), and on millets and sorghums (small grains and rupoko together).
 Southern Rhodesia f) separate questions on rupoko (*Eleusine coracana*) and munga or pearl millet (*Pennisetum*).
 Tanganyika a) same remark as under Belgium a).
 Tunisia a) same remark as under Algeria a).
 Union of South Africa a) same remark as under Belgium a).
 Union of South Africa b) separate questions on bulrush and dwarf millet.
 Australia a) same remark as under Belgium a).
 Australia b) also a separate question on sorghum for seed.
 Australia c) same remark as under Southern Rhodesia b).
 Australia d) same remark as under Belgium a).

Note to item E-1.11: Other cereals harvested for grain.
 Of the two kinds of grains mentioned in the Program under this item, buckwheat was asked for in eight censuses (of which four also asked for production), and quinoa in one (area and production). In addition, canary seed was asked for in six censuses (of which four also asked for production). Buckwheat, canary seed, and millets are also mentioned a few times each in descriptions of miscellaneous items. The low frequency of questions on production data reflects not only the geographical differences in the approach to production data, as commented above, but also the reluctance of many countries to ask questions on the production of miscellaneous items. "Cereals" as a single item show up in two censuses only.

TABLE 11. QUESTIONS IN NATIONAL CENSUSES ON LEGUMINOUS CROPS FOR GRAIN

ITEM	Soybeans	All dry beans and peas	Edible dry beans	Lentils	Chick-peas	Edible dry peas	Other legumes for grain (Lupines, vetches, fenugreek, etc.)
Code in the Expanded List	E-2 1	E-2.2	a	b	c	d	e
Code in the Short List	20	(21-22)	21	—	—	22	—
Number of censuses asking the question on crop areas	19	47	60	21	21	41	36
Number of censuses asking the question on crop production	15	24	42	12	14	25	18
COUNTRY							
EUROPE							
Austria	—	a X	X	—	—	X	Other pulses (fodder peas, field beans, soybeans, lentils) and mixtures of pulses and grains
Belgium	—	a X	b X	—	—	X	Lupines, vetches.
Czechoslovakia*	X	a X	b X	X	—	X	Mixtures of grains and pulses ^c . All other kinds of pulses and their mixtures
Denmark	—	X	—	—	—	—	—
Finland	—	—	—	—	—	* X	—
Germany (Federal Republic)	—	a X	X	—	—	X	Lupines ^b . Vetches. Fodder peas. Fodder beans. Mixtures of pulses or of pulses and cereals
Greece ^a	—	b X	c, d X	X	X	—	Vetches ^e . Other dry pulses for food. Other dry pulses for feed
Ireland	—	a X	X	—	—	X	—
Luxembourg	—	a X	X	X	—	X	Lupines. Vetches. Fodder beans for grain. Mixtures of pulses and cereals for grain
Malta and Gozo	—	—	*, a X	—	—	—	Vetches* ^b
Netherlands	—	a X	b X	—	—	c X	—
Norway	—	—	—	—	—	X	—
Portugal ^a	—	—	b X	—	X	—	—
Saar	—	a X	b X	X	—	X	Lupines ^c . Vetches. Fodder peas for grain. Mixed pulses for grain
Sweden	—	a X	b X	—	—	X	Fodder peas and vetches
United Kingdom	—	a X	a, b X	—	—	c X	Vetches ^d . Beans for stock-feeding. Peas for stock-feeding
NORTH AND CENTRAL AMERICA							
British Honduras	—	—	* X	—	—	* X	—
Canada	* X	*, a X	* X	—	—	* X	—
Costa Rica	—	—	*, a, b X	—	—	—	—
Dominican Republic	* X	*, a X	*, b, c X	—	* X	*, c X	Pigeon peas (<i>Cajanus indicus</i>)* ^c
El Salvador	—	—	*, a, b X	—	—	—	—
Guatemala	—	*, a X	*, b, c X	* X	* X	* X	—
Haiti	—	—	—	—	—	* X	—
Honduras	—	—	*, a X	—	—	—	—
Leeward Islands	—	—	* X	—	—	* X	—
Mexico	—	—	*, a X	* X	*, b X	—	—
Panama	—	—	*, a X	—	—	—	Pigeon peas (<i>Cajanus indicus</i>)* ^b
Puerto Rico	—	—	* X	—	—	—	Pigeon peas* Cow peas*
Trinidad and Tobago	—	X	—	—	—	—	—
United States	* X	*, a X	*, b X	—	—	*, c X	Mung beans* Velvet beans* Cow peas*
Virgin Islands	—	—	* X	—	—	—	—
Windward Islands	—	a X	—	—	—	—	—

TABLE 11. QUESTIONS IN NATIONAL CENSUSES ON LEGUMINOUS CROPS FOR GRAIN

Code in the Expanded List	E-2.1	E-2.2	a	b	c	d	e
SOUTH AMERICA							
Argentina	X	a X	b X	X	X	X	—
Bolivia	—	*, a, o, r, b X	*, b X	—	* X	* X	—
Brazil ^a	* X	*, a, o, r, b X	*, c X	* X	—	* X	Pigeon peas* Cowage or cali-* beans (<i>Mucuna</i> spp.)
Chile ^{a, b}	—	*, c X	* X	* X	* X	* X	—
Colombia ^a	—	*, b X	*, c X	* X	* X	* X	Other leguminous crops
Ecuador	—	*, a X	*, b X	* X	—	* X	Other leguminous crops*
Uruguay	—	*, a X	*, b X	* X	* X	*, c X	—
Venezuela	* X	*, a X	*, b X	* X	* X	* X	Pigeon peas*
ASIA							
Burma	* X	*, a X	*, b X	—	* X	—	Other dry peas and beans
Ceylon	—	a X	—	—	—	—	—
Cyprus	—	*, a X	*, b X	* X	* X	*, c X	Lupines* Vetches*, d Cow peas*
India	—	a X	X	—	X	X	Mung beans (<i>Phaseolus Mungo</i> , var. <i>chlorospermus</i>) Black gram (<i>Phaseolus Mungo</i> , var. <i>melanospermus</i>). Horse gram (<i>Dolichos biflorus</i>) Orhar (tur). Masur. Khesari. Other pulses
Iraq	—	a X	b X	X	—	X	Vetches. Green gram or mung beans
Israel	—	a X	* X	*—	*—	—	Other pulses
Jewish holdings	—	a X	*, b X	* X	* X	—	Vetches ^c
Arab holdings	*, a X	*, b X	*, c X	—	—	* X	Green gram or mung beans*. Cowpeas*. Sword beans (<i>Cannalia ensiformis</i>)*. Jack beans (<i>Vigna catjang</i>). Hyacinth beans*
Japan	—	—	—	—	—	—	Vetches ^d
Jordan ^a	—	*, b X	*, c X	* X	* X	—	—
Malaya, Federation of	* X	X	—	—	—	—	—
North Borneo	* X	—	* X	—	—	—	—
Philippines	* X	a X	*, b X	—	—	* X	Mung beans*. Cowpeas (<i>Vigna sinensis</i>)*. Singapore beans (<i>Vigna sinensis</i> var. <i>Sesquipedalis</i>)*
Ryukyu Islands	* X	* X	—	—	—	—	—
Thailand	X	X	—	—	—	—	Mung beans
Turkey	—	*, a X	*, b X	* X	* X	*, c X	Vetches*, d
AFRICA							
Algeria	—	a X	b X	X	X	X	Other leguminous crops (Vetches, haricot beans, etc.)
Bechuanaland	—	—	* X	—	—	—	—
Belgian Congo	—	—	* X	—	—	—	Pois du Cap (Lima beans)*. Other leguminous crops*
Europeans and developed Negroes	—	—	* X	—	—	—	Vetches
Egypt ^a	—	—	X	X	X	—	—
Gambia	—	*, a X	* X	—	—	* X	—
Gold Coast and British Togoland	—	* X	—	—	—	—	—
Kenya	—	—	—	—	—	—	—
Mozambique	* X	—	*, a X	—	* X	—	Lupines*. Rattlewort or wild pea (<i>Crotalaria sagittalis</i>)* Cowpeas*, a
Nigeria and British Cameroons	—	—	—	—	—	—	—
Nyasaland	—	* X	—	—	—	—	—
Sierra Leone	—	* X	—	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—	—
European holdings	* X	—	* X	—	—	—	Cowpeas* Velvet beans*
African agriculture	—	*, a X	—	—	—	—	—
Swaziland	* X	—	* X	—	—	—	—
Tanganyika	—	—	—	—	—	—	—
Tunisia	—	a X	b X	X	X	X	Other leguminous crops (vetches, haricot beans, etc.)

TABLE 11. QUESTION IN NATIONAL CENSUSES ON LEGUMINOUS CROPS FOR GRAIN

Code in the Expanded List	E-2.1	E-2.2	a	b	c	d	e
Uganda	*X	*aX	*X	—	—	*X	—
Union of South Africa							
"White" farms, excluding natives on them	*X	*aX	*X	—	—	*X	—
"Native" areas and farms and natives on "white" farms	—	*aX	*bX	—	—	*cX	—
Zanzibar and Pemba	—	—	*X	—	—	—	—
OCEANIA							
Australia	—	—	*aX	—	—	*bX	—
Fiji	—	—	*X	—	—	—	—
Guam	—	—	*X	—	—	—	—
Hawaii	—	—	*X	—	—	—	—
New Zealand	—	—	—	—	—	*X	—

Austria ^a) by addition of the subitems.
 Belgium ^a) same remark as under Austria ^a).
 Belgium ^b) separate questions on beans and broad beans.
 Czechoslovakia ^a) same remark as under Austria ^a).
 Czechoslovakia ^b) same remark as under Belgium ^b).
 Czechoslovakia ^c) separate questions on winter and spring sown crops.
 Germany (Federal Republic) ^a) same remark as under Austria ^a).
 Germany (Federal Republic) ^b) separate questions on sweet and bitter lupines.
 Greece ^a) separate questions on first and second crops.
 Greece ^b) same remark as under Austria ^a).
 Greece ^c) same remark as under Belgium ^b).
 Greece ^d) separate questions on beans grown alone and grown together with maize.
 Greece ^e) separate questions on vetches and bitter vetches (*Vicia e vilia*).
 Ireland ^a) same remark as under Austria ^a).
 Luxembourg ^a) same remark as under Austria ^a).
 Malta and Gozo ^a) broad beans.
 Malta and Gozo ^b) separate questions on white, black, and bitter vetches.
 Netherlands ^a) same remark as under Austria ^a).
 Netherlands ^b) separate questions on kidney beans, white beans, large broad beans (including mixtures), pigeon beans (including mixtures), and other broad beans (including mixtures).
 Netherlands ^c) separate questions on green peas, marrowfat peas and two kinds of grey peas.
 Portugal ^a) separate questions on dry and irrigated area.
 Portugal ^b) same remark as under Belgium ^b).
 Saar ^a) same remark as under Austria ^a).
 Saar ^b) separate questions on kidney beans and broad beans.
 Saar ^c) same remark as under Germany (Federal Republic) ^b).
 Sweden ^a) same remark as under Austria ^a).
 Sweden ^b) kidney beans.
 United Kingdom ^a) Northern Ireland only.
 United Kingdom ^b) in England and Wales included among the vegetables.
 United Kingdom ^c) in England and Wales and Northern Ireland; in Scotland included among the vegetables.
 United Kingdom ^d) England and Wales only.
 Canada ^a) same remark as under Austria ^a).
 Costa Rica ^a) same remark as under Greece ^a).
 Costa Rica ^b) separate questions on sole and associated crops.
 Dominican Republic ^a) same remark as under Austria ^a).
 Dominican Republic ^b) separate questions on sole and associated crops.
 Dominican Republic ^c) separate questions on kidney beans, broad beans, and other beans.
 El Salvador ^a) same remark as under Dominican Republic ^b).
 El Salvador ^b) separate questions on crops sown in May, September, and in any other season.
 Guatemala ^a) same remark as under Austria ^a).
 Guatemala ^b) same remark as under Belgium ^b).
 Guatemala ^c) separate questions on sole and associated crops.
 Honduras ^a) separate questions on early and late crops.

Mexico ^a) separate questions on kidney beans as a sole crop, kidney beans as an associated crop, and broad beans harvested dry.
 Mexico ^b) separate questions on two varieties.
 Panama ^a) separate questions on first sowing and other sowings.
 Panama ^b) same remark as under Dominican Republic ^b).
 United States ^a) same remark as under Austria ^a).
 United States ^b) separate questions on Lima beans, blackeye, small white, pink, red kidney, pinto, cranberry and peas and navy beans.
 United States ^c) separate questions on Alaska peas, Canada peas and garden seed peas.
 Windward Islands ^a) edible dry beans and peas.
 Argentina ^a) same remark as under Austria ^a).
 Argentina ^b) same remark as under Belgium ^b).
 Bolivia ^a) same remark as under Austria ^a).
 Bolivia ^b) same remark as under Belgium ^b).
 Brazil ^a) same remark as under Dominican Republic ^b).
 Brazil ^b) same remark as under Austria ^a).
 Brazil ^c) same remark as under Belgium ^b).
 Chile ^a) same remark as under Portugal ^a).
 Chile ^b) same remark as under Dominican Republic ^b).
 Chile ^c) same remark as under Austria ^a).
 Colombia ^a) same remark as under Dominican Republic ^b).
 Colombia ^b) same remark as under Austria ^a).
 Colombia ^c) same remark as under Belgium ^b).
 Ecuador ^a) same remark as under Austria ^a).
 Ecuador ^b) same remark as under Belgium ^b).
 Uruguay ^a) same remark as under Austria ^a).
 Uruguay ^b) same remark as under Belgium ^b).
 Uruguay ^c) separate questions on peas and winter peas.
 Venezuela ^a) same remark as under Austria ^a).
 Venezuela ^b) separate questions on two varieties.
 Burma ^a) same remark as under Austria ^a).
 Burma ^b) separate questions on pegyi (large white beans), pegya (red beans), pebyugale (small white beans, and peseingon).
 Ceylon ^a) separate questions on the Yala and the Maha crop season.
 Cyprus ^a) same remark as under Austria ^a).
 Cyprus ^b) same remark as under Belgium ^b).
 Cyprus ^c) a variety called favetta.
 Cyprus ^d) separate questions on two varieties.
 India ^a) same remark as under Austria ^a).
 Iraq ^a) same remark as under Austria ^a).
 Iraq ^b) same remark as under Malta and Gozo ^a).
 Israel ^a) same remark as under Austria ^a).
 Israel ^b) same remark as under Malta and Gozo ^a).
 Israel ^c) kersennah or bitter vetch (*Vicia ervilia*).
 Japan ^a) separate question on dried and green soybeans.
 Japan ^b) same remark as under Austria ^a).
 Japan ^c) separate questions on kidney beans, broad beans, Azuki beans. (*Phaseolus angularis*), scarlet runner beans (*Mutiflora* spp.), and Lima beans.
 Jordan ^a) separate questions on dry and irrigated area.

Jordan ^b) same remark as under Austria ^a).
 Jordan ^c) same remark as under Malta and Gozo ^a).
 Jordan ^d) separate questions on vetch or kersenneh (*Vicia* spp.), beika (*Vicia* spp.), and bitter vetch (*Lathyrus montanus*).
 Philippines ^a) same remark as under Austria ^a).
 Philippines ^b) separate questions on bountiful beans (*Phaseolus vulgaris*), Anipay (*Phaseolus calcaratus*), Goa beans (*Psophocarpus tetragonolobus*) and all other beans.
 Turkey ^a) same remark as under Austria ^a).
 Turkey ^b) same remark as under Belgium ^b).
 Turkey ^c) separate questions on peas and blackeyed peas.
 Turkey ^d) separate questions on common vetch (*Vicia ervilia*) and vetching (*Vicia cracca*).
 Algeria ^a) same remark as under Austria ^a).
 Algeria ^b) same remark as under Malta and Gozo ^a).
 Egypt ^a) same remark as under Dominican Republic ^b).
 Gambia ^a) same remark as under Austria ^a).
 Mozambique ^a) separate questions on seven varieties.
 Nigeria ^a) separate questions regarding main farm land and dry season land and within each, on first and second crop.
 Southern Rhodesia ^a) on production, separate questions on production under sole crops and under mixed crops.
 Tunisia ^a) same remark as under Austria ^a).

Tunisia ^b) same remark as under Malta and Gozo ^a).
 Uganda ^a) same remark as under Austria ^a).
 Union of South Africa ^a) same remark as under Austria ^a).
 Union of South Africa ^b) including cow-peas, and on production, separately.
 Union of South Africa ^c) including lentils and on production, separately.
 Australia ^a) same remark as under Malta and Gozo ^a).
 Australia ^b) separate questions on grey peas and other field peas.
 Note to item E-2.2.e : Other legumes for grain.
 Among the species listed within brackets in this item in the FAO Program, lupines was asked for by six censuses (of which two also asked for production), and vetches by 13 (three asking for production). Fenugreek does not seem to have been listed as a separate item in any of the participating censuses. Among other leguminous crops asked for separately in national censuses — apart from varieties listed in the footnotes to beans and peas — are cowpeas, asked for in eight censuses, mung beans in six, pigeon peas (a tree or bush crop) in five. Altogether 77 censuses seem to have asked one or more questions on leguminous crops for grain.
 There is a certain amount of overlap between this section and that on vegetables. It has not always been possible to settle whether a question should be read as belonging to one or the other group. All pulse crops in the Swiss census and some of these crops in the United Kingdom census, are included among vegetables.

TABLE 12. QUESTIONS IN NATIONAL CENSUSES ON TUBER AND ROOT CROPS FOR FOOD OR FEED

ITEM	Potatoes	Manioc	Arrowroot	Sweet potatoes including yams	Other tuber and root crops grown principally for feed (turnips, mangels, Jerusalem artichokes, swedes, carrots, etc., grown principally for feed)
Code in the Expanded List	E-3.1	E-3.2	E-3.3	E-3.4	E-3.5
Code in the Short List	23	—	—	—	—
Number of censuses asking the question on crop areas	65	47	8	59	48
	1				
Number of censuses asking the question on crop production	42	37	7	49	27
	1				
COUNTRY					
EUROPE					
Austria	a X	—	—	—	All other tuber and root crops (mangels, swedes, fodder cabbage, fodder carrots, Jerusalem artichokes)
Belgium	a X	—	—	—	Turnips ^b , Mangels ^c , Swedes, Carrots
Czechoslovakia	a X	—	—	—	Turnips ^b , Mangels ^c , Swedes, Carrots. All other root crops (fodder kohlrabi, Jerusalem artichokes, etc.)
Denmark	X	—	—	—	Turnips, Mangels ^a , Swedes, Carrots
Finland	*a X	—	—	—	Turnips ^a , Mangels ^a , Swedes ^a , Other root crops ^a
Germany (Federal Republic)	a, b X	—	—	—	Mangels, Swedes, Carrots. All other tuber and root crops (including Jerusalem artichokes)
Greece	a X	—	—	—	—
Ireland	X	—	—	—	Turnips, Mangels
Luxembourg	a X	—	—	—	Turnips ^b , Swedes, Carrots. All other tuber and root crops
Malta and Gozo	a, b X	—	—	—	—
Netherlands	a X	—	—	b X	Mangels, Swedes, Carrots
Norway	X	—	—	—	Turnips, Mangels, Swedes
Portugal	a X	—	—	—	—
Saar	a X	—	—	—	Mangels, Swedes, Carrots. All other tuber and root crops
Sweden	a X	—	—	—	Root crops for fodder
Switzerland	X	—	—	—	Turnips and swedes, Mangels ^a , Carrots ^{b, c}
United Kingdom	a X	—	—	—	Turnips and swedes ^b , Mangels
NORTH AND CENTRAL AMERICA					
Alaska	* X	—	—	—	Root crops (give name)*
Barbados	—	* X	—	*a X	—
Bermuda	* X	—	—	* X	—
British Honduras	—	X	—	—	—
Canada	* X	—	—	—	Turnips, mangels and swedes*
Costa Rica	*a, b X	*b X	—	—	—
Dominican Republic	* X	*a X	—	*b X	Yautia or tanier (<i>Xanthosoma sagittaeifolium</i>)*
Guatemala	* X	* X	—	—	—
Haiti	—	—	—	*a X	—
Honduras	* X	* X	—	*a X	—
Leeward Islands	* X	* X	* X	* X	—
Mexico	* X	—	—	*a X	Mangels, Jerusalem artichokes
Panama	*a X	b X	—	*c X	—
Puerto Rico	* X	* X	—	*a X	Yautia or cocoyams (colocasia)* Malanga or dasheen (<i>Xanthosoma</i>)*
Trinidad and Tobago	—	* X	—	* X	Other root crops*
United States	* X	—	—	*a X	—
Virgin Islands	* X	* X	—	*a X	—
Windward Islands	—	* X	* X	*a X	Tanya or cocoyams (colocasia)*

TABLE 12. QUESTIONS IN NATIONAL CENSUSES ON TUBER AND ROOT CROPS FOR FOOD OR FEED

Code in the Expanded List	E-3.1	E-3.2	E-3.3	E-3.4	E-3.5
SOUTH AMERICA					
Argentina	a X	X	—	b X	—
Bolivia	* X	* X	—	*a X	Oca (<i>Oxalis tuberosa</i>)*, Papaliza*, Mangolds
Brazil^a	* X	*b X	* X	*c X	—
British Guiana	—	—	—	—	Tuber and root crops
Chile	*a, b X	—	—	—	—
Colombia^a	* X	* X	—	*b X	Bogota arrowroot (<i>Arracacia moschata</i>)*, Other tuber and root crops*
Ecuador	* X	* X	—	*a X	Other root crops*
Uruguay	* X	* X	—	*a X	—
Venezuela	* X	* X	—	*a X	Tanier (<i>Xanthosoma</i>)
ASIA					
Brunei	—	* X	—	* X	Derris*
Burma	* X	—	—	—	—
Ceylon^a	X	X	—	b X	Other root crops
Cyprus	*a X	—	—	—	—
India	—	X	—	—	—
Iraq	X	—	—	—	—
Israel	—	—	—	—	—
Jewish holdings	* X	—	—	a X	—
Arab holdings	* X	—	—	—	—
Japan	* X	—	—	*a X	Mangels, Swedes, Dasheen*
Jordan	*a, b X	—	—	—	—
Malaya, Federation of	—	* X	—	* X	Colocasia*, Tuba-root (<i>Derris elliptica</i>)*
North Borneo	* X	* X	—	* X	—
Philippines	* X	* X	* X	*a X	Cocoyams (colocasia)*, Yam bean (<i>Pachyrhizus eros</i>)*, Tanier (<i>Xanthosoma</i>)*, Galiang (<i>Cyrosperma Merkusii</i>)*, Tubah root (<i>Derris elliptica</i>)*
Ryukyu Islands	—	—	—	*a X	—
Singapore Island	—	* X	—	* X	—
Thailand	—	X	—	a X	Derris, Taro, yam and other tuber and root crops not elsewhere specified.
Turkey	* X	—	—	—	Turnips* ^a , Mangels* ^a
AFRICA					
Algeria	X	—	—	a X	—
Belgian Congo	—	* X	—	*a X	Taro, etc.*
Europeans and developed Negroes	—	* X	—	*a X	—
Undeveloped Negroes	b X	—	—	c X	Colocasia
Egypt^a	—	* X	—	X	—
Gambia	—	* X	—	X	Cocoyams (colocasia)*
Gold Coast and British Togoland	—	* X	—	* X	—
Kenya	X	—	—	—	—
Mauritius	* X	* X	—	* X	—
Mozambique	* X	* X	—	*a X	—
Nigeria and British Cameroons^a	—	* X	—	*b X	—
Northern Rhodesia	—	—	—	—	—
European holdings	*a X	—	—	—	—
African agriculture	—	X	—	—	—
Nyasaland	* X	* X	—	* X	—
Seychelles	—	* X	—	* X	—
Sierra Leone	—	* X	—	* X	—
Southern Rhodesia	—	—	—	—	—
European holdings	*a X	—	—	*b X	—
St. Helena	* X	—	—	* X	—
Swaziland	* X	—	—	*a X	—
Tanganyika	—	* X	—	*a X	—
Tunisia	X	—	—	a X	—
Uganda	* X	* X	—	* X	—

TABLE 12. QUESTIONS IN NATIONAL CENSUSES ON TUBER AND ROOT CROPS FOR FOOD OR FEED

Code in the Expanded List	E-3.1	E-3.2	E-3.3	E-3.4	E-3.5
Union of South Africa "White" holdings excluding natives thereon Native farms and areas and natives on "white" farms	* X *	—	—	* a X * a	— *
Zanzibar and Pemba	—	* X	—	* X	—
←-----X-----→					
OCEANIA					
American Samoa	—	—	* X	* a X	Taro*
Australia	* a X	—	* X	* b, c X	Mangels*. Turnips* Other root crops*
British Solomon Islands	—	* X	—	* X	Taro*
Cook and Niue Islands	—	X	—	a X	Taro. Kumaras
Fiji	* X	* X	X	* X	Taro*
Gilbert and Ellice Islands	—	—	—	—	Colocasia antiquorum and babai (Alocasia indica)*
Guam	—	* X	* X	* a X	Taro*
Hawaii	* X	—	—	* a X	Upland taro*. Wetland taro*.
New Zealand	* X	—	—	—	Turnips ^a , Mangels. Swedes. Rapes. Turnips and rapes mixed
Papua and New Guinea	—	—	—	a X	Taro
Tonga	—	* X	—	* X	Taro*
Western Samoa	—	X	—	a X	Taro. Ta'amu*

Austria ^a) separate questions on early and late crop.
 Belgium ^a) also separate questions on early, half early and late crop.
 Belgium ^b) also a separate question on rape-colewort (chou-navet).
 Belgium ^c) including semi-sugar beets.
 Czechoslovakia ^a) separate questions on early, half-early, and late crop.
 Denmark ^a) separate questions on mangels, fodder sugar beets, and sugar beets grown for fodder.
 Finland ^a) also asked for among the vegetables.
 Germany (Federal Republic) ^a) same remark as under Finland ^a).
 Germany (Federal Republic) ^b) separate questions on "prepared early" other early, and late crop.
 Greece ^a) separate questions on first and second crop.
 Luxembourg ^a) same remark as under Czechoslovakia ^a).
 Luxembourg ^b) including sugar beets.
 Malta and Gozo ^a) separate questions on dry and irrigated area.
 Malta and Gozo ^b) separate questions on winter and spring crop.
 Netherlands ^a) separate questions on potatoes for human consumption grown on clay soil, grown on sand and peat soil, and potatoes for industrial purposes.
 Netherlands ^b) separate questions on early crops with and without successive cultivation.
 Portugal ^a) same remark as under Malta and Gozo ^a).
 Saar ^a) same remark as under Austria ^a).
 Sweden ^a) same remark as under Finland ^a).
 Switzerland ^a) same remark as under Belgium ^b).
 Switzerland ^b) including all kinds of carrots, not only for fodder.
 Switzerland ^c) separate questions on sole and associated crops.
 United Kingdom ^a) in England and Wales and Scotland, separate questions were asked on "first earlies", and "main crop and second earlies".
 United Kingdom ^b) in Northern Ireland only turnips.
 Barbados ^a) including cocoyams.
 Costa Rica ^a) separate questions on first and second sowing.
 Costa Rica ^b) separate questions on sole and associated crops.
 Dominican Republic ^a) separate questions on sweet and bitter manioc.
 Dominican Republic ^b) separate questions on sweet potatoes, yams and mapuey (*Dioscorea clifontiana*).
 Haiti ^a) sweet potatoes only.
 Honduras ^a) same remark as under Haiti ^a).
 Mexico ^a) same remark as under Haiti ^a).
 Panama ^a) separate questions on spring sown and autumn sown crop.
 Panama ^b) separate questions on sole and associated crops.
 Panama ^c) yams only.

Puerto Rico ^a) separate questions on sweet potatoes and yams.
 United States ^a) same remark as under Haiti ^a).
 Virgin Islands ^a) same remark as under Puerto Rico ^a).
 Windward Islands ^a) including cocoyams (edoes) and dasheens.
 Argentina ^a) two separate questions: one on early, half-early and half-late, another on late crop.
 Argentina ^b) same remark as under Haiti ^a).
 Bolivia ^a) same remark as under Haiti ^a).
 Brazil ^a) same remark as under Panama ^b).
 Brazil ^b) same remark as under Dominican Republic ^a).
 Brazil ^c) separate questions on sweet potatoes, yams and cara (a Brazilian variety of yam).
 Chile ^a) same remark as under Malta and Gozo ^a).
 Chile ^b) same remark as under Panama ^b).
 Colombia ^a) same remark as under Panama ^b).
 Colombia ^b) same remark as under Panama ^c).
 Ecuador ^a) same remark as under Haiti ^a).
 Uruguay ^a) same remark as under Haiti ^a).
 Venezuela ^a) same remark as under Panama ^c).
 Ceylon ^a) separate questions on the Yala and the Maha crop season.
 Ceylon ^b) same remark as under Haiti ^a).
 Cyprus ^a) separate questions on winter crop, summer crop, and hill crop.
 Israel ^a) same remark as under Haiti ^a).
 Japan ^a) same remark as under Haiti ^a).
 Jordan ^a) same remark as under Finland ^a).
 Jordan ^b) same remark as under Malta and Gozo ^a).
 Philippines ^a) separate questions on sweet potatoes (*Ipomaea batatas*), kangkong (*Ipomaea aquatica*), red yam (*Dioscorea alata*), and Goa yam (*Dioscorea esculentum*).
 Ryukyu Islands ^a) same remark as under Haiti ^a).
 Thailand ^a) sweet potatoes only, yams are combined with taro and other tuber and root crops.
 Turkey ^a) asked only from *mukhtars* (village headmen) and large farms.
 Algeria ^a) same remark as under Haiti ^a).
 Belgian Congo ^a) same remark as under Puerto Rico ^a).
 Egypt ^a) same remark as under Panama ^b).
 Egypt ^b) separate questions on winter crops and flood crops.
 Egypt ^c) same remark as under Haiti ^a).
 Mozambique ^a) same remark as under Haiti ^a).
 Nigeria ^a) separate questions on main farmland and dry season land and within each, on first and second crop.

Nigeria ^b) same remark as under Haiti ^a).
 Northern Rhodesia ^a) separate questions on main crop and irrigated crop.
 Southern Rhodesia ^a) separate questions on summer crops and winter crop.
 Southern Rhodesia ^b) same remark as under Haiti ^a).
 Swaziland ^a) same remark as under Haiti ^a).
 Tanganyika ^a) same remark as under Haiti ^a).
 Tunisia ^a) same remark as under Haiti ^a).
 Union of South Africa ^a) same remark as under Haiti ^a).
 American Samoa ^a) same remark as under Puerto Rico ^a).
 Australia ^a) separate questions on early crop and main crop.
 Australia ^b) same remark as under Haiti ^a).
 Australia ^c) separate questions on sweet potatoes for food and for feed.
 Cook Islands ^a) same remark as under Panama ^c).
 Guam ^a) same remark as under Puerto Rico ^a).
 Hawaii ^a) same remark as under Haiti ^a).
 New Zealand ^a) separate questions on white-fleshed (soft) and yellow-fleshed (hard) turnips.
 Papua ^a) separate questions on sweet potatoes, yams, taitu and mammies.
 Western Samoa ^a) same remark as under Panama ^c).

Note to item E-3.

More than 90 censuses are represented in the subsection on root crops, nearly the same number as the subsection on cereals. As in the case of leguminous crops for grain, though in an even higher degree, this subsection overlaps that on vegetables. Especially as regards mixed items, assignment to either group is almost arbitrary. The use of a crop mainly for human food or mainly for fodder, on which allocation should generally be based, is not always expressed clearly enough in the questionnaires to permit of a strict classification.

Item E-3.4: Sweet potatoes (including yams) was conceived as a mixed item, including two different crops (or groups of such). Most of the 59 censuses asking for this item have taken a different attitude. As will be seen from the footnotes, 24 of these censuses asked for sweet potatoes only and five for yams only, while nine asked separate questions on each of the two (or more) crops in the group. This leaves only 21 censuses asking the joint question as proposed. All these 21 are British dependencies, participating in the World Census on the basis of the London Program for colonial and underdeveloped areas. The joint question has thus evoked no response at all among independent countries, unless some of these countries intended that the single question relating to sweet potatoes should in fact include yams.

Item E-3.5: Other tuber and root crops grown principally for feed specified a tentative list of five crops which might be included here. Of these crops, mangels (or fodder beets in general) was asked for separately in about 20 countries, turnips in 11, swedes in 11, carrots in eight and Jerusalem artichokes as a feed crop in one country only. The first four of these five items thus reach a frequency which is at least equal to that reached by item E-3.3 (arrowroot), but none of them comes close to the frequency of either the potato, the manioc, or the sweet potato. These feed root crops belong mainly to the temperate zones, which explains their lower frequency and also the still much lower frequency of questions on production quantities (the majority of these countries being in Europe).

Among tropical root crops not mentioned in the FAO Program, the group called taro or cocoyams (*Colocasia* and similar) has been asked for in 16 censuses, taniel (*Xanthosoma*) in five, and the tubah-root (*Derris elliptica*) in three.

TABLE 13. QUESTIONS IN NATIONAL CENSUSES ON CROPS FOR HAY, PASTURE, GREEN FODDER AND SILAGE

I T E M	Grasses, legumes and grains cut for hay (total)		Alfalfa (lucerne)		Clover		Other leguminous crops for hay (espedeza, sainfoin, soybean, hay, etc.)		Grasses (timothy, redtop, sudan grass, orchard grass, immature grain, etc.)		Grasses, legumes and grains grown only for pasture, green feed or silage (total)		Alfalfa, clover and other leguminous plants		Grasses (bluegrass, timothy, etc.)		Maize grown for silage and sorghum		Cabbage for fodder		Pumpkins for fodder		Other fodder crops (Sunflower for fodder, etc)			
	E-4.1	a	b	c	d	E-4.2	a	b	c	d	E-4.2	a	b	c	E-5.1	E-5.2	E-5.3									
Code in the Expanded List	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Code in the Short List	10	30	14	17	28	6	7	13	23	2	28	7	13	23	2	5	32	—	—	—	—	—	—	—	—	
Number of censuses asking the question on crop area	<p style="text-align: center;">1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>																									
Number of censuses asking the question on production	4	11	4	4	11	4	1	4	11	4	4	1	3	7	—	4	11	—	—	—	—	—	—	—	—	—
COUNTRY	EUROPE																									
Austria	—	a X	a, b X	—	Temporary meadows	—	—	—	Temporary meadows	—	—	—	X	c X	—	—	All other fodder crops on arable land. Clover and grass mixed. Mixed leguminous plants	—	—	—	—	—	—	—	—	—
Belgium	—	a X	a, b X	Sainfoin ^a	Temporary meadows for hay	—	—	—	Temporary meadows for hay	—	—	—	Temporary meadows for grazing	c X	X	Spurry (Spergula), Serradella, Other fodder crops	—	—	—	—	—	—	—	—	—	—
Czechoslovakia	—	a X	a, b X	Sainfoin ^a	Meadows and pastures in the rotation ^a	—	—	—	Meadows and pastures in the rotation ^a	—	—	—	—	—	—	Mixtures of different clovers and of clovers and grasses. Maize, sunflower and mixtures of them. Cereals and pulses mixed for green fodder. All other fodder crops (Spurry, fodder mustard, Mohar millet (<i>Setaria italica</i> , subsp. <i>mocharicum</i>), fodder cabbage, etc.	—	—	—	—	—	—	—	—	—	—

TABLE 13. QUESTIONS IN NATIONAL CENSUSES ON CROPS FOR HAY, PASTURE, GREEN FODDER AND SILAGE

I T E M	Grasses, legumes and grains cut for hay (total)		Alfalfa (lucerne)		Clover		Other leguminous crops for hay (espedeza, sainfoin, soybean, hay, etc.)		Grasses (timothy, redtop, sudan grass, orchard grass, immature grain, etc.)		Grasses, legumes and grains grown only for pasture, green feed or silage (total)		Alfalfa, clover and other leguminous plants		Grasses (bluegrass, timothy, etc.)		Maize grown for silage and sorghum		Cabbage for fodder		Pumpkins for fodder		Other fodder crops (Sunflower for fodder, etc)			
	E-4.1	a	b	c	d	E-4.2	a	b	c	d	E-4.2	a	b	c	E-5.1	E-5.2	E-5.3									
Code in the Expanded List	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Code in the Short List	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Number of censuses asking the question on crop area	<p style="text-align: center;">1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100</p>																									
Number of censuses asking the question on production	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
COUNTRY	EUROPE																									
Denmark	X	a X	—	—	—	X	Lupines for green fodder or mixed pulses for green fodder, silage, etc.	Cereals for green fodder	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Finland	*, a X	—	—	—	—	*, b X	—	—	—	—	—	—	—	—	—	—	Leaf turnips for silage*	—	—	—	—	—	—	—	—	—
Germany (Federal Republic)	—	a X	a X	Serradella, esparsette and mixture of clover and alfalfa	Rotation grass for hay	—	—	—	Rotation grass for hay	—	—	—	—	—	—	—	Kale for fodder. Mixtures of clover and grass. All other food crops (e.g., green maize, vetches, sweet lupines, spurry, fodder mustard, etc.) for green fodder, silage and hay	—	—	—	—	—	—	—	—	
Greece	—	a X	—	—	Oats cut for hay, Barley cut for hay	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Luxembourg	—	a X	a, b X	Vetches Esparsette (sainfoin) ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Malta and Gozo	—	—	—	Sulla (<i>Hedysarum</i>)* Cicerpillar plant (<i>scorpiurus</i>) ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Netherlands	—	a X	a, b X	Lupines for fodder ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Norway	X	—	—	—	—	a X	—	—	—	—	a X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Saar	—	a X	a, b X	Sainfoin ^a , Vetches ^a , Sweet lupines ^a , Serradella, Mixtures of clover, alfalfa and sainfoin	Rotation grass for hay	—	Other crops for green fodder and silage	Rotation grass for pasture	c X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Sweden	X	—	—	—	—	—	—	—	—	—	X	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Switzerland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

TABLE 13. QUESTIONS IN NATIONAL CENSUSES ON CROPS FOR HAY, PASTURE, GREEN FODDER AND SILAGE

Code in the Expanded List	E-4.1	a	b	c	d	E-4.2	a	b	c	E-5.1	E-5.2	E-5.3
United Kingdom	a X	b, c X	-	-	-	d X	-	-	-	e X	-	Kale
Yugoslavia	-	-	-	-	-	-	-	-	-	-	-	-
NORTH AND CENTRAL AMERICA	-	-	-	-	-	-	-	-	-	-	-	-
Alaska	-	-	-	-	Mixed grains* Tame and cultivated grass*, a	-	-	Mixed grains for silage*	-	-	-	-
Canada	* X	← * X	-	-	Oats*, Other grains*	-	-	-	*, a X	-	-	-
Costa Rica	-	-	-	-	-	-	-	-	-	-	-	-
Dominican Republic	-	-	-	-	-	-	-	-	-	-	-	-
El Salvador	-	-	-	-	Guinea grass (<i>Panicum maximum</i>) ^a , Yaragua (<i>Panicum melinis</i>) ^a , Merker grass ^a , Yerba de paeza ^a , Other grasses ^a	-	-	-	-	-	-	-
Guatemala	-	a X	-	-	Millet, sown grasses ^a	-	-	-	a X	-	-	-
Honduras	-	-	-	-	-	-	-	-	b X	-	-	-
Mexico	-	-	-	-	-	-	-	-	*, a X	-	-	-
Puerto Rico	-	-	-	-	Pará grass (<i>Panicum molle</i>), Guinea grass (<i>Panicum maximum</i>), Yaragua (<i>Panicum melinis</i>), Guatemala grass, Merker grass, Elephant grass	-	-	-	*, b X	-	-	-
United States	-	* X	-	-	Lespedeza* Soybean hay* Cowpeas for hay*	-	-	-	-	-	-	-
Windward Islands	-	-	-	-	Oats, wheat, barley, rye, or other small grains cut for hay* Chested wheat grass* Orchard grass* June grass* Sweet clover, Millet, Sudan grass, Old meadows	-	-	-	b X	-	-	Clover on timothy, alone or mixed for hay*, Vetch or peas, alone or mixed with oats and other grains cut for hay*, Peanut vines or tops saved for hay or forage*, Root or green crops hogged off.

TABLE 13. QUESTIONS IN NATIONAL CENSUSES ON CROPS FOR HAY, PASTURE, GREEN FODDER AND SILAGE

Code in the Expanded List	E-4.1	a	b	c	d	E-4.2	a	b	c	E-5.1	E-5.2	E-5.3
SOUTH AMERICA	-	-	-	-	-	-	-	-	-	-	-	-
Argentina	-	X	-	-	Sudan grass ^a	-	Alfalfa	-	-	-	-	-
Bolivia	-	* X	-	-	-	-	-	-	-	-	-	Cultivated grass except alfalfa*, Barley for green fodder*
Brazil	-	*, a X	-	-	-	-	-	-	-	-	-	Sugar cane for fodder*
Chile^{a, b}	-	*, c X	*, c X	-	Cereals for fodder ^c Other sown grass ^{c, *} (specify)	-	-	-	d X	-	-	Other fodder crops
Colombia	-	X	-	-	Imperial grass, Elephant grass, Guatemala grass, Ray grass, Other grasses for hay	-	Carretón or meadow clover (<i>Trifolium pratense</i>)	-	-	-	-	Sugar cane for fodder
Falkland Islands	-	-	-	-	-	-	-	-	-	-	-	-
Uruguay	-	*, a X	-	-	Sudan grass* Ray grass*	-	Alfalfa	-	-	-	-	-
ASIA	-	-	-	-	-	-	-	-	-	-	-	-
Burma	-	-	-	-	-	-	-	-	-	-	-	-
Ceylon	-	-	-	-	-	-	-	-	-	-	-	-
Cyprus	-	a X	a, b X	Vicos ches ^a	(Green vet- Green barley ^a Green oats ^a)	-	-	-	c X	-	-	-

TABLE 13. QUESTIONS IN NATIONAL CENSUSES ON CROPS FOR HAY, PASTURE, GREEN FODDER AND SILAGE

Code in the Expanded List	E-4.1	a	b	c	d	E-4.2	a	b	c	E-5.1	E-5.2	E-5.3
India					Cereals used as fodder							Other fodder crops
Israel Jewish holdings	X	a X	*.a,b X	Field peas ^a Beans ^a , Cowpeas ^a , Tares and tare mix- ture ^a	Sudan grass ^a , Oats ^a , Italian millet (Setaria) ^a , African millet (Pennis- tum) ^a , Wintersaum (An- dropogon Sorghum)*.a,b		Fodder pulses*.b		*.c,d X		*.c X	Fodder beet Sunflowers for fodder Artificial pastures, Miscellaneous fodder crops
Arab holdings	X				Hay from rotation crops*.b		Fodder pulses*.b					
Japan					Hay from rotation crops*.b							
Jordan		a X	a X	Soybean hay ^a Common vetch (As- tragalus) ^a , Bur-clo- ver (Medicago den- ticulata) ^a	Seawickien Timothy grass ^a Orchard grass ^a Other grasses*.a,b				c X			Other crops for fodder, green manure, etc.*.d
Philippines		*.a X	*.a X		Other grasses*.a							
Turkey					Forage grasses*.a,b							
AFRICA												
Algeria		a X										Other fodder crops (Alexan- dria clover, cereals green or dry, maize and sorghum for fodder, fodder beets, Vetches and oats and similar mixtures)
Egypt^a												
Kenya												
Mozambique												
	.a X				Guinea grass.a				* X			* X Sunflowers for fodder* Other fodder crops*

TABLE 13. QUESTIONS IN NATIONAL CENSUSES ON CROPS FOR HAY, PASTURE, GREEN FODDER AND SILAGE

Code in the Expanded List	E-4.1	a	b	c	d	E-4.2	a	b	c	E-5.1	E-5.2	E-5.3
Northern Rhodesia European holdings					Oats for hay				a X		X	Sunflower for fodder. Sunn hemp for seed or hay. Cowpeas and beans for seed or hay. Planted pasture. Other fodder crops (specify)
Southern Rhodesia European holdings		*.a X		Soybean hay*. Sunn hemp hay*. Velvet bean hay* Cowpeas hay*	Rye for fodder* (not for grain). Oats for fodder* (not for grain). Barley and grasses for fodder* (not for grain). Planted grass crops				* X		*.b X	Cattle melons ^b
Swaziland	X											Sunflower, castor seed and silage*.a
Tunisia		a X										Vetches, oats and analogous forage mixtures. Other fodder crops (Alexandria clover, cereals green or dry, maize and sorghum for fodder, fodder beets)
Union of South Africa "White" holdings ex- cluding natives thereon		*.a X		Soybean hay ^b . Soybeans for hay and silage ^b Cow peas for hay and silage ^b	Teff grass(Poaabyssinica)*.a Other hay grasses sown annually*.a Oats for hay* Manna for hay*.c Veld grass for hay*				d X			
Native areas and farms and native farming on "white" holdings												
OCEANIA												
Australia		* X	* X	Field peas for hay*	Wheat for hay* Oats for hay* Rye for hay* Barley for hay* Millet for hay* Field grass for hay		Alfalfa cut for green fodder. Alfalfa fed off. Clover for green fodder. Field peas for green fodder.Lupines fodder	Wheat cut for green fodder. Oats cut for green fodder Barley cut for green fodder Rye cut for green fodder Millet cut for green fodder Sudan grass cut for green fodder Elephant grass cut for green fodder Other grass cut for green fodder Oats sown for grazing	a X		* X	Grass and clover cut for hay*. Other crops cut for hay*. Rape for green fodder. Other crops cut for green fodder. Sugar cane cut for fodder. Cow cane cut for fodder. Cow melons for fodder*. Other vege- tables for fodder*. Other fodder crops

TABLE 13. QUESTIONS IN NATIONAL CENSUSES ON CROPS FOR HAY, PASTURE, GREEN FODDER AND SILAGE

Code in the Expanded List	E-4.1	a	b	c	d	E-4.2	a	b	c	E-5.1	E-5.2	E-5.3
Hawaii					Napier (elephant) grass*							Sugar cane for fodder* Koa Hoale (<i>Leucaena glauca</i>)*
New Zealand		*, a, b, X			*, b, c, X	*, d						Kale; thousand-headed Kohlrabi

Austria a) area cut for hay not distinguished from other area.
 Austria b) separate questions on red clover and other clover.
 Austria c) separate questions on green maize and silo maize.
 Belgium a) same remark as under Austria a).
 Belgium b) separate questions on red clover, crimson clover (*Trifolium incarnatum*) and other clover.
 Belgium c) fodder maize.
 Czechoslovakia b) same remark as under Austria a).
 Denmark a) same remark as under Austria a).
 Denmark b) same remark as under Austria a).
 Finland a) separate questions on five age strata of rotation grass, and on second harvest.
 Finland b) separate questions on green fodder and silage.
 Germany (Federal Republic) a) same remark as under Austria a).
 Greece a) same remark as under Austria a).
 Luxembourg b) same remark as under Austria a).
 Luxembourg c) separate questions on red clover, white clover, Swedish clover, yellow clover and crimson clover (*Trifolium incarnatum*).
 Netherlands a) same remark as under Austria a).
 Netherlands b) separate questions on red clover, white clover, and other clover.
 Netherlands c) same remark as under Belgium c).
 Norway a) separate questions on green fodder and rotation pasture.
 Saar b) same remark as under Austria a).
 Saar c) separate questions on red clover, white clover, Swedish clover, and other and mixed clover.
 Switzerland a) separate questions on clover and mixtures one year old, mixtures on the basis of clover and grass more than one year old, mixtures on the basis of alfalfa more than one year old, and mixtures on the basis of sainfoin more than one year old. Also two questions on hay crops sown in the census year.
 Switzerland b) same remark as under Belgium c).
 United Kingdom a) in Northern Ireland, separate questions on first year's, second year's and third year's.
 United Kingdom b) in England and Wales and Scotland.
 United Kingdom c) same remark as under Austria a).
 United Kingdom d) in Scotland separate questions on green fodder and pasture (area not for mowing).
 United Kingdom e) in England and Wales, the item includes kale, savoy and kohlrabi; in Scotland, includes kale.
 Alaska a) includes cultivated permanent grass.
 Canada a) same remark as under Belgium c).
 Dominican Republic a) same remark as under Austria a).
 El Salvador a) same remark as under Belgium c).
 Guatemala a) same remark as under Belgium c).
 Guatemala b) same remark as under Belgium c).
 Honduras a) same remark as under Belgium c).
 Honduras b) same remark as under Belgium c).
 Mexico a) same remark as under Austria a).
 Mexico b) separate questions on fodder maize and fodder sorghum.
 United States a) a separate question on the total production of silage.
 Argentina a) same remark as under Austria a).
 Brazil a) same remark as under Austria a).
 Chile a) separate questions on dry and irrigated crops.
 Chile b) separate questions on sole and associated crops.
 Chile c) same remark as under Austria a).
 Chile d) same remark as under Belgium c).
 Colombia a) same remark as under Belgium c).
 Uruguay a) separate questions on area sown exclusively for hay, and area sown for pasture but not yet harvested for hay, grain or seed.
 Uruguay b) separate questions on maize and sorghum for fodder.
 Cyprus a) same remark as under Austria a).

Cyprus b) berseem (*Trifolium alexandrinum*).
 Cyprus c) same remark as under Belgium c).
 Israel a) same remark as under Austria a).
 Israel b) on production only.
 Israel c) production data asked on behalf of irrigated crop only.
 Israel d) including melons for fodder.
 Israel e) including melons for fodder.
 Japan a) same remark as under Belgium c).
 Japan b) including Kentucky blue grass, tall oat-grass, red top grass, Sudan grass, lupines, serradella, meadow fescue, Italian rye-grass, perennial ryegrass, meadow foxtail, etc.
 Japan c) including oats for fodder, rye for fodder, barley for fodder, hogmillet, Japanese barnyard millet for fodder, sorghum for fodder, buckwheat for fodder, Chinese milk-vetch, broad beans for fodder, garden peas for fodder, Jerusalem artichokes, pumpkins, turnips, and hairy vetch for fodder.
 Jordan a) same remark as under Austria a).
 Philippines a) same remark as under Austria a).
 Philippines b) including zacate, barit, Guinea grass, etc.
 Algeria a) same remark as under Austria a).
 Egypt a) same remark as under Chile b).
 Kenya a) separate questions on permanent clover (bersim) and catch clover.
 Mozambique a) same remark as under Austria a).
 Northern Rhodesia a) same remark as under Belgium c).
 Southern Rhodesia a) same remark as under Austria a).
 Southern Rhodesia b) sole crop only on area and on production, separate questions on sole crop and crops grown with maize.
 Swaziland a) only production item, no corresponding area item.
 Tunisia a) same remark as under Austria a).
 Union of South Africa a) same remark as under Austria a).
 Union of South Africa b) same remark as under United States a).
 Union of South Africa c) only on production.
 Union of South Africa d) same remark as under Belgium c).
 Australia a) separate questions on fodder maize and fodder sorghum.
 New Zealand a) for hay or silage.
 New Zealand b) including cuttings on permanent grassland.
 New Zealand c) also separate questions on wheat, oats (or oats and vetches) and barley for chaff, hay of ensilage.
 New Zealand d) same remark as under United States a).
 New Zealand e) also separate questions on wheat, oats, barley, and maize, fed off or abandoned.
 New Zealand f) same remark as under Belgium c).

Note to item E-4.
 As will be seen from Table 13 and the notes to it, this subsection, in the form proposed by the FAO Program, has met with very uneven and incomplete response. It is especially noteworthy that no fewer than 26 countries (out of 55 listed in the table) have omitted to distinguish area cut for hay (or one or more fodder crops) from area used otherwise. It is true that most of these countries are among those which did not attempt to enumerate production of fodder crops, but the deviation is nevertheless remarkable. Among the remaining 29, a few asked only for maize and other cereals cut for green fodder and hay, but for these crops the distinction is not so important as for the main hay crops. Only a minority of countries adopted the Program approach in regard to questions E-4.1.
 It is further interesting to note that among individual hay and silage crops only those listed as specific items in the Program, i.e., alfalfa, clover, and maize, have evoked a large response. Each of the individual leguminous and grass crops tentatively listed in the Program were asked for separately by only a few countries. The same is true about sorghum, cabbage, pumpkins, and sunflower for fodder. In addition, individual countries specified a considerable number of other individual fodder crop items, each of which was asked in a few countries only.

TABLE 14a. QUESTIONS IN NATIONAL CENSUSES ON PHYSICAL AREA UNDER VEGETABLES

COUNTRY	ITEM	All vegetables and melons grown principally for human consumption	Grown as field crops	Grown in market gardens	Grown in kitchen gardens
	Code in the Expanded List	E-6.1	a	b	c
	Code in the Short List	29	—	—	—
	Number of censuses asking the question on crop areas	46	3	1	5
	Number of censuses asking the question on production	18	—	—	1
			3	2	
EUROPE					
Austria	a X		X		X
Belgium	a X				
Czechoslovakia	a X				
Denmark	a X				
Finland	X		X		
Germany (Federal Republic)	—				
Norway	X				
Saar	—				
Sweden	a X		X		
Switzerland	X				
United Kingdom	a X				
Yugoslavia	a X				
			a X		
				b X	
NORTH AND CENTRAL AMERICA					
Bermuda	* X				
British Honduras	X				
El Salvador	* X				
Guatemala	X				
Honduras	X				
Leeward Islands	* X				
Trinidad and Tobago	* X				
Windward Islands	* X				
SOUTH AMERICA					
Bolivia	—				
Chile	X				
Ecuador	X				
ASIA					
Brunei	X				
Cyprus	* X				
Iraq	X				
Israel					
*Jewish holdings	* X				
*Arab holdings	* X				
Jordan	* X				
Malaya, Federation of	* X				
North Borneo	* X				
Ryukyu Islands	* X				
Sarawak	* X				
Singapore Island	* X				
Turkey	X				

TABLE 14a. QUESTIONS IN NATIONAL CENSUSES ON PHYSICAL AREA UNDER VEGETABLES

Code in the Expanded List	E-6.1	a	b	c
AFRICA				
Algeria	X	—	—	—
Gambia	X	—	—	—
Kenya	^a X	—	—	—
Mauritius	X	—	—	—
Mozambique	—	—	—	*X
Northern Rhodesia				
European holdings	^a X	—	—	—
Seychelles	*X	—	—	—
Southern Rhodesia				
European holdings	*X	—	—	—
St. Helena	*X	—	—	—
Swaziland	X	—	—	—
Tunisia	X	—	—	—
Union of South Africa				
"White" holdings excluding natives	X	—	—	—
Native farming	X	—	—	—
Zanzibar and Pemba	X	—	—	—
OCEANIA				
British Solomon Islands	*X	—	—	—
Fiji	*X	—	—	—
New Zealand	—	—	X	—
Tonga	*X	—	—	—

Austria ^a) by addition of the subitems.
 Belgium ^a) same remark as under Austria ^a).
 Czechoslovakia ^a) including areas under strawberries and flowers.
 Denmark ^a) including areas under strawberries.
 Germany (Federal Republic) ^a) same remark as under Denmark ^a).
 Saar ^a) including areas under strawberries and flowers.

Sweden ^a) same remark as under Austria ^a).
 Sweden ^b) including flowers grown in the open.
 United Kingdom ^a) Scotland only.
 Yugoslavia ^a) presumably including potatoes.
 Kenya ^a) production for sale only.
 Northern Rhodesia ^a) same remark as under Kenya ^a).

TABLE 14b. QUESTIONS IN NATIONAL CENSUSES ON CROP

Code in the Expanded List	E-6.2 a	b	c	d	e	f	g	h	i	j	k	l
Puerto Rico	—	—	*X	*X	*X	—	*X	—	*aX	—	—	—
United States	X	X	aX	bX	X	X	cX	dX	eX	X	fX	Green cowpeas. Brussels sprouts. Green mustard. Parsley, Rhubarb, Swiss chard. Collards, Watercress, Dandelions, Turnip greens
Virgin Islands	—	—	X	X	X	—	—	—	aX	—	—	—
SOUTH AMERICA												
Argentina	X	X	X	—	—	—	—	—	aX	—	—	—
Bolivia	—	—	*aX	*X	*X	—	*X	*X	*X	—	—	—
Brazil	—	—	aX	*X	*X	—	—	—	*bX	—	—	—
Chile	—	—	*aX	—	—	—	—	*X	*bX	—	—	—
Colombia	—	—	—	—	—	—	—	—	—	—	—	—
Uruguay	—	*X	*aX	*bX	*X	—	—	*X	*cX	—	—	Green vegetables (spinach, silver beet, lettuce, wa- tercress and all other leafy vegetables)
Venezuela	—	—	—	—	—	—	—	—	—	—	—	—
ASIA												
Burma	—	—	—	—	—	—	—	—	—	—	—	—
Ceylon ^a	—	—	—	—	—	—	—	—	—	—	—	—
Cyprus	—	—	*a	—	—	—	—	—	—	—	—	Green cowpeas* ^b
India	—	—	—	—	—	—	—	—	—	—	—	—
Iraq	—	—	—	X	X	—	X	—	—	X	—	—
Israel	—	—	—	X	X	—	X	—	—	X	—	—
Jewish holdings	—	—	X	*aX	*aX	—	—	X	bX	—	—	—
Arab holdings	—	—	—	X	—	—	—	—	bX	—	—	—
Japan	X	X	*aX	*bX	*X	—	*X	X	*cX	dX	—	(See list in note ^c)
Jordan	—	—	*X	*X	*X	—	*X	*X	*aX	*X	—	Cowpeas (<i>Vigna sinensis</i>)* Other green vegetables*
Philippines	—	—	*aX	bX	*X	—	*X	*X	cX	—	—	Mung beans*, Cowpeas* Sitao or Singapore beans*, Librato (<i>Portu- laco</i> , sp.)* <i>Talinum tri- angolare</i> *
Thailand	—	—	—	—	—	—	—	—	aX	—	—	—
Turkey	aX	—	a,bX	aX	aX	—	—	—	a,cX	aX	—	Leeks*
AFRICA												
Algeria	X	—	aX	X	X	—	—	X	bX	—	—	—
Egypt ^a	X	X	b,cX	X	dX	—	X	X	c,eX	dX	—	Jew's mallow (<i>Cochorus</i>)* Mallows, Wild leek, Rhubarb*
Mozambique	—	—	*X	*X	*X	—	—	*X	*X	—	*X	—
Nigeria and British Cameroons	—	—	—	—	—	—	—	—	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—	—	—	—	—	—	—
European holdings	—	—	—	—	—	—	—	—	—	—	—	—
Tunisia	X	—	aX	X	X	—	—	X	bX	—	—	—

AREAS OF VEGETABLES AND MELONS GROWN IN THE OPEN

Code in the Expanded List	E-6.3 a	b	6.4 a	b	c	d	e	f	g	h	i	j	k	l
Puerto Rico	—	*X	—	—	*X	—	*X	—	*X	—	—	*X	—	Okra*, Other (give name)*
United States	gX	X	X	hX	X	X	X	X	iX	X	X	X	X	Horseradish, Kohlrabi, Parsnips, Dasheen, Chayote, Salsify, Sweet peppers and pimientos, Okra
Virgin Islands	—	X	—	—	X	—	X	—	X	—	X	X	—	Okra, Green peppers. Any other vegetables sold (list separately)
SOUTH AMERICA														
Argentina	—	—	—	—	X	—	—	X	X	—	—	X	X	—
Bolivia	bX	—	—	—	—	—	—	—	X	—	—	X	X	Others (specify)*
Brazil	—	—	—	—	*X	—	—	—	*X	—	—	*X	—	—
Chile	*cX	—	—	—	—	—	—	—	*X	—	—	*X	—	—
Colombia	*cX	—	—	—	—	—	—	—	*X	—	—	*X	—	Other vegetables*
Uruguay	*dX	—	*X	—	—	—	—	—	*X	—	—	*X	—	Other vegetables
Venezuela	—	—	—	—	—	—	—	—	*X	*X	—	*X	—	—
ASIA														
Burma	—	—	—	—	—	—	—	—	*X	*X	—	—	—	Other vegetables
Ceylon ^a	—	—	—	—	—	—	—	—	X	X	—	—	—	Other vegetables
Cyprus	*c	—	*d	eX	—	—	—	—	*X	—	—	*X	—	Colocase, root artichoke*
India	—	—	—	—	—	—	—	—	X	—	—	—	—	Root vegetables, Other nonleafy vegetables
Iraq	aX	X	—	X	—	—	X	—	—	—	—	X	X	—
Israel	d,eX	*aX	X	*aX	—	—	X	—	X	—	—	*aX	—	Miscellaneous vegetables
Jewish holdings	eX	X	—	X	—	—	X	X	X	—	—	X	—	Okra, Miscellaneous veg- etables
Arab holdings	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Japan	*fX	*X	X	—	X	—	*X	—	*X	*X	*X	*X	*X	(See list in note ^d)
Jordan	*bX	*X	X	X	—	—	X	X	X	X	—	X	X	Green pepper, Okra (<i>lb- iscus esculentu</i>), Other vegetables
Philippines	*dX	*X	—	—	*X	—	*X	*X	*eX	*X	—	*X	*X	Okra*, Chayote (<i>Sechium edule</i>)*, Ampalaya (<i>Mormardica charantia</i>)*, Patola or Chinese ser- pent cucumber (<i>Tricho- santhes anguina</i>)*
Thailand	bX	—	—	—	—	—	—	X	—	X	—	—	—	Vegetables, not elsewhere specified
Turkey	*dX	aX	—	—	aX	—	aX	—	aX	*X	*X	—	aX	Green pepper ^a , Other veg- etables (specify) ^a
AFRICA														
Algeria	cX	—	—	X	—	—	—	—	—	X	—	—	X	Other vegetables (Aspara- gus, beetroots, lettuce, leek, garlic, silver beet, celery, eggplant, pump- kins, etc.)
Egypt ^a	c,fX	c,gX	—	X	—	—	—	hX	X	iX	—	—	cX	Okra ^h
Mozambique	*aX	—	—	—	X	—	—	—	*X	*X	—	—	*X	Unspecified vegetables*
Nigeria and British Cameroons	—	—	—	—	—	—	—	—	—	aX	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—	—	—	—	—	—	—	—	—
European holdings	—	—	—	—	—	—	—	—	—	*aX	—	—	—	—
Tunisia	cX	—	—	X	—	—	—	—	—	X	—	—	X	Other vegetables (Aspa- ragus, beetroots, let- tuce, leek, garlic, silver beet, celery, eggplant, pumpkins, etc.)

TABLE 14 b. QUESTIONS IN NATIONAL CENSUSES ON CROPS AREAS OF VEGETABLES AND MELONS GROWN IN THE OPEN

Code in the Expanded List	E-6.2													l
	a	b	c	d	e	f	g	h	i	j	k	l		
Uganda	—	—	—	—	—	—	—	—	—	—	—	—	—	
Union of South Africa "White" holdings, excluding natives	—	—	—	—	—	—	—	—	—	—	—	—	—	
OCEANIA														
Australia	*X	*X	*aX	*X	*X	—	*X	*bX	*X	*X	—	Rhubarb*, Brussels sprouts*, Leek*		
Guam	—	—	—	—	—	—	—	—	—	—	—	—		
Hawaii	—	—	aX	bX	X	—	X	X	cX	—	—	Rhubarb. Watercress		
New Zealand	—	—	—	—	—	—	—	—	—	—	—	—		

Belgium a) separate questions on area (under main, successive, or associated crop) harvested at different periods of the year.
 Belgium b) separate questions on Savoy cabbage, white cabbage and red cabbage.
 Belgium c) separate questions on white celery, green celery, and root celery.
 Czechoslovakia a) separate questions on early white, late white and red cabbage.
 Czechoslovakia b) separate questions on early and late crop.
 Czechoslovakia c) pumpkins (or gourds).
 Czechoslovakia d) melons.
 Czechoslovakia e) separate questions on cucumbers for pickles and for salad.
 Denmark a) separate questions on early and late white cabbage and red cabbage.
 Denmark b) separate questions on peas for drying and for consumption in fresh state.
 Finland a) separate questions on white cabbage and other cabbage.
 Greece a) same remark as under Denmark a).
 Malta and Gozo a) broad beans.
 Malta and Gozo b) separate questions on pumpkins and squash.
 Malta and Gozo c) separate questions on watermelons and sugarmelons.
 Malta and Gozo d) separate questions on early and main crop.
 Malta and Gozo e) separate questions on green and ripe crop.
 Malta and Gozo f) separate questions on crops on dry land and on irrigated land.
 Netherlands a) separate questions on culture as sole crop and as under-culture in orchards.
 Netherlands b) same remark as under Malta and Gozo a).
 Netherlands c) separate questions on early red, early yellow, and early white cabbage.
 Norway a) separate questions on summer-and-autumn white cabbage, winter white cabbage, and other cabbage including kale and Brussels sprouts.
 Sweden a) white cabbage.
 Switzerland a) including dry beans.
 Switzerland b) separate questions on white, red, and Savoy cabbage.
 United Kingdom a) England and Wales only.
 United Kingdom b) same remark as under Switzerland c).
 United Kingdom c) separate questions on broad beans, and runner and French beans.
 United Kingdom d) in England and Wales separate questions on spring cabbage, summer cabbage, autumn cabbage and winter cabbage, autumn Savoys and winter Savoys.
 United Kingdom e) in Scotland, three seasonal strata listed separately; excludes Savoys.
 United Kingdom f) including sprouting broccoli.
 United Kingdom g) in England and Wales and Scotland.
 United Kingdom h) separate questions on peas for the market and for canning.
 United Kingdom i) in England and Wales, separate questions on onions for salad and for harvesting dry.
 United Kingdom j) including swedes.
 United Kingdom k) in England and Wales and Northern Ireland.

Dominican Republic a) same remark as under Czechoslovakia c).
 Dominican Republic b) separate questions on onions and small onions (cebollin).
 Mexico a) separate questions on string beans and broad beans.
 Mexico b) separate questions on melons and watermelons.
 Puerto Rico a) same remark as under Czechoslovakia c).
 United States a) separate questions on green beans (string, snap, or wax), and green Lima beans.
 United States b) separate questions on cabbage and Chinese cabbage.
 United States c) lettuce and romaine.
 United States d) separate questions on English peas and green peas.
 United States e) same remark as under Malta and Gozo b).
 United States f) endive, chicory and escarole.
 United States g) separate questions on watermelons, and cantaloupes and other melons.
 United States h) separate questions on cauliflower and broccoli.
 United States i) separate questions on dry onions and on shallots and green onions.
 Virgin Islands a) squash.
 Argentina a) same remark as under Czechoslovakia c).
 Argentina b) same remark as under Mexico b).
 Bolivia a) same remark as under Malta and Gozo a).
 Brazil a) same remark as under Malta and Gozo a).
 Brazil b) same remark as under Malta and Gozo b).
 Brazil c) same remark as under Mexico b).
 Chile a) separate questions on haricot beans and broad beans.
 Chile b) same remark as under Virgin Islands a).
 Chile c) same remark as under Mexico b).
 Uruguay a) same remark as under Chile a).
 Uruguay b) including cauliflower.
 Uruguay c) separate questions on pumpkins and small pumpkins (zapallitos).
 Uruguay d) same remark as under Mexico b).
 Ceylon a) separate questions on the Yala and the Maha crop season.
 Cyprus a) separate questions on haricot beans and broad beans.
 Cyprus b) production question only, no question on crop area.
 Cyprus c) same remark as under Mexico b).
 Cyprus d) including carrots.
 Cyprus e) including cabbage and kohlrabi.
 Iraq a) same remark as under Mexico b).
 Israel a) production data asked for only on behalf of irrigated land.
 Israel b) vegetable marrows.
 Israel d) on behalf of unirrigated land.
 Israel e) separate questions on watermelons and sweet melons.
 Japan a) same remark as under Chile a).
 Japan b) separate questions on cabbage, pe-tsai or Chinese cabbage, and other cabbages (including kale, Brussels sprouts, kohlrabi and Savoy cabbage).
 Japan c) cushaw (winter squash).
 Japan d) separate questions on spinach and silver beet.
 Japan e) the following items were asked for: Welsh onion (*Allium fistulosum*), bamboo sprouts, Kyona (various vegetables of the type common in Kyoto),

E-6.3	E-6.4													l
	a	b	a	b	c	d	e	f	g	h	i	j	k	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	
*cX	*X	*X	*X	*X	*X	—	*X	*X	*X	*X	—	Parsnips*. Other vegetables (state kind)*		
*aX dX	X	X	eX	X	X	X	—	fX	X	X	X	Peppers. Burdock (<i>Arctium majus</i>). Yambean root (<i>Pachyrhizus</i> spp.). Other (give name)		
—	—	—	—	—	—	—	—	—	—	—	—	—		

other tsukena (for pickles), Garland chrysanthemum, edible chrysanthemum, garden cress or pepper grass, seakale, butter-bur or bog-rhubarb, parsley, Japanese honewort, waterdropwort, dandelion, fennel, coriander, beefsteak plant (*Perilla nankinensis*), knotweed, leek, scallion (*Allium bakeri*), tufted stone leek or Welsh onion, Chinese garlic, chive garlic, fragrant-flowered garlic, lily, Japanese udo salad, edible amaranth, water malabar (*Zingiber mioga*), okra, thyme and narrow-leaved sage.
 Japan f) separate questions on melons, watermelons, oriental pickling melons, and Makuwa melons.
 Japan g) the following items were asked for: Great burdock (*Arctium majus*) Lotus (*Nymphaea alba*), Horseradish, Sweet pepper, calabash or white flowered gourd, white gourd or wax gourd, chayotte, balsam pears. Old world arrowhead, Chinese yam or Japanese yam, salsify, parsnip, root celery, Chinese artichoke, rushnut or chuba, yautia and yam bean.
 Jordan a) same remark as under Israel b).
 Jordan b) separate questions on watermelons and muskmelons (or cantaloupes).
 Philippines a) separate questions on bountiful beans (*Phaseolus vulgaris*), Anipay (*Phaseolus calcaratus*), Goa beans (*Psophocarpus tetragonolobus*) and all other beans.
 Philippines b) separate questions on pe-tsai or Chinese cabbage, and other cabbages.
 Philippines c) separate questions on gourds, squash, and kondol or white gourd of India (*Benincasia hispida*).
 Philippines d) same remark as under Jordan b).
 Philippines e) separate questions on big bulb (or *Sebuyas Bombay*) onions, and native or small bulb onions.
 Thailand a) same remark as under Czechoslovakia c).
 Thailand b) watermelons.
 Turkey a) asked only from mukhtars (and large farms), not from sample holdings.
 Turkey b) same remark as under Chile a).
 Turkey c) same remark as under Virgin Islands a).
 Turkey d) same remark as under Israel e).
 Algeria a) same remark as under Chile a).
 Algeria b) same remark as under Virgin Islands a).
 Algeria c) same remark as under Mexico b).
 Egypt a) same remark as under Netherlands a).
 Egypt b) same remark as under Chile b).
 Egypt c) separate questions on winter crops, summer crops, and flood crops.
 Egypt d) separate questions on winter crops and flood crops.
 Egypt e) squash, also a separate question on gourds among summer crops.
 Egypt f) separate questions on water melons, sweet melons, and muskmelons.
 Egypt g) also a separate question on crops under cotton or any other crops.
 Egypt h) separate questions on summer crops and flood crops.
 Egypt i) separate questions on winter crops and summer crops.
 Mozambique a) same remark as under Thailand a).
 Nigeria a) separate questions on main farmland and dry season land and, within each, on first and second crop.

Southern rhodesia a) Sole crop only.
 Tunisia a) same remark as under Chile a).
 Tunisia b) same remark as under Virgin Islands a).
 Tunisia c) same remark as under Mexico b).
 Australia a) separate questions on French runner beans, Navy beans, and broad beans.
 Australia b) separate questions on green peas and blue peas.
 Australia c) same remark as under Mexico b).
 Guam a) same remark as under Czechoslovakia d).
 Hawaii a) separate questions on beans (green, string, yard-long and wax), and lima and soy beans.
 Hawaii b) separate questions on head cabbage and Chinese (or Oriental) cabbage.
 Hawaii c) same remark as under Malta and Gozo b).
 Hawaii d) same remark as under Thailand b).
 Hawaii e) separate questions on cauliflower and broccoli.
 Hawaii f) dry onions only.

Note to item E-6.
 The synopsis of the Program subsection E-6 (vegetables and melons grown in the open) is presented in the form of two tables, 14a and 14b, because the items 6.1, 6.1a, 6.1b and 6.1c refer to physical area (a concept of land utilization), while items 6.2, 6.3 and 6.4 refer to crop areas (without reduction for double cropping). Accordingly the total of areas under 6.2 to 6.4 inclusive in general exceed the total for 6.1: the excess may be significant even in the temperate countries, where double cropping is otherwise comparatively rare. The two tables have very different coverage. Together more than 80 censuses have asked one or more questions on vegetables. Each table includes about 50 censuses, and thus only about 20 countries asked both types of questions.
 To the frequencies shown on Table 14a, it may be added that, in addition to the 21 countries that asked for total physical area under vegetables and the production from that area, 10 more censuses have asked for production data in such a form that the returns on production of the various vegetable crops are likely to add up to the total quantity of vegetables produced. If the production question under 6.1 were formulated as "total production of vegetables", then at least 31 censuses would have corresponded to that criterion.
 Certain vegetables not proposed in the FAO Program appear as often in census schedules as several of the less frequent Program items. Thus, area under rhubarb was asked for in 11 censuses, sweet pepper in seven (apart from the many instances where sweet and hot pepper were included in one item), Brussels sprouts in six (apart from the many cases when it may have been included with the cabbage), leek and okra also in six each, and horseradish in five censuses. No other non-Program item occurred in more than three censuses. It can thus be stated that the lowest frequency reached by a Program item (four, for kale) was exceeded by only six non-Program items.

TABLE 15. QUESTIONS IN NATIONAL CENSUSES ON CULTIVATION UNDER GLASS, LOFWERS AND BULBS GROWN IN THE OPEN, AND CROPS GROWN FOR SEED

ITEM	Glasshouses and frames	Flowers	Bulbs	Sugarbeet seed	Vegetable seed	Maize hybrids and parent strains	Other crops for seed
Code in the Expanded List	E-7.1	E-8.1	E-8.2	E-9.1	E-9.2	E-9.3	E-9.4
Number of censuses asking the question on area	15	13	5	7	8	—	18
Number of censuses asking the question on production	1	—	—	1	2	—	10
COUNTRY							
EUROPE							
Belgium	a X	b X	c X	X	d X	—	Fodder-beet seed Turnip seed Chicory (for coffee) seed
Czechoslovakia	X	X	—	X	—	—	Chicory for seed Fodder beets for seed Fodder carrots for seed Grasses for seed
Denmark	a X	—	—	b X	c X	—	See List in Note d)
Finland	*a X	X	—	—	—	—	Clover for seed* Timothy and other grasses for seed*
Germany (Federal Republic)	X	X	—	X	—	—	Fodder beets Swedes Fodder carrots Grasses for seed
Luxembourg	—	X	a X	—	—	—	—
Netherlands	a X	—	b X	X	c X	—	See List in Note d)
Norway	a X	b X	X	—	—	—	Grass and clover seed* ^c , seeds of other sorts (specify)* ^c
Saar	—	—	—	X	—	—	Fodder beets Swedes Fodder carrots Grasses for seed
Sweden	a X	—	—	—	—	—	Leys for seed, seed cultivation (other than timothy or clover).
Switzerland	a X	b X	—	—	X	—	—
United Kingdom	a X	a b X	—	—	—	—	Perennial grass ^c Italian hay grass ^c Crested dogtail ^a
NORTH AND CENTRAL AMERICA							
Alaska	a X	—	—	—	—	—	—
Canada	a X	—	—	—	—	—	—* ^b
Puerto Rico	—	—	X	—	—	—	—
United States	a X	X	b X	* X	—	—	See list in Note c)
SOUTH AMERICA							
Argentina	—	X	—	—	—	—	Alfalfa for seed
Chile	—	—	—	—	—	—	Alfalfa* ^a , clover* ^a Other sown grasses (specify)* ^a
Uruguay	—	—	—	—	—	—	Alfalfa* Ray grass* Sudan grass* Other fodder crops*
ASIA							
India	—	X	—	—	—	—	—
Israel	—	—	—	—	—	—	—
Jewish holdings	—	a X	—	—	X	—	—
Japan	a X	b X	—	—	c X	—	Chinese milk vetch* Other crops grown for seed*
Thailand	—	a X	—	—	—	—	—

TABLE 15. QUESTIONS IN NATIONAL CENSUSES ON CULTIVATION UNDER GLASS, FLOWERS AND BULBS GROWN IN THE OPEN, AND CROPS GROWN FOR SEED

Code in the Expanded List	E-7.1	E-8.1	E-8.2	E-9.1	E-9.2	E-9.3	E-9.4
AFRICA							
Mozambique	—	X	—	—	—	—	—
Union of South Africa	—	X	—	—	—	—	—
"White" holdings	—	—	—	—	*—	—	Teff grass seed* ^a Alfalfa seed* ^a
OCEANIA							
Australia	a X	b X	—	—	* X	—	Alfalfa* Clover and grass* (combined or separately) Sudan grass*
Hawai	—	—	—	—	a X	—	See List in Note a)
New Zealand	—	—	—	—	—	—	—

Belgium a) separate questions on glasshouses, hothouses and frames, also separate questions on vegetables, flowers and bulbs, fruit trees and mushrooms, and in each group, on 3 to 8 items.

Belgium b) separate questions on cut flowers and other flowers, and among the former, on dahlia and other cut flowers.

Belgium c) separate questions on tulips, gladioli, begonias and others.

Belgium d) separate questions on scorsonera, leek, onions, carrots, peas, beans and others.

Denmark a) number of glasshouses and frames and not their area.

Denmark b) separate questions on beets for factory and fodder.

Denmark c) separate questions on white cabbage, cauliflower, other cabbages, garden carrots, spinach, radishes, and other vegetables for seed.

Denmark d) the following additional crops for seed were asked for: fodder beets, fodder sugar beets, swedes, turnips, red fodder carrots, white or yellow fodder carrots, early red clover, half-late and late red clover, white clover, Alsike clover, black medic (*Medicago upulina*), alfalfa, other leguminous hay crops, mixtures of leguminous crops and grasses, cock's foot (*Dactylis glomerata*), English rye-grass, Italian rye-grass, *Festuca pratensis*, *Festuca rubra*, Brome grass, *Poa trivialis*, *Poa pratensis*, timothy, other grasses, other seed areas on arable land.

Finland a) separate questions on hothouses, greenhouses, hotbeds, and frames without heating.

Luxembourg a) separate questions on roses and all other flowers.

Netherlands a) separate questions on eleven specified and two mixed crop items.

Netherlands b) separate questions on eleven specified and one mixed crop items.

Netherlands c) separate questions on onions, radishes, spinach, four kinds of beans, garden peas, carrots, two kinds of cabbage, cauliflower and other horticultural seeds.

Netherlands d) the following additional crops for seed were asked for separately: fodder beets, turnips, swedes, bitter lupine, fodder lupine, flower seeds, other field crops for seed, red clover, white clover other clover, sainfoin, Westerwolds rye-grass, English rye-grass, other grass seeds.

Norway a) same remark as under Finland a). Also separate questions according to crops planted.

Norway b) separate questions on summer flowers, bush flowers and other sorts (specify).

Norway c) only production asked for, no corresponding question on crop area.

Sweden a) separate questions on glasshouses and frames.

Switzerland a) also separate questions on vegetables, cut flowers, plants in pots, and other plants for decoration. Separate questions on glasshouses and frames.

Switzerland b) separate questions on cut flowers, plants in pots and other plants for decoration.

United Kingdom a) England and Wales only.

United Kingdom b) separate questions on bulb flowers and other flowers.

United Kingdom c) Northern Ireland only.

Alaska a) greenhouses and hothouses.

Canada a) greenhouses and mushroom and rhubarb houses.

Canada b) only production data asked for. The following items were listed: alfalfa, sweet clover, red clover, Alsike clover, timothy, brome grass, crested wheat grass, other (give kind).

United States a) separate questions with reference to flowers, vegetables, etc.

United States b) asked only on behalf of holdings specialized in bulb production, with separate questions on nine specified items.

United States c) the following additional items on crops grown for seed (area and production) were asked for separately: Alfalfa, red clover, lespeze, sweet clover, timothy, redtop, Sudan grass, Alsike clover, lupine, common and perennial (English) rye-grass, hairy vetch, other vetch, Australian winter peas, crimson clover, other field seed crops (rough winter peas, carpet grass, Dallis grass), sugar cane cut for seed.

Chile a) on production only.

Israel a) including flower seeds.

Japan a) glasshouses.

Japan b) separate questions on chrysanthemums, tulips and other flowers.)

Japan c) separate questions on radishes, turnips, carrots, great burdock, Welsh onions, (other) onions, cucumbers, cushaw, eggplants, cabbage, pe-tsai or Chinese cabbage and tsukenas (leafy vegetables for pickles).

Thailand a) separate questions on lotus and on other flowers.

Union of South Africa a) only production data asked for, not the corresponding area.

Australia a) in New South Wales and South Australia only: refers to tomatoes.

Australia b) cut flowers.

Hawaii a) including flower seeds, vegetable plants, and bulbs.

New Zealand a) area and production of the following crops for seed were asked for: perennial rye-grass, Italian rye-grass, including Western Wolths, cocksfoot, Chewing fescue, crested dogtail, broad red clover (including cowgrass); Montgomery red clover, timothy, alfalfa, white clover, Hordeum (short rotation) rye-grass, other grasses and clovers for seed.

TABLE 16. QUESTIONS IN NATIONAL CENSUSES ON SUGAR CROPS

ITEM	Sugar Cane	Sugar Beets	Other Sugar Crops	ITEM	Sugar Cane	Sugar Beets	Other Sugar Crops
Code in the Expanded List	E-10.1a	b	c	SOUTH AMERICA			
Code in the Short List	24	25	—	Argentina	X	X	—
Number of censuses asking the question on areas	53	19	5	Bolivia	*X	—	—
Number of censuses asking the question on production	42	7	2	Brazil	*X	—	—
				British Guiana	*X	—	—
				Colombia	*X	—	—
				Ecuador	*X	*X	—
				Uruguay	*X	—	—
				Venezuela	*X	—	—
				ASIA			
COUNTRY				Brunei	X	—	—
EUROPE				Burma	*X	—	—
Austria	—	X	—	Ceylon	*X	—	Other sugar crop
Belgium	—	X	—	India	X	—	—
Czechoslovakia	—	X	—	Japan	*X	*X	—
Denmark	—	X	—	Jordan	*X	—	—
Finland	—	*X	—	Malaya, Federation of	*X	—	—
Germany (Federal Republic)	—	X	—	North Borneo	*X	—	—
Ireland	—	X	—	Philippines	*X	*X	—
Netherlands	—	X	—	Ryukyu Islands	*X	—	—
Saar	—	X	—	Singapore Island	X	—	—
Sweden	—	X	—	Thailand	—	*X	—
Switzerland	—	X	—	Turkey	—	—	—
United Kingdom	—	aX	—	AFRICA			
				Algeria	—	—	Beets and other crops for alcohol
NORTH AND CENTRAL AMERICA				Belgian Congo	X	—	—
Barbados	*X	—	—	Egypt	aX	—	—
British Honduras	*X	—	—	Kenya	X	—	—
Canada	—	*X	—	Mauritius	*X	—	—
Costa Rica	*X	—	—	Mozambique	X	—	—
Dominican Republic	*X	—	—	Nigeria and British Cameroons	*X	—	—
El Salvador	*X	—	—	Nyasaland	X	—	—
Guatemala	*X	—	—	Seychelles	—	—	Beets and other crops for alcohol
Haiti	*X	—	—	Tunisia	—	—	—
Honduras	*X	—	—	Uganda	*X	—	—
Jamaica	*X	—	—	Union of South Africa	*X	—	—
Leeward Islands	*X	—	—	OCEANIA			
Mexico	*X	—	—	American Samoa	*X	—	—
Panama	*X	—	—	Australia	*X	—	Sweet sorghum*
Puerto Rico	*X	—	—	Fiji	*X	—	—
Trinidad and Tobago	*X	—	—	Gum	*X	—	—
United States	*X	*X	Sweet sorghum*	Hawaii	*X	—	—
Virgin Islands	*X	—	—	Western Samoa	X	—	—
Windward Islands	*X	—	—				

United Kingdom a) England and Wales and Scotland.
 Leeward Islands a) On production, separate question on sugar and rum.
 Mexico a) Separate questions on cane for harvesting the first time, and for harvesting the second or later time.
 Panama a) On production, separate questions on harvest from sowings in 1950, and from earlier sowings.
 Colombia a) Separate questions on cane for sugar, for syrup, and for local unrefined sugar, as well as each of these products.

Ecuador a) Separate questions on cane for sugar, for syrup, for alcohol, and for local unrefined sugar, as well as for each of these products.
 Ceylon a) Asked for on estates only, not on small holdings.
 Egypt a) Separate questions on irrigated and unirrigated areas.
 Nigeria a) Separate questions on main farm land and dry season land and, within each, on first and second crops.

TABLE 17. QUESTIONS IN NATIONAL CENSUSES ON FIBER CROPS

ITEM	Cotton	Flax harvested for fiber	Hemp harvested for fiber	New Zealand flax	Abaca	Jute and jute-like fibers	Ramie and Rhea	Sisal and henequen	Other fiber crops
Code in the Expanded List	E-10.2a	b	c	d	e	f	g	h	i
Code in the Short List	26	—	—	—	—	—	—	—	—
Number of censuses asking the question on areas	45	25	13	3	3	7	7	17	7
Number of censuses asking the question on production	36	11	5	1	1	4	4	14	3
						4			
COUNTRY									
EUROPE									
Austria	—	X	X	—	—	—	—	—	—
Belgium	—	X	—	—	—	—	—	—	—
Denmark	—	X	—	—	—	—	—	—	—
Finland	—	*X	*X	—	—	—	—	—	—
Germany (Federal Republic)	—	X	X	—	—	—	—	—	—
Greece	X	X	X	—	—	—	—	—	—
Ireland	—	X	—	—	—	—	—	—	—
Luxembourg	—	X	X	—	—	—	—	—	—
Netherlands	—	aX	—	—	—	—	—	—	—
Saar	—	X	X	—	—	—	—	—	—
Sweden	—	—	—	—	X	—	—	—	—
Switzerland	—	X	X	—	—	—	—	—	—
United Kingdom	—	aX	—	—	—	—	—	—	—
NORTH AND CENTRAL AMERICA									
Barbados	*X	—	—	—	—	—	—	—	—
Canada	—	*X	—	—	—	—	—	—	—
Dominican Republic	*X	—	—	—	—	—	—	*X	—
El Salvador	*X	—	—	—	—	—	—	*X	—
Guatemala	*X	—	—	—	—	—	—	*X	—
Haiti	*X	—	—	—	—	—	—	*X	—
Honduras	*X	—	—	—	—	—	—	—	—
Leeward Islands	*X	—	—	—	—	—	—	—	—
Mexico	*X	*X	—	—	—	—	—	*X	—
Puerto Rico	*X	—	—	—	—	—	—	—	—
United States	*X	—	—	—	—	—	—	—	—
Windward Islands	*X	—	—	—	—	—	—	—	—
SOUTH AMERICA									
Argentina	X	X	X	X	X	X	X	X	—
Bolivia	*X	—	—	—	—	—	—	—	—
Brazil	*X	*X	—	—	—	*X	—	*X	—
Chile	—	*X	*X	—	—	—	—	—	—
Colombia	*X	—	—	—	—	—	—	—	Other fiber crops*
Ecuador	*X	—	—	—	—	—	—	—	—
Uruguay	*X	*X	—	—	—	—	—	—	—
Venezuela	*X	—	—	—	—	—	—	*X	—
ASIA									
Aden Protectorate	X	—	—	—	—	—	—	—	—
Burma	*X	—	—	—	—	*X	—	—	Other fiber crops
Ceylon	aX	—	—	—	—	—	—	—	—
Cyprus	*X	*X	*X	—	—	—	—	—	—

TABLE 17. QUESTIONS IN NATIONAL CENSUSES ON FIBER CROPS

Code in the Expanded List	E-10.2a	b	c	d	e	f	g	h	i
India	X	—	X	—	—	X	—	—	Other fiber crops
Iraq	X	—	—	—	—	—	—	—	—
Japan	*X	*X	*X	*X	—	*X	*X	—	Indian Mallow or Chinese jute
Jordan	*X	—	—	—	—	—	—	—	—
Malaya, Federation of	—	—	—	—	X	—	X	—	—
North Borneo	*X	—	—	—	—	—	—	*aX	—
Philippines	*X	—	—	—	*X	—	*X	*X	—
Thailand	X	—	—	—	—	X	X	—	—
Turkey	*X	*X	*X	—	—	—	—	—	—
AFRICA									
Algeria	—	—	—	—	X	—	—	—	—
Belgian Congo	*X	—	—	—	—	—	*X	*X	Da*, Paka*
Europeans and developed Negroes	X	X	—	—	—	—	—	—	—
Egypt	*X	—	—	—	—	—	—	—	—
Gambia	*X	—	—	—	—	—	—	—	—
Gold Coast and British Togoland	*X	—	—	—	—	—	—	X	—
Kenya	—	—	—	—	—	—	—	*aX	—
Mauritius	—	—	—	—	—	*X	*X	*X	—
Mozambique	*X	—	—	—	—	—	—	—	—
Nigeria and British Cameroons	*aX	—	—	—	—	—	—	*aX	—
Nyasaland	*X	—	—	—	—	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—	—	—	—
European holdings	*X	—	—	—	—	—	—	—	Hard Fibers (hemp and tow)*
St. Helena	—	—	—	—	—	—	—	—	—
Swaziland	X	—	—	—	—	—	—	—	—
Tanganyika	*X	—	—	—	—	—	—	—	—
Tunisia	—	—	—	—	X	—	—	—	—
Uganda	*X	*X	—	—	—	—	—	*aX	—
Union of South Africa	—	—	—	—	—	—	—	—	—
"White" holdings, excluding natives on the same	*X	—	—	—	—	—	—	—	Other fiber crops
OCEANIA									
Australia	*X	*X	—	—	—	—	—	aX	—
Fiji	—	—	—	—	—	—	—	—	—
Hawaii	*X	—	—	—	—	—	—	—	—
New Zealand	—	X	—	aX	—	—	—	—	—
Western Samoa	—	—	—	—	X	—	—	—	—

Netherlands a) separate questions on blue-flower and white-flower flax.
 United Kingdom a) England and Wales and Northern Ireland.
 El Salvador a) henequen.
 Mexico a) separate questions on agave and henequen.
 Colombia a) separate questions on annual and permanent crop.
 Ecuador a) separate questions on annual and semi-permanent crop.
 Ceylon a) separate questions on the Yala and the Maha crop season.
 North Borneo a) including other hard fibers.

Mauritius a) separate questions on aloe fiber (fourcroya), and on sisal and other hard fibers.
 Nigeria a) separate questions on main farmland and dry season land and, within each, on first and second crop.
 Nyasaland a) same remark as under North Borneo a).
 Uganda a) same remark as under North Borneo a).
 Fiji a) same remark as under North Borneo a).
 New Zealand a) essentially wild growth (on unimproved land).

TABLE 18. QUESTIONS IN NATIONAL CENSUSES ON OILSEED CROPS

ITEM	Groundnuts	Linseed	Hempseed	Castor beans	Rapeseed or colza	Sesame	Sunflower	Other oilseed crops not reported elsewhere
Code in the Expanded List	E-10.3 a	b	c	d	e	f	g	h
Code in the Short List	27	—	—	—	—	—	—	—
Number of censuses asking the question on areas	48	19	3	12	15	27	15	13
1								
2								
Number of censuses asking the question on production	45	12	2	8	3	20	12	13
COUNTRY								
EUROPE								
Austria	—	—	—	—	X	—	—	All other oil crops
Belgium	—	—	X	—	aX	—	—	Other oil crops
Czechoslovakia	—	X	X	—	aX	—	—	All other oilseeds (sunflower, canary, radish, pumpkins for oil and camellia)
Denmark	—	X	—	—	X	—	—	—
Finland	—	—	—	—	X	—	—	—
Germany (Federal Republic)	—	—	—	—	a,bX	—	—	—
Greece	—	—	—	—	—	X	—	—
Luxembourg	—	—	—	—	aX	—	—	—
Netherlands	—	X	—	—	aX	—	—	Dill for seed
Saar	—	—	—	—	a,bX	—	—	—
Sweden	—	—	—	—	X	—	—	—
Switzerland	—	—	—	—	X	—	—	—
United Kingdom ^a	—	X	—	—	X	—	—	—
NORTH AND CENTRAL AMERICA								
Barbados	—	—	—	—	—	—	—	Cotton seed*
Canada	—	*X	—	—	*X	—	*X	—
Costa Rica	*a,bX	—	—	—	—	*bX	—	—
Dominican Republic	*X	—	—	—	—	*X	—	—
El Salvador	*X	—	—	—	—	*X	—	—
Guatemala	*X	—	—	—	—	*X	—	—
Honduras	*X	—	—	—	—	*X	—	—
Leeward Islands	*X	—	—	—	—	—	—	Cotton seed*
Mexico	*X	*X	—	*X	—	*X	—	—
Trinidad and Tobago	*—	—	—	—	—	—	—	—
United States	*X	*X	—	—	—	—	—	—
Windward Islands	X	—	—	—	—	—	—	Cotton seed*
SOUTH AMERICA								
Argentina	X	X	—	—	aX	—	X	—
Bolivia	*X	*X	—	—	—	—	—	—
Brazil	*X	*X	—	*X	—	*X	*X	—
Chile	—	*—	—	—	—	*—	*X	—
Colombia	*X	—	—	*X	—	*X	—	—
Ecuador	*X	—	—	*X	—	—	—	—
Uruguay	*X	—	—	—	—	—	*aX	—
Venezuela	*X	—	—	—	—	*X	—	—
ASIA								
Aden Protectorate	—	—	—	—	—	*X	—	Cotton seed*
Brunei	*X	—	—	—	—	—	—	—
Burma	*X	—	—	—	—	*X	—	Other oil seeds
Ceylon	—	—	—	—	—	aX	—	—

TABLE 18. QUESTIONS IN NATIONAL CENSUSES ON OILSEED CROPS

Code in the Expanded List	E-10.3a	b	c	d	e	f	g	h
Cyprus	*—	*—	*—	—	—	*X	—	—
India	X	X	—	X	a X	X	—	Niger seed (<i>Guizotia abyssinica</i>) Other oilseed
Iraq	—	*X	—	—	—	*X	—	—
Israel	—	—	—	—	—	—	—	—
Jewish holdings	*X	—	—	—	—	X	X	Other oilseeds* ^a
Arab holdings	*—	—	—	—	—	X	X	Other oilseeds* ^a
Japan	*X	—	—	X	*X	X	X	Perilla. <i>Camellia japonica</i>
Jordan	*X	—	—	—	—	*X	*X	—
Malaya, Federation of	*X	—	—	—	—	—	—	—
North Borneo	*X	—	—	—	—	—	—	—
Philippines	*X	—	—	*X	—	*X	—	—
Thailand	X	—	—	X	—	X	—	—
Turkey	*X	*X	*X	*a X	*a X	*X	*X	—
AFRICA								
Algeria	—	X	—	—	—	—	—	Other oilseeds (sunflower, castor beans, soybeans, groundnuts, etc.)
Belgian Congo								
Europeans and developed Negroes	*X	—	—	*X	—	—	—	Other oilseeds*
Undeveloped Negroes	*X	—	—	—	—	—	—	—
Egypt	X	—	—	—	—	X	—	Lettuce for oil
Gambia	*X	—	—	—	—	X	—	—
Gold Coast and British Togoland	*X	—	—	—	—	—	—	Cotton seed*
Mauritius	*X	—	—	—	—	—	—	—
Mozambique	*X	—	—	*X	—	*X	X*	Cotton seed* Earth nuts Bambara groundnuts (<i>Voandzeia subterranea</i>)* ^a
Nigeria and British Cameroons	*a X	—	—	—	—	—	—	—
Northern Rhodesia								
European holdings	*X	—	—	—	—	—	—	—
Nyasaland	*X	—	—	—	—	—	—	Cotton seed*
Sierra Leone	*X	—	—	—	—	—	—	—
Southern Rhodesia								
European holdings	*X	—	—	—	—	—	*X	Sunn hemp seed*
African agriculture	*a X	—	—	—	—	—	—	—
Swaziland	*X	←	←	←	←	←	←	Cotton seed*
Tanganyika	*a X	←	←	←	←	←	←	—
Tunisia	—	X	—	—	—	—	—	Other oilseeds (Sunflower, castor beans, soybeans, groundnuts, etc.)
Uganda	*X	—	—	—	—	*X	*X	Cotton seed*
Union of South Africa								
"White" holdings, excluding natives on the same	*X	*X	—	—	—	—	*X	—
Native farming	X	—	—	—	—	—	—	—
Zanzibar and Pemba	*X	—	—	—	—	—	—	—
OCEANIA								
Australia	*X	*X	—	—	—	—	*X	—
British Solomon Islands	*X	—	—	—	—	—	—	—
Fiji	*X	—	—	X	—	*X	—	—
Hawaii	*X	—	—	—	—	—	—	—
New Zealand	—	X	—	—	—	—	—	—
Tonga	*X	—	—	—	—	—	—	—

Belgium ^a) separate questions on winter and summer crops.
Czechoslovakia ^a) same remark as under Belgium ^a).
Germany (Federal Republic) ^a) same remark as under Belgium ^a).
Germany (Federal Republic) ^b) separate questions on rapeseed and colza.
Luxembourg ^a) same remark as under Germany, Federal Republic ^b).
Netherlands ^a) same remark as under Germany, Federal Republic ^b).
Saar ^a) same remark as under Belgium ^a).
Saar ^b) same remark as under Germany, Federal Republic ^b).
United Kingdom ^a) England and Wales and Scotland.
Costa Rica ^a) separate questions on first and second crop.
Costa Rica ^b) separate questions on sole and associated crops.
Argentina ^a) same remark as under Germany, Federal Republic ^b).
Uruguay ^a) same remark as under Costa Rica, ^a).
Ceylon ^a) separate questions on the Yala and the Maha crop season.
India ^a) including mustard.

Israel ^a) on production only.
Turkey ^a) asked only from *mukhtars* (and large farms), not on sample holdings.
Nigeria ^a) separate questions on main farm land and dry season land and within each, on first and second crop.
Southern Rhodesia ^a) on production, separate questions on production under sole crop and under mixed crops.
Tanganyika ^a) including bambara nuts (*Voandzeia subterranea*).
Note to item E-10.3 h.

The frequency of participation regarding production of oilseeds, other than those listed in the FAO Program as independent items, is mainly due to the inclusion of questions on cotton seed in a number of censuses. These questions always refer to production from the area already reported under fiber crops, no country having asked separately for area exclusively or mainly devoted to production of cotton seed.

TABLE 19. QUESTIONS IN NATIONAL CENSUSES ON SPICES, CON

ITEM	Aniseed	Cardamom	Mustard	Pimenta				
Code in the Expanded List	E-10.4 a	b	c					
Number of censuses asking the question on areas	4	4	14					
Number of censuses asking the question on production	3	3	7					
COUNTRY								
EUROPE								
Austria	—	—	—	—	X	—	—	—
Czechoslovakia	—	—	—	X	X	—	—	Caraway
Denmark	—	—	—	X	X	—	—	Caraway
Finland	—	—	—	—	—	—	—	Spices
Germany, (Federal Republic)	—	—	—	X	—	—	—	—
Netherlands	—	—	a X	—	X	—	—	Caraway
Saar	—	—	X	—	X	—	—	—
Switzerland	—	—	—	—	X	—	—	—
United Kingdom	—	—	a X	—	—	—	—	—
NORTH AND CENTRAL AMERICA								
Canada	—	—	—	*X	—	—	—	—
Dominican Republic	—	—	—	—	*X	—	—	—
Guatemala	—	*X	—	—	—	—	—	—
Mexico	—	—	—	—	*X	—	—	Paprika (<i>Chile seco</i>)
Panama	—	—	—	—	*—	—	—	—
Puerto Rico	—	—	—	—	*X	—	—	—
United States	—	—	—	—	X	—	—	—
SOUTH AMERICA								
Argentina	X	—	—	—	X	X	—	—
Bolivia	—	—	—	—	*X	—	—	—
Colombia	*X	—	—	—	—	—	—	—
Uruguay	—	—	—	—	a X	—	—	—
ASIA								
Brunei	—	—	—	—	—	—	—	Turmeric*
Burma	—	—	—	—	*X	*X	—	Dhani
Ceylon	—	*a X	—	—	b X	b X	—	Turmeric ^b
Cyprus	*X	—	—	—	—	—	—	—
India	—	—	—	—	—	X	—	Caraway, Turmeric, Other spices and condiments
Israel	—	—	—	—	—	—	—	Safflower*
Jewish holdings	—	—	—	—	—	X	—	—
Arab holdings	—	—	—	—	—	X	—	—
Japan	—	—	—	—	—	*X	—	Torreyia for perfume, Saffron
Malaya, Federation of	—	*X	—	—	—	X	—	Turmeric
Philippines	—	—	—	—	—	*X	—	—
Thailand	—	X	—	—	—	X	—	—
Turkey	*X	—	—	—	—	*a X	*X	Safflower

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TABLE 18. QUESTIONS IN NATIONAL CENSUSES ON OILSEED CROPS

Code in the Expanded List	E-10.3a	b	c	d	e	f	g	h
Cyprus	*—	*—	*—	—	—	*X	—	—
India	X	X	—	X	aX	X	—	Niger seed (<i>Guizotia abyssinica</i>) Other oilseed
Iraq	—	*X	—	—	—	*X	—	—
Israel	—	—	—	—	—	X	X	Other oilseeds* ^a
Jewish holdings	*X	—	—	—	—	X	X	Other oilseeds* ^a
Arab holdings	*—	—	—	—	—	X	X	Perilla.
Japan	*X	—	—	X	*X	X	X	<i>Camellia japonica</i>
Jordan	*X	—	—	—	—	*X	*X	—
Malaya, Federation of	*X	—	—	—	—	—	—	—
North Borneo	*X	—	—	—	—	—	—	—
Philippines	*X	—	—	*X	—	*X	—	—
Thailand	X	—	—	X	—	X	—	—
Turkey	*X	*X	*X	*aX	*aX	*X	*X	—
AFRICA								
Algeria	—	X	—	—	—	—	—	Other oilseeds (sunflower, castor beans, soybeans, groundnuts, etc.)
Belgian Congo	—	—	—	—	—	—	—	Other oilseeds*
Europeans and developed Negroes	*X	—	—	*X	—	—	—	—
Undeveloped Negroes	*X	—	—	—	—	—	—	—
Egypt	X	—	—	—	—	X	—	Lettuce for oil
Gambia	*X	—	—	—	—	X	—	—
Gold Coast and British Togoland	*X	—	—	—	—	—	—	Cotton seed*
Mauritius	*X	—	—	—	—	—	—	—
Mozambique	*X	—	—	*X	—	*X	X*	Cotton seed* Earth nuts
Nigeria and British Cameroons	*aX	—	—	—	—	—	—	Bambara groundnuts (<i>Voandzeia subterranea</i>)* ^a
Northern Rhodesia	—	—	—	—	—	—	—	—
European holdings	*X	—	—	—	—	—	—	Cotton seed*
Nyasaland	*X	—	—	—	—	—	—	—
Sierra Leone	*X	—	—	—	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—	*X	Sunn hemp seed*
European holdings	*X	—	—	—	—	—	—	—
African agriculture	*aX	—	—	—	—	—	—	—
Swaziland	*X	—	—	—	—	—	—	Cotton seed*
Tanganyika	*aX	—	—	—	—	—	—	Other oilseeds (Sunflower, castor beans, soybeans, groundnuts, etc.)
Tunisia	—	X	—	—	—	—	—	Cotton seed*
Uganda	*X	—	—	—	—	*X	*X	—
Union of South Africa	—	—	—	—	—	—	—	—
"White" holdings, excluding natives on the same	*X	*X	—	—	—	—	*X	—
Native farming	X	—	—	—	—	—	—	—
Zanzibar and Pemba	*X	—	—	—	—	—	—	—
OCEANIA								
Australia	*X	*X	—	—	—	—	*X	—
British Solomon Islands	*X	—	—	—	—	—	—	—
Fiji	*X	—	—	X	—	*X	—	—
Hawaii	*X	—	—	—	—	—	—	—
New Zealand	—	X	—	—	—	—	—	—
Tonga	*X	—	—	—	—	—	—	—

Belgium ^a separate questions on winter and summer crops.
Czechoslovakia ^a same remark as under Belgium ^a.
Germany (Federal Republic) ^a same remark as under Belgium ^a.
Germany (Federal Republic) ^b separate questions on rapeseed and colza.
Luxembourg ^a same remark as under Germany, Federal Republic ^b.
Netherlands ^a same remark as under Germany, Federal Republic ^b.
Saar ^a same remark as under Belgium ^a.
Saar ^b same remark as under Germany, Federal Republic ^b.
United Kingdom ^a England and Wales and Scotland.
Costa Rica ^a separate questions on first and second crop.
Costa Rica ^b separate questions on sole and associated crops.
Argentina ^a same remark as under Germany, Federal Republic ^b.
Uruguay ^a same remark as under Costa Rica, ^a.
Ceylon ^a separate questions on the Yala and the Maha crop season.
India ^a including mustard.

Israel ^a on production only.
Turkey ^a asked only from *mukhtars* (and large farms), not on sample holdings.
Nigeria ^a separate questions on main farm land and dry season land and, within each, on first and second crop.
Southern Rhodesia ^a on production, separate questions on production under sole crop and under mixed crops.
Tanganyika ^a including bambara nuts (*Voandzeia subterranea*).

Note to item E-10.3 h.
The frequency of participation regarding production of oilseeds, other than those listed in the FAO Program as independent items, is mainly due to the inclusion of questions on cotton seed in a number of censuses. These questions always refer to production from the area already reported under fiber crops, no country having asked separately for area exclusively or mainly devoted to production of cotton seed.

TABLE 19. QUESTIONS IN NATIONAL CENSUSES ON SPICES, CONDIMENTS AND AROMATIC PLANTS

ITEM	Aniseed	Cardamom	Mustard	Pimento or peppers	Poppy seed	Other cultivated spices, condiments and aromatic plants (caraway seed, etc.)
Code in the Expanded List	E-10.4a	b	c	d	e	f
Number of censuses asking the question on areas	4	4	14	23	9	17
Number of censuses asking the question on production	3	3	7	12	1	3
COUNTRY						
EUROPE						
Austria	—	—	—	—	X	—
Czechoslovakia	—	—	X	X	X	Caraway
Denmark	—	—	X	—	X	Caraway
Finland	—	—	—	—	—	Spices
Germany, (Federal Republic)	—	—	X	—	X	—
Netherlands	—	—	aX	—	X	Caraway
Saar	—	—	X	—	X	—
Switzerland	—	—	—	—	X	—
United Kingdom	—	—	aX	—	—	—
NORTH AND CENTRAL AMERICA						
Canada	—	—	*X	—	—	—
Dominican Republic	—	—	—	*X	—	—
Guatemala	—	*X	—	—	—	—
Mexico	—	—	—	*X	—	Paprika (<i>Chile seco</i>)
Panama	—	—	—	*—	—	—
Puerto Rico	—	—	—	*X	—	—
United States	—	—	—	X	—	—
SOUTH AMERICA						
Argentina	X	—	—	X	X	—
Bolivia	—	—	—	*X	—	—
Colombia	*X	—	—	—	—	—
Uruguay	—	—	—	aX	—	—
ASIA						
Brunei	—	—	—	—	—	Turmeric*
Burma	—	—	—	—	—	Dhani
Ceylon	—	*aX	bX	bX	—	Turmeric ^b
Cyprus	*X	—	—	—	—	—
India	—	—	—	X	—	Caraway, Turmeric, Other spices and condiments
Israel	—	—	—	—	—	Safflower*
Jewish holdings	—	—	—	X	—	—
Arab holdings	—	—	—	X	—	—
Japan	—	—	—	*X	—	Torreya for perfume.
Malaya, Federation of	—	*X	—	X	—	Saffron
Philippines	—	—	*X	*X	—	Turmeric
Thailand	—	X	—	X	—	—
Turkey	*X	—	*aX	*X	*X	Safflower

TABLE 19. QUESTIONS IN NATIONAL CENSUSES ON SPICES, CONDIMENTS AND AROMATIC PLANTS

Code in the Expanded List	E-10.4 a	b	c	d	e	f
AFRICA						
Algeria	—	—	—	X	—	Geranium rosat and other perfume plants
Egypt	—	—	—	aX	—	Safflower
Mozambique	—	—	*X	—	—	Coriander*, Piripiri*
Nigeria and British Cameroons	—	—	—	*aX	—	—
Tunisia	—	—	—	X	—	Geranium rosat and other perfume plants
Uganda	—	—	—	*X	—	—
OCEANIA						
Australia	—	—	*X	—	—	—
Fiji	—	—	*X	—	—	—
Guam	—	—	—	*X	—	—

Netherlands ^{a)} separate questions on brown and yellow mustard.
 United Kingdom ^{a)} England and Wales, including mustard for fodder and for plowing in.
 Uruguay ^{a)} including sweet peppers.
 Ceylon ^{a)} production asked for only on estates, not on small holdings.
 Ceylon ^{b)} separate questions on the Yala and the Maha crop season.

Turkey ^{a)} Wild mustard, asked for only from mukhtars (and large farms), not on sample holdings.
 Egypt ^{a)} separate questions on winter crops and flood crops.
 Nigeria ^{a)} separate questions on main farmland and dry season land and, within each, on first and second crop.

TABLE 20. QUESTIONS IN NATIONAL CENSUSES ON ESSENTIAL OIL PLANTS

ITEM	Citronella	Geranium	Lemon grass	Lavender	Other cultivated essential oil plants (mint, etc.)
Code in the Expanded List	E-10.5 a	b	c	d	e
Number of censuses asking the question on areas	4	—	1	—	5
Number of censuses asking the question on production	3	—	1	—	4
COUNTRY					
NORTH AND CENTRAL AMERICA					
El Salvador	*aX	—	—	—	—
Guatemala	*X	—	*X	—	—
United States	—	—	—	—	Mint*
SOUTH AMERICA					
Argentina	—	—	—	—	Mint
ASIA					
Ceylon	*aX	—	—	—	—
Japan	—	—	—	—	Mint*
Malaya, Federation of	X	—	—	—	Patchouli (<i>Pogostemon heyneanus</i>)*, Sireh, or Indian lemon grass (<i>Andropogon schoenanthus</i>)
AFRICA					
Seychelles	—	—	—	—	Patchouli (<i>Pogostemon heyneanus</i>)*

El Salvador ^{a)} citronella and lemon grass in one item.

Ceylon ^{a)} the question on production asked only on estates, not on small holdings.

TABLE 21. QUESTIONS IN NATIONAL CENSUSES ON OTHER INDUSTRIAL CROPS

ITEM	Tobacco	Hops	Indigo	Other crops for industrial purposes, not included elsewhere (licorice, chicory, opium, henna, broom millet, broom sorghum, etc.)
Code in the Expanded List	E-10.6 a	b	c	d
Code in the Short List	28	—	—	—
Number of censuses asking the question on areas	65	11	1	28
Number of censuses asking the question on production	45	1	—	5
COUNTRY				
EUROPE				
Austria	X	—	—	Chicory. All other industrial crops (hops, officinals, condiments, weaver teasel [<i>Dipsacus fullorum</i>], aromatic plants)
Belgium	X	X	—	Chicory. Medical and aromatic plants and condiments
Czechoslovakia	X	X	—	Medical and aromatic plants and condiments. All other industrial crops (valerian, fennel, marjoram, etc.)
Denmark	—	—	—	Chicory
Germany (Federal Republic)	X	X	—	Medical plants and spices (valerian, fennel, marjoram, caraway, mint, etc.). All other industrial crops including other fiber and oil crops, also camellia, soybeans, chicory
Greece	^a X	—	—	Other industrial crops, and aromatic plants. (aniseed, groundnuts, etc.)
Luxembourg	—	—	—	Medical and aromatic plants and spices. All other industrial crops
Netherlands	X	X	—	Medical and aromatic plants. Chicory not for greens.
Saar	X	X	—	Chicory. Medical plants, condiments and aromatic plants (valerian, fennel, marjoram, caraway, mint, etc.) All other crops for industrial purposes
Switzerland	X	—	—	Chicory. Medical plants
United Kingdom^a	—	X	—	—
Yugoslavia	—	—	—	Industrial crops
NORTH AND CENTRAL AMERICA				
Canada	^a X	—	—	—
Costa Rica	^a X	—	—	—
Dominican Republic	X	—	—	—
El Salvador	X	—	—	—
Guatemala	X	—	—	—
Haiti	X	—	—	—
Honduras	X	—	—	—
Mexico	^a X	—	—	—
Panama	^a X	—	—	—
Puerto Rico	X	—	—	—
United States	^a X	X	—	Broomcorn.
Windward Islands	X	—	—	—
SOUTH AMERICA				
Argentina	X	X	—	Pellitory root (<i>Anacyclus pyrethrum</i>). Tartago (<i>Euphorbia lathyris</i>)
Bolivia	X	—	—	—
Brazil	X	—	—	Pellitory root (<i>Anacyclus pyrethrum</i>)
Chile	X	—	—	—
Colombia	X	—	—	—
Ecuador	X	—	—	—
Uruguay	X	—	—	Broom sorghum
Venezuela	X	—	—	—

TABLE 21. QUESTIONS IN NATIONAL CENSUSES ON OTHER INDUSTRIAL CROPS

Code in the Expanded List	E-10.6 a	b	c	d
ASIA				
Brunei	*X	—	—	—
Burma	*X	—	—	—
Ceylon	^a X	—	—	—
Cyprus	^a X	—	—	Broom corn
India	X	—	—	Ganja (<i>cannabis sativa</i> var. <i>indica</i>) or Indian hemp, other drugs and narcotics
Iraq	X	—	—	—
Israel	*X	—	—	Other industrial and medicinal crops
Jewish holdings	*X	—	—	—
Arab holdings	*X	—	—	—
Japan	*X	X	X	See note ^a)
Jordan	^a X	—	—	Broom sorghum*
Malaya, Federation of	*X	—	—	Ipecacuanha*
North Borneo	^a X	—	—	—
Philippines	*X	—	—	—
Singapore Island	*X	—	—	—
Thailand	X	—	—	—
Turkey	*X	—	—	Opium*
AFRICA				
Algeria	X	—	—	—
Belgian Congo	*X	—	—	—
Egypt	—	—	—	Henna, Pyrethrum. Other industrial crops
Kenya	—	—	—	—
Mauritius	^a X	—	—	—
Mozambique	*X	—	—	Maffra (a kind of medicinal oil plant)
Nigeria and British Cameroons	^a X	—	—	—
Northern Rhodesia	—	—	—	—
European holdings	^a X	—	—	—
Nyasaland	^a X	—	—	—
Seychelles	*X	—	—	—
Southern Rhodesia	—	—	—	—
European holdings	^a X	—	—	—
Swaziland	*X	—	—	—
Tanganyika	*X	—	—	—
Tunisia	X	—	—	—
Uganda	^a X	—	—	—
Union of South Africa	—	—	—	—
"White" holdings	^a X	—	—	Chicory
Native holdings	X	—	—	—
Zanzibar and Pemba	*X	—	—	—
OCEANIA				
American Samoa	*X	—	—	—
Australia	*X	*X	—	Chicory*. Broom millet*
Fiji	*X	—	—	Patwa
Guam	*X	—	—	—
New Zealand	X	X	—	—
Tonga	*X	—	—	—
Western Samoa	X	—	—	—

Greece ^a) separate question on first and second crop.
 United Kingdom ^a) England and Wales.
 Canada ^a) also a separate question on type of tobacco.
 Costa Rica ^a) separate questions on sole and associated crops.
 Mexico ^a) "Tabaco beneficiado".
 Panama ^a) separate questions on 1949 and 1950 sowings.
 United States ^a) separate questions on burley tobacco, dark-fired tobacco, and dark air-cured tobacco.
 Ceylon ^a) separate questions on the Yala and the Maha crop season.
 Cyprus ^a) separate questions on yellow leaf, fumigated, and Virginia tobacco.
 Japan ^a) the following additional items were asked for: opium, insect powder plant (*Chrysanthemum* spp.) Konyaku (*Amorphophalus konjac*)*. Mat rush (*Juncus effusus*). Shichito mat rush (*Caperus malaccensis*)*. Rice paper plant (*Wickstroemia sikokiana*). Sponge gourd or towel gourd, millet grass (*Andropogon Sorghum*), summer cypress or broom goosetoe, sedge grass for hats (*Acetabularia mediterranea*). Korean mat-making grass.

Bass or black-rush (great water rush, bullrush, mat rush, spurt grass) and Gobbo (*Abe moschus manihot*).
 Jordan ^a) separate questions on Virginia, Turkish and local (*Heshee*) tobacco.
 North Borneo ^a) separate questions on air-cured and flue-cured tobacco.
 Mauritius ^a) same remark as under North Borneo ^a).
 Nigeria ^a) separate questions on main farm land and dry season land, and, within each, on first and second crop.
 Northern Rhodesia ^a) separate questions on flue-cured Virginia, sun-and-air-cured Virginia, Turkish, and Burley tobacco.
 Nyasaland ^a) separate questions on air-cured, flue-cured, and fire-cured tobacco.
 Southern Rhodesia ^a) separate questions on flue-cured Virginia, fire-cured Virginia, sun-cured Virginia, air-cured Virginia, cigar tobacco, and Turkish tobacco.
 Uganda ^a) separate questions on air-cured, flue-cured and fire-cured tobacco and on tobacco for nicotine fabrication, as well as on nicotine production.
 Union of South Africa ^a) separate questions on Turkish and other tobacco.

Table 22. QUESTIONS IN NATIONAL CENSUSES ON CROPLAND NOT SOWN OR NOT HARVESTED, AND AREA CUT FOR HAY ON PERMANENT MEADOWS AND PASTURE together with other crops on arable land and green manure as a main crop (the two latter not expressly included in the Program)

ITEM	Other crops on arable land	Fallow land	Crop failure, destruction or loss	Green manure as a main crop	Area cut for hay
Code in the Expanded List	—	E-11.1	E-11.2	—	E-12
Code in the Short List	—	—	—	—	31
Number of censuses asking the question on areas	47	45	7	13	21
Number of censuses asking the question on production	19	—	—	—	11
COUNTRY					
EUROPE					
Austria	—	a X	—	—	b X
Belgium	Other crops not included elsewhere (specify).	X	—	—	X
Czechoslovakia	—	X	—	—	X
Denmark	Other crops (spurry, buckwheat, tobacco, etc.)	X	—	—	a X
Finland	Other crops	X	—	—	*, a X
Germany (Federal Republic)	—	X	—	X	X
Greece	—	X	—	—	X
Ireland	Other root and green crops (including area under tobacco, grass for ensilage, vetches, rape, carrots etc.)	—	—	—	—
Luxembourg	—	X	—	X	a X
Malta and Gozo	—	X	—	—	—
Netherlands	Field crops other than those specified elsewhere (specify)	X	—	a X	—
Norway	Other crops on arable land and horticultural land	X	—	—	a X
Portugal	—	a X	—	—	—
Saar	—	X	—	X	a X
Sweden	Other crops (on arable land)	a X	—	—	X
Switzerland	Other crops (on arable land)	—	—	—	—
United Kingdom	Other crops ^a	b X	—	—	c X
Yugoslavia	—	a X	—	—	—
NORTH AND CENTRAL AMERICA					
Alaska	Other crops (give name)*	—	X	—	*, a X
Canada	Other field crops*	X	—	—	*, a —
Costa Rica	Other crops (give name)*	X	—	—	—
Dominican Republic	—	X	a X	—	—
El Salvador	Other crops	—	—	—	—
Guatemala	Other crops on arable land*	X	X	—	—
Honduras	Other non-perennial crops (give name)*	X	—	—	—
Mexico	Other crops (canary seed, chayote (<i>Sechium edule</i>), flowers, etc.)	X	X	—	—
Panama	—	X	—	—	—
Puerto Rico	Other crops (give name)	—	—	—	—
Trinidad and Tobago	Other miscellaneous crops (tobacco, pineapples, fodder, groundnuts, etc.).	—	—	—	—
United States	Other crops (give name)*	X	—	a X	*, b X
Virgin Islands	Other field crops (give name)	—	X	—	—
Windward Islands	Mixed food crops	—	—	—	—
SOUTH AMERICA					
Bolivia	Other crops (specify)	X	X	—	—
Chile	—	X	—	—	—
Colombia	—	—	a X	—	—
Falkland Islands	—	—	—	—	*, X
Uruguay	—	a X	—	—	—
Venezuela	Other crops*	X	a X	—	—

TABLE 22. QUESTIONS IN NATIONAL CENSUSES ON CROPLAND NOT SOWN OR NOT HARVESTED, AND AREA CUT FOR HAY ON PERMANENT MEADOWS AND PASTURE together with other crops on arable land and green manure as a main crop (the two latter not expressly included in the Program)

Code in the Expanded List	Other crops on arable land	E-11.1	E-11.2	Green manure	E-12
ASIA					
Burma	Other field crops	X	—	—	—
Ceylon	Other crops ^a	X	—	—	—
Cyprus	—	X	—	—	—
India	—	a X	—	—	—
Israel					
Jewish holdings	Miscellaneous winter crops.	—	—	—	—
	Miscellaneous summer crops.	a X	—	X	* X
Arab holdings	Miscellaneous winter crops.	b X	—	—	—
	Miscellaneous summer crops.	a X	—	b X	—
Japan	—	X	a X	—	—
Jordan	Other crops (specify)*	—	—	—	—
Malaya, Federation of	Other miscellaneous crops	—	—	—	—
Philippines	All other crops (specify)*	X	—	—	—
Ryukyu Islands	Other crops	X	—	—	—
Thailand	—	X	—	—	—
Turkey	Other field crops (specify)*, ^a	X	—	—	* X
AFRICA					
Algeria					
Belgian Congo	Other crops (broom sorghum, canne de Provence, flowers, etc)	X	—	—	—
Europeans and developed Negroes	Food crops not elsewhere specified	—	—	X	—
Undeveloped Negroes	Crops for home consumption*	—	—	—	—
Kenya	Other crops	—	—	X	—
Mozambique	Other crops	—	—	X	—
Nigeria and British Cameroons	Other crops (specify)*, ^a	X	—	—	—
Northern Rhodesia					
European holdings	Other annual crops (specify)*	X	—	a X	—
Southern Rhodesia					
European holdings	Other summer crops (specify)*	—	—	a X	* X
	Other winter crops (specify)*	—	—	—	—
	Trap crops for witchweed (specify crops separately)	—	—	—	—
African agriculture	Other crops*	—	—	—	—
	Mixed crops*	—	—	—	—
Swaziland	—	—	—	—	* X
Tunisia					
Other crops (broom sorghum, canne de Provence, flowers etc.)	X	—	—	—	—
Union of South Africa					
"White" farms	Other crops (specify)	—	—	—	*, a X
OCEANIA					
American Samoa					
Australia	Other crops (give name)*	—	—	—	—
Guam	Other crops (state kind)*	X	—	X	* X
Hawaii	Other crops (give name)*	—	—	—	—
New Zealand	Other field crops (give name)*	—	—	—	—
	Other field crops (space for specification)*	X	—	—	—
Papua and New Guinea					
	Area of other crops (if sufficiently important, state kind)	—	—	—	—
Western Samoa	Other cultivated crops to be specified	—	—	—	—

Austria ^a) includes green manure as a main crop.

Austria ^b) with same distinction as on the land utilization table.

Denmark ^a) separate questions on artificial and natural grassland.

Finland ^a) same remark as under Austria ^b).

Luxembourg ^a) same remark as under Austria ^b).

Netherlands ^a) kind of crop to be specified.

Norway ^a) separate questions on natural meadows on nearby land, and on

outfarm meadows and other meadows farm from the holding center.

Portugal ^a) separate questions on irrigated and unirrigated land.

Saar ^a) same remark as under Austria ^b).

Sweden ^a) separate questions on black fallow, permanent pasture on arable land and uncultivated arable land.

United Kingdom ^a) in Northern Ireland, other crops except clover and grass.

United Kingdom ^b) in Northern Ireland including uncultivated arable land.

United Kingdom ^c) in Scotland a separate question on timothy grass for mowing.

Yugoslavia ^a) same remark as under United Kingdom ^b).

Alaska ^a) wild grass only, all cultivated grass being included under E-4.

Canada ^a) same remark as under Alaska ^a).

Dominican Republic ^a) separate questions on four categories of causes.

United States a) separate questions on soybeans and cowpeas.
 United States b) same remark as under Alaska a).
 Colombia a) separate questions on the different crops that may have failed.
 Uruguay a) stubble land cultivated until 1 to 20 years ago.
 Venezuela a) same remark as under Colombia a).
 Ceylon a) separate questions on seasonal and nonseasonal crops and, among the former, on the Yala and the Maha crop season.
 India a) separate questions on current fallow and new fallow.
 Israel a) separate questions on cultivated and bare fallow.
 Israel b) cultivated fallow.
 Japan a) separate questions on paddy field and other arable land.

Japan b) separate questions on soybeans, Chinese milk vetch, common vetch, bur-clover and other crops for green manure.
 Jordan a) separate questions on three causes of damage.
 Turkey a) asked only from mukhtars (and large farms) not from sample holdings.
 Nigeria a) separate questions on main farm land and dry season land and within each, on first and second crop.
 Northern Rhodesia a) separate questions on sunn hemp, cowpeas, beans, sunflower, and other nonleguminous crops plowed in green.
 Southern Rhodesia a) specify crops separately.
 Union of South Africa a) veld grass cut for hay.

TABLE 23. QUESTIONS IN NATIONAL CENSUSES ON GRAPES AND OLIVES

ITEM	Grapes	For wine	For table use	For raisins	Olives	For oil production	For direct consumption
Code in the Expanded List	E-13.1	a	b	c	E-14.1	a	b
Code in the Short List	32	—	—	—	—	—	—
Number of censuses asking the question on areas	33	8	6	4	17	—	—
		1	1	1			
Number of censuses asking the question on production	18	3	3	1	9	—	—
COUNTRY							
EUROPE							
Austria	1 X	—	—	—	—	—	—
Czechoslovakia	1 X	—	—	—	—	—	—
Germany (Federal Republic)	1 X	—	—	—	—	—	—
Greece	1,2 X	1 X	—	1,a X	X	—	—
Luxembourg	X	—	—	—	—	—	—
Malta and Gozo	3 X	—	—	—	—	—	—
Saar	1 X	—	—	—	—	—	—
Switzerland	1 X	—	—	—	—	—	—
NORTH AND CENTRAL AMERICA							
Canada	X	—	—	—	—	—	—
Dominican Republic	*4 X	—	—	—	—	—	—
Guatemala	* X	—	—	—	—	—	—
Mexico	*4 X	—	—	—	* X	—	—
United States	*4,a X	*b X	*b X	*b X	*b X	—	—
SOUTH AMERICA							
Argentina	2,a,b X	a,b X	a,b X	—	c X	—	—
Bolivia	* X	—	—	—	—	—	—
Brazil	* X	—	—	—	—	—	—
Chile	* a X	—	—	—	* X	—	—
Colombia	* X	—	—	—	—	—	—
Ecuador	* X	—	—	—	—	—	—
Uruguay	*2 X	* X	* X	—	* X	—	—
ASIA							
Cyprus	*1 X	—	—	—	*a X	—	—
Iraq	—	—	—	—	X	—	—
Israel							
Jewish holdings	* X	X	X	—	* X	—	—
Arab holdings	* X	—	—	—	X	—	—

TABLE 23. QUESTIONS IN NATIONAL CENSUSES ON GRAPES AND OLIVES

Code in the Expanded List	E-13.1	a	b	c	E-14.1	a	b
Japan	* ³ X	—	—	—	X	—	—
Jordan	* ⁴ X	—	—	—	*X	—	—
Philippines	*X	—	—	—	—	—	—
Turkey	*X	—	—	—	*X	—	—
AFRICA							
Algeria	X	a X	a X	—	X	—	—
Egypt	a X	—	—	—	X	—	—
Mozambique	* ³ X	—	—	—	a X	—	—
Tunisia	X	a X	a X	—	X	—	—
Union of South Africa "White" holdings	X		X	a X	—	—	—
OCEANIA							
Australia	*X	*X	*X	*X	*X	—	—
New Zealand	X	—	—	—	—	—	—

¹Including nonproductive area.

²By addition of the subitems.

³Area, plus number of scattered vines.

⁴Number of vines, not area.

Greece ^a) separate questions on Corinthian, Sultanine, and Rozaki raisins.

United States ^a) in California, also area was asked for.

United States ^b) in California only, classified according to variety.

Argentina ^a) separate questions also on area with and without espalier.

Argentina ^b) also separate questions on nonproductive area.

Argentina ^c) separate questions on area with and without associated crops.

Chile ^a) separate questions on irrigated and nonirrigated area, and on a variety called parrones (not distinguished as irrigated or not).

Cyprus ^a) area, not number of trees.

Algeria ^a) separate questions on red and white grapes.

Egypt ^a) separate questions on vines "trellis" and vines "on ground."

Mozambique ^a) number of scattered trees only.

Tunisia ^a) same remark as under Algeria ^a).

Union of South Africa ^a) separate questions on currants and sultanas

TABLE 24. QUESTIONS IN NATIONAL CENSUSES ON TREES, BUSHES AND VINES YIELDING SPICES, CONDIMENTS, AND AROMATIC PRODUCTS

ITEM	Cinnamon	Cloves	Cumin seed	Nutmeg and mace	Black pepper	Other cultivated trees, bushes and vines, yielding spices condiments, and aromatic products (ginger, vanilla, etc.)
Code in the Expanded List	E-15.1	E-15.2	E-15.3	E-15.4	E-15.5	E-15.6
Number of censuses asking the question on areas	5	5	4	3	7	21
Number of censuses asking the question on production	3 ¶	4	2	2	4	16
COUNTRY						
EUROPE						
Malta and Gozo	—	—	¹ X	—	—	—
NORTH AND CENTRAL AMERICA						
Dominican Republic	—	—	—	—	—	Ginger*
El Salvador	—	—	—	—	—	Balsam trees*, ²
Jamaica	—	—	—	—	—	Ginger*
Mexico	—	—	—	—	—	Vanilla*
Puerto Rico	—	—	—	—	—	Vanilla*
Windward Islands	¹ X	¹ X	—	* ¹ ,a X	—	Other spices*
SOUTH AMERICA						
Argentina	—	—	¹ X	—	—	—
ASIA						
Brunei	—	—	—	—	* ¹ X	Ginger ¹ , Betel leaf*, ¹
Burma	—	—	—	—	—	Betel leaf vines
Ceylon ¹	* ^a ,b X	* ^b X	—	* ^b ,c X	* ^b X	Ginger*, ^d
Cyprus	—	—	* ¹ X	—	—	—
India	—	—	—	—	¹ X	Ginger ¹ , Betel leaf vines
Japan	X	—	—	—	X	Ginger* Japanese pepper or prickly ash
Malaya, Federation of	—	*X	—	a X	—	Ginger*, Chillies (Indian pepper)
Philippines	—	—	—	—	*X	Betl peppers* Ginger* Sabutan (Pandanus doratissimus)* Tambis (Eugenia agnea)*
Sarawak	—	—	—	—	* ¹ X	—
Thailand	—	—	—	—	¹ X	—
AFRICA						
Belgian Congo	—	—	—	—	—	—
Europeans and developed Negroes ¹	*X	*X	—	—	—	Aromatic and various tree crops*
Mozambique	—	—	*X	—	—	Ginger*
Seychelles	*X	—	—	—	—	Vanilla*, ¹
Sierra Leone	—	—	—	—	—	Ginger ¹
Zanzibar and Pemba	—	* ¹ X	—	—	—	—
OCEANIA						
Australia	—	—	—	—	—	Ginger*, ¹
Fiji	—	—	—	—	—	Ginger*, ¹ Yanggona or Kava (Piper methysticum)
Hawaii	—	—	—	—	—	Ginger*, ¹
Tonga	—	—	—	—	—	Kava (Piper methysticum)

¹ Area, not number of plants.

El Salvador ^a) area of compact plantations plus number of scattered trees.

Windward Islands ^a) on production, separate questions on nutmeg and mace.

Ceylon ^a) area on estates, number of trees on small holdings.

Ceylon ^b) question on production only on estates.

Ceylon ^c). Nutmeg.

Ceylon ^d) separate questions on the Yala and the Maha crop season.

Malaya ^a) Nutmeg only.

Note to item E-15.6.

Among the crops tentatively listed under item E-15.6, ginger was asked in 13 censuses (of which ten also asked a question on production), a considerably higher frequency than occurs under any of the separate items of the Program in this subsection.

TABLE 25. QUESTIONS IN NATIONAL CENSUSES ON CITRUS TREES

ITEM	Citrus trees (total)	Oranges	Mandarins and tangerines	Lemons	Grape fruit	Other citrus trees asked for (citrons, etc.)
Code in the Expanded List	E-16.1	a	b	c	d	e
Code in the Short List	33	—	—	—	—	—
Number of censuses asking the question on area	56	37	20	29	22	31
Number of censuses asking the question on production	36	27	13	21	17	18
COUNTRY						
EUROPE						
Greece	1 X	X	X	X	—	Bitter oranges Other citrus trees (cedrates, grapefruits)
Malta and Gozo	*2 X	—	—	—	—	—
NORTH AND CENTRAL AMERICA						
Bermuda	*2 X	—	—	—	—	—
British Honduras	2 X	—	—	—	—	—
Costa Rica	—	* X	—	—	—	—
Dominican Republic	*1 X	* X	—	* X	* X	Bitter oranges*. Sweet lime*
El Salvador	*2 X	—	—	—	—	—
Guatemala	—	* X	—	—	—	—
Honduras	*1 X	* X	—	* X	* X	Other citrus trees (give name)*
Jamaica ²	*1 X	*1 X	—	—	*1 X	Limes*. Other varieties
Leeward Islands	2 X	—	—	—	—	—
Mexico	*1 X	* X	—	* X	* X	Sweet lime*
Panama	—	* X	—	—	—	—
Puerto Rico	*1 X	* X	—	* X	* X	Limes*
Trinidad and Tobago	*2 X	—	—	—	—	—
United States	*1 X	*1 X	* X	* X	* X	Citrons*. Limes*. Tangeloes* Limequats*. Kumquats*
Virgin Islands	*1 X	* X	—	*1 X	* X	Limes. Other citrus trees
Windward Islands ²	*1 X	—	—	—	—	—
SOUTH AMERICA						
Argentina	1 X	X	X	X	X	—
Bolivia	*1 X	* X	* X	* X	* X	Cedrats*. Limes*
Brazil	*1 X	* X	* X	* X	* X	—
British Guiana	2 X	—	—	—	—	—
Chile	—	* X	—	* X	—	—
Colombia	*1 X	* X	—	* X	—	Other citrus trees*
Ecuador	*1 X	* X	—	* X	—	Other citrus trees*
Uruguay	*1 X	*1 X	* X	* X	—	Other citrus trees (bergamotte, grapefruit, etc.)*
Venezuela	—	* X	—	—	—	—
ASIA						
Burma	1,2 X	2 X	—	—	—	Other citrus trees
Ceylon	1 X	—	—	—	—	Limes. Other citrus trees
Cyprus	*1 X	*1 X	*1 X	*1 X	*1 X	Sweet lemons or limes*. C Bitter oranges*. C Sweet lime
Iraq	1 X	X	—	X	—	—
Israel	—	—	—	—	—	—
Jewish holdings	* X	a X	b X	X	X	Other varieties
Arab holdings	X	—	—	—	—	—

TABLE 25. QUESTIONS IN NATIONAL CENSUSES ON CITRUS TREES

Code in the Expanded List	E-16.1	a	b	c	d	e
Japan ^a	* X	*1 X	*1 X	* X	* X	Other citrus fruits* ^d (citrons, lemons, grapefruits, bitter oranges, Shaddock, Kumquats, Kino Kuni etc.)
Jordan	*1 X	* X	* X	* X	* X	—
North Borneo	* X	—	—	—	—	—
Philippines	*1 X	* X	* X	* X	* X	Citrons*. Lime*. Kalamansi (<i>Citrus microcarpa</i>)*. Dalayap (citrus sp.)*
Ryukyu Islands	* X	—	—	—	—	—
Thailand ²	1 X	—	X	—	X	Other citrus trees
Turkey	1 X	* X	*1 X	X	—	—
AFRICA						
Algeria	1 X	X	a X	—	—	Citrons, Grapefruit and various citrus trees
Belgian Congo	* X	—	—	—	—	—
Egypt	1 X	X	X	X	—	Sweet lemon. Spanish lemon. Bitter orange
Gambia	2 X	—	—	—	—	—
Mozambique ^a	*1 X	* X	* X	* X	* X	Citrons*. Other citrus trees*
Nigeria and British Cameroons	—	X	—	—	—	—
Northern Rhodesia	—	—	—	—	—	—
European holdings	1 X	X	—	—	—	Other citrus
Nyasaland	*2 X	—	—	—	—	—
Seychelles	*2 X	—	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—
European holdings	1 X	X	—	X	X	Other citrus
Swaziland	* X	—	—	—	—	Other citrus
Tunisia	1 X	X	a X	—	—	Citrons. Grapefruits and various
Union of South Africa	—	—	—	—	—	—
"White" holdings	1 X	X	X	X	X	—
Native holdings	X	—	—	—	—	—
Zanzibar and Pemba	*2 X	—	—	—	—	—
OCEANIA						
American Samoa	*1 X	* X	—	* X	—	Citrons*. Limes*
Australia	*1 X	* X	* X	*1 X	* X	All other citrus*
British Solomon Islands	2 X	—	—	—	—	—
Cook and Niue Islands	2 X	—	—	—	—	—
Fiji	*2 X	—	—	—	—	—
Guam	*1 X	* X	*1 X	* X	* X	Limes*
Hawaii	*1 X	* X	*1 X	* X	* X	Limes*. Other citrus fruits*
Tonga	*2 X	—	—	—	—	—
Western Samoa	1 X	X	—	a X	X	—

¹) By addition of the subitems.

²) Area, not number of trees.

El Salvador ^a) area of compact plantations plus number of scattered trees.

Jamaica ^a) separate questions on sweet and sour oranges.

Jamaica ^b) separate questions on seeded and seedless, grapefruits.

United States ^a) separate questions on Valencia, Temple, Navel, and other oranges, including tangerines and mandarins.

Virgin Islands ^a) including limes.

Uruguay ^a) separate questions on ordinary or indigenous, De Ombligo, De Verano, and other varieties.

Cyprus ^a) note 1), with reference to production.

Cyprus ^b) separate questions on Jaffa and round, and on Valencia and other varieties.

Cyprus ^c) questions only on production, not on number of trees or area.

Israel ^a) separate questions on Jaffa and Valencia oranges.

Israel ^b) clementines.

Japan ^a) same remark as under El Salvador ^a).

Japan ^b) separate questions on navel oranges and Watson pomelo (*Citrus aurantium*, var. *natsu mikan*).

Japan ^c) tangerines (*Citrus aurantium*, subsp. *nobilis*, var. *unshu*). In the question reported under 16.1.e, mention is also made of Iyo mandarin orange, Naruto mandarin orange, and Yatsuchi mandarin orange.

Japan ^d) See preceding note.

Turkey ^a) tangerines.

Algeria ^a) separate questions on mandarines and clementines.

Mozambique ^a) area and number of scattered trees.

Tunisia ^a) same remark as under Algeria ^a).

Australia ^a) including limes.

Cook Islands ^a) both number of trees and area planted.

Guam ^a) same remark as under Turkey ^a).

Hawaii ^a) same remark as under Turkey ^a).

Western Samoa ^a) same remark as under Virgin Islands ^a).

Note to item E-16.1 (e).

Citron, a non-Program variety mentioned to define the content of Program item E-16.1 (e), was asked for in six censuses, thus less than for any of the Program items. In addition, 14 censuses have asked separately for limes and four for bitter oranges. Seven other varieties, more or less clearly defined, have been asked for in one census each.

TABLE 26. QUESTIONS IN NATIONAL CENSUSES ON OTHER PLANTED OR CULTIVATED FRUIT TREES

ITEM	Other planted or cultivated fruit trees	Apples	Apricots	Avocados	Cherries	Dates	Figs	Mangoes	Peaches	Pears	Plums and prunes	Other planted or cultivated noncitrus fruit trees (breadfruit, litchi, carob, guava, pomegranate, quince, etc.)
Code in the Expanded List	E-16.2	a	b	c	d	e	f	g	h	i	j	k
Number of censuses asking the question on area	68	34	22	20	22	10	17	20	28	30	33	46
Number of censuses asking the question on production	35	16	11	18	10	6	12	14	16	15	15	25
COUNTRY												
EUROPE												
Austria	1 X	X	X							X	X	X
Belgium ^a	1 X	X			b X					X	X	X
Czechoslovakia	1 X	X	X		a X					X	X	X
Denmark	1 X	X			a X					X	X	X
Finland ^a	*1 X	*X			*X					*X	*X	*X
Germany (Federal Republic)	1 X	X			X					X	X	X
Greece	1 X	X	X		X		X		X	X	X	X
Ireland ^a	1 X	X									a X	b X
Luxembourg	1 X	a X	X		X							
Malta and Gozo	2 X											
Netherlands	X	X			X						X	X
Norway	1 X	a X			X						X	X
Sweden ^a	1 X	X			X						X	X
Switzerland	2 X											X
United Kingdom ^a	1 X	X										X
NORTH AND CENTRAL AMERICA												
Alaska	*1 X											(enter the name of each kind of fruit)*
Canada ^a	1 X	X			X					X	X	X Other tree fruits (give kind)
Costa Rica	*1 X				*X							Other (give name)*
Dominican Republic	*1 X				*X							Breadfruit*, Soursop (<i>Annona muricata</i>)*, Jagua or Genip fruit (<i>Genipa</i>)*, Nispero or medlar (<i>Pyrus</i>)*, Tamarind*, Zapote*
Guatemala	*1 X	*X			*X					*X		*X Other fruits*
Honduras	*1 X											Other fruit trees (give name)*
Leeward Islands	*2 X											
Mexico	*1 X	*X	*X	*X		*X	*X	*X	*X	*X	*1 X	*1 X Guava*, Pomegranate*, Quince*, Custard apple (<i>Annona</i>)*, Mammy (<i>Mammea</i>)*, Perón or Mexican apple (<i>Casimiroa edulis</i>), Tamarind, Yellow zapote*, White zapote*, Black zapote*, Other fruit trees (soursop, papaya, etc.)*
Panama					*X							
Puerto Rico	*1 X				*X							Guava*, Other fruit trees*
Trinidad and Tobago												
United States	*1 X	*X	*X	*X	*1 X	*X	*X		*X	*1 X	*X	*X Pomegranate*, Quince*, Nectarines*, Japanese Persimmons*, Loquats*
Virgin Islands	*1 X				*X				*X			Mamey*, Mesples*, Soursops*, Sugar apples*, Guava*
Windward Islands	*2 X											

TABLE 26. QUESTIONS IN NATIONAL CENSUSES ON OTHER PLANTED OR CULTIVATED FRUIT TREES

Code in the Expanded List	E-16.2	a	b	c	d	e	f	g	h	i	j	k
SOUTH AMERICA												
Argentina	1 X	X	X			X				X	X	X Quince, Agriots (<i>Prunus cerasus</i>) Other fruit trees
Bolivia	*1 X	*X	*X	*X			*X	*X	*X	*X	*X	*X Guava*, Pomegranate*, Quince*, Agriots (<i>Prunus cerasus</i>)*, Custard apple (<i>Annona</i>)*, Pacae (<i>Inga feuillei</i>)*, Others (specify)*
Brazil	*1 X	*X					*X	*X	*X	*X		(see list in note a)
British Guiana	*1 X											
Chile	*1 X	*X	*X	*X			*1 X			*X	*X	
Colombia	*1 X	*X								*X	*X	*X
Ecuador	*1 X	*X								*X	*X	*X Other fruit trees*
Uruguay	*1 X	*1 X	*X							*X	*X	*X Custard apple*, Other fruit trees
ASIA												
Aden Protectorate										*X		
Brunei	*2 X											
Burma ^a	1 X										X	Durian (<i>Durio zibethinus</i>), Miscellaneous fruit trees
Ceylon											X	Breadfruit, Jack tree (<i>Artocarpus integrifolia</i>) Other fruit trees ^a
Cyprus	*2 X		*1 a							*1 b		*1 Carob*, C. Pomegranate*, C
India	1, a X											
Iraq	1 X	X	X						X		X	Pomegranate, Other fruit trees ^a
Israel												
Jewish holdings	*1 X	X	*X							X		X Pomegranate, Others (specify)
Arab holdings	*1 X	X	X							X		X Pomegranate, Miscellaneous fruit trees
Japan ^a	*1 X	*X	*X							*X	*X	*X Pomegranate*, Persimmon (<i>Diospyros kaki</i>)*, Loquat*, Japanese apricot (<i>Prunus mume</i>)*, Jujube, Chinese quince* Other fruit trees (specify)*
Jordan	*1 X	*X	*X							*X	*X	*1 a X Guava*, Pomegranate*, Quince*, Custard apple, Prickly pear (<i>Opuntia megacanthus</i>)*, Other fruit trees*
Malaya	2, a X											
North Borneo	*1 X											
Philippines	*1 X											(see list in note a)
Ryukyu Islands	*1 X											Loquat*, Other fruit trees*
Singapore Island	2 X											
Thailand											X	Tamarind, Jack fruit, Durian, Mangosteen, Rambutan, Langzones, Longan (<i>Nephelium longana</i>)
Turkey	*1 X	*X	*X							*1 a X		*1 X
AFRICA												
Algeria	1 X		X							a X	X	X Carob, Other fruit trees (pears, apples, quinces, azaroles, cherries, Japanese persimmons, pomegranates, Graftot jujubes, pistachios, walnuts, etc.)
Belgian Congo	*2 X											
Egypt	1 X	X	X							X	X	X Guava, Pomegranate, Custard apple.
Kenya	X											

TABLE 26. QUESTIONS IN NATIONAL CENSUSES ON OTHER PLANTED OR CULTIVATED FRUIT TREES

Code in the Expanded List	E-16.2	a	b	c	d	e	f	g	h	i	j	k
Mozambique ^a	*1 X	*X	*X	*X	*X	*X	*X	*X	*X	*X	*X	*X Breadfruit*, Litchi*, Guava*, Pomegranate*, Quince*, Custard apple*, Medler*, Passiflora*, Pitangas*, Sapodilla*
Nigeria and British Cameroons	1 X											
Northern Rhodesia	a X											Guava. Others (specify)
European holdings	2 X											
Nyasaland	1 X	X	X	X				X	X	X	a X	Guava. Quince. Others (specify)
Southern Rhodesia	*X											
European holdings	1 X											
Swaziland	*X											
Tunisia	1 X		X			a X	X		X			X Carob. Other fruit trees (pears, apples, quince, etc.)
Union of South Africa	1 X	X	X	X	X		X	X	X	X		a X Litchi. Guava. Quince. Nectarines. Other kinds of fruit trees.
"White" holdings												
Native farming	b X											
OCEANIA												
American Samoa	*1 X			*X				*X				Breadfruit*. Other fruits or nuts*
Australia	*1 X	*X	*X		*X		*X	*X	*X	*X	*a X	Quince. Nectarines*. Loquats*. Custard apple*. All other orchard fruit (state kind)*.
British Solomon Islands	*2 X											
Cook Islands	2 X											Breadfruit ^a
Fiji	2 X											
Gilbert and Ellice Islands	1 X											Breadfruit*. ²
Guam				*X								Breadfruit*. Other fruits (give name)*.
Hawaii												Other fruits (give name)*
New Zealand	2, a, b X			*a X				*X				
Tonga	*2 X											
Western Samoa												Breadfruit

¹) wherever it occurs, means that the total has not been asked for separately, but results from the addition of the subitems.
²) wherever it occurs, means that the question refers to area rather than number of trees.
 Belgium ^a) separate questions on high and low-stemmed trees, and with regard to the occurrence of associated crops.
 Belgium ^b) separate questions on two varieties, and on trees over and under ten years of age.
 Czechoslovakia ^a) same remark as under Belgium ^b).
 Denmark ^a) same remark as under Belgium ^b).
 Luxembourg ^a) separate questions on varieties for table fruit and for juice.
 Luxembourg ^b) separate questions on plums and on mirabells, greengages and other plums.
 Norway ^a) separate questions on summer and autumn varieties and winter varieties.
 Sweden ^a) separate questions on three age strata.
 United Kingdom ^a) Northern Ireland only.
 Mexico ^a) separate questions on two varieties (Ciruelo de España o de almendra and Ciruelo de país).
 United States ^a) separate questions on sweet and sour cherries.
 United States ^b) separate questions on Bartlett pears and other pears.
 Bolivia ^a) including lujmas (*Lucuma obovata*).
 Brazil ^a) the following items were asked for: for area and production: Mammy (*Mammea*), Caimito (*Lucuma caimito*), Loquat (*Eriobotrya japonica*), Jambo (*Eugenia* spp.), Jaca (*Artocarpus integrifolia*), custard apple (*Anona squamosa*), kaki or Japanese persimmon (*Diospyros kaki*), carambola tree (*Averrhoa carambola*), cupuaçu (*Guazuma* spp.), imbu or hog plum (kind of *Spondias tuberosa*), cajeamanga or hog plum (*Spondias* sp.), guava, quince, others (state kind).

edule), serali (*Flacourtia Ramontchi*), biriba (not identified), camistel (*Lucuma nervosa*) carambola (*Averrhoa carambola*).
 Turkey ^a) separate questions on cherries and black cherries.
 Turkey ^b) prunes.
 Algeria ^a) separate questions on Deglet-Nour, Rhars and similar varieties, and Degla Beida and similar varieties.
 Mozambique ^a) area plus number of scattered trees.
 Northern Rhodesia ^a) to be specified.
 Southern Rhodesia ^a) plums only.
 Tunisia ^a) same remark as under Algeria ^a).
 Union of South Africa ^a) separate questions on plums and prunes.
 Union of South Africa ^b) separate questions on deciduous fruit trees, and subtropical and other fruit trees.
 Australia ^a) same remark as under Union of South Africa ^a).
 Cook Islands ^a) both number of trees and area.
 Hawaii ^a) separate questions on West India and Guatemala types, including nut trees.

New Zealand ^a) same remark as under India ^a).
 New Zealand ^b) separate questions on registered and non-registered orchards, and on bearing and nonbearing trees.

Note to item E-16.2 (k)

As will be seen from the frequency figures, "other" fruits were asked for in more countries than any of the specified Program items, which, of course, is a consequence of the wide geographical variation in fruit cultivation as well as of the universality of this branch of production. Among the fruits tentatively listed in the Program, breadfruit was asked for in nine censuses, litchi in three, carobs in four, guava in 12, pomegranate in 11 and quinces in 12 censuses. In addition, medlars were asked for in five censuses, jackfruit and tamarind in four each, and agriot, loquat and zapote in three each. A large number of additional items were asked for in only one or two censuses each.

Chile ^a) including a variety called quindos.
 Uruguay ^a) separate questions on deliciosa, jonathan, and other varieties.
 Uruguay ^b) including grafones (a large variety of cherries).
 Ceylon ^a) asked for on small holdings only.
 Cyprus ^a) including a variety called kaisha.
 Cyprus ^b) same remark as under United States ^a).
 Cyprus ^c) only production asked for, not area or number of trees.
 India ^a) may also include citrus trees.
 Iraq ^a) including also "other nut trees", etc.
 Japan ^a) area of compact plantations, plus number of scattered trees.
 Jordan ^a) separate questions on Koch plums and other plums.
 Malaya ^a) same remark as under India ^a).
 Philippines ^a) the following items were asked for separately, both for number of trees and production: breadfruit, litchi, guava, pomegranate, chico mammey (*Mammea* sp.), jackfruit (*Artocarpus integrifolia*), lemasa (*Artocarpus champeden*), gomihan (*Artocarpus elastica*), langsat (*Lansium domesticum*), durian (*Durio zibethinus*), santol (*Santorium koetapjee*), siniguelas (*Spondias purpurea*), hevi (*Spondias cytherea*), custard apple (*Anona reticulata*) sour sop (*Anona muricata*), sweetsop (*Anona squamosa*), atemoya (*Anona* hybrid), marang (*Semecarpus anacardium*), cashew (*Anacardium occidentale*), chicos or sapodilla (*Achras sapota*), sapote negro (*Diospyros ebenaster*), mabolo (*Diospyros discolor*), tamarind (*Tamarindus indica*), kamanchite or Manilla tamarind (*Pithecolobium dulce*), caimito or star apple (*Chrysophyllum caimito*), mangosteen (*Carcinia mangostena*), makopa (*Eugenia aquae*), duhat or lumboy (*Eugenia cumini*), lipote or igot (*Eugenia curranii*), yambo (*Eugenia jambos*), alpay (*Euphoria didyma*), bauno (*Mangifera caesia*), paho (*Mangifera altissima*) huani (*Mangifera odorata*), bulala (*Nephelium mutabile*), rambutan (*Nephelium carambola*), kamias or pias (*Averrhoa bilimbi*), iba (*Cicca acida*), jujuba (*Zisiphys jujuba*), kayam (*Inocarpus edulis*), pangi (*Pangium*

TABLE 27. QUESTIONS IN NATIONAL CENSUSES ON CULTIVATED EDIBLE NUT TREES

ITEM	Almonds	Chestnuts	Filberts	Walnuts	Other edible nut trees
Code in the Expanded List	E-17.1	E-17.2	E-17.3	E-17.4	E-17.5
Number of censuses asking the question on area	12	2	3	15	17
Number of censuses asking the question on production	8	1	3	11	9
COUNTRY					
EUROPE					
Austria	—	—	—	X	—
Czechoslovakia	—	—	—	X	—
Greece	X	X	X	X	Pistachio, Mastic (<i>Pistacia lentiscus</i>)
Luxembourg	—	—	—	X	—
NORTH AND CENTRAL AMERICA					
Dominican Republic	—	—	—	—	Cashew nut
Mexico	—	—	—	*X	—
United States	*X	—	*X	*X	—
Virgin Islands	—	—	—	—	Cashew nuts
Windward Islands	—	—	—	—	Cashew nuts ^a
SOUTH AMERICA					
Bolivia	—	—	—	—	—
Brazil	—	—	—	—	Cashew nuts*
Chile	*X	—	—	*X	—
ASIA					
Ceylon	—	—	—	—	Cashew nuts
Cyprus	*X	—	—	*X	—
India	—	—	—	—	Cashew nuts ¹
Iraq	X	—	—	—	Pistachio
Japan	—	*X	—	—	*X Maidenhair tree (<i>Ginkgo biloba</i>)*
Jordan	*X	—	—	—	*X Pistachio*
Malaya, Federation of	—	—	—	—	Cashew nut ²
Philippines	—	—	—	—	Java almond (<i>Canarium ovatum</i>)* Kanari (<i>Canarium commune</i>)* Kubili or Ibili (<i>Nephelium sp.</i>)* Galo (<i>Anacolasa luzonensis</i>)*
Turkey	*X	—	*X	*X	*X Pistachio*
AFRICA					
Algeria	X	—	—	—	—
Mozambique	*X	—	—	—	*X Cashew nuts*
Southern Rhodesia	—	—	—	—	—
European holdings	*X	—	—	—	*X
Tunisia	X	—	—	—	—
Union of South Africa	—	—	—	—	—
"White" holdings	X	—	—	X	—
OCEANIA					
Australia	*X	—	—	—	*X Other nuts (state kind)*
Guam	—	—	—	—	Other nuts (give name)*
Hawaii	—	—	—	—	Litchie nuts*, Macadamia nuts*

¹Area, not number of trees.
 Mexico ^a separate questions on two varieties called nuez de Castilla and nuez encarcelada.
 Windward Islands ^a area, not number of trees.

Among the additional items here classified under E-17.5, eight censuses asked separately for cashew nuts (*Anacardium occidentale*) and four for pistachio (*Pistachia vera*).

TABLE 28. QUESTIONS IN NATIONAL CENSUSES ON SMALL FRUITS CULTIVATED

ITEM	Strawberries	Raspberries	Other cultivated small fruits and berries (blackberries, gooseberries, currants, etc.)	ITEM	Strawberries	Raspberries	Other cultivated small fruits and berries (blackberries, gooseberries, currants, etc.)
Code in the Expanded List	18.1	18.2	18.3				
Number of censuses asking the question on area	21	14	15	NORTH AND CENTRAL AMERICA			
Number of censuses asking the question on production	9	6	6	Alaska	*X	*X	Currants*, Other tame berries (give name)*.
				Canada	X	X	Other small fruits (give kind)
				Mexico	*X	—	—
				United States	*X	*X	Blackberries and dewberries*, Gooseberries*, Currants*, Tame blueberries*, Boysenberries, Cranberries*, Loganberries and Youngberries*, Wild blueberries
COUNTRY							
EUROPE							
Belgium ^a	X	b X	Gooseberries ^c , Black currants ^d , White, red or yellow currants.	SOUTH AMERICA			
Czechoslovakia	X	—	Gooseberries ^a , Currants ^a	Argentina	a X	—	—
Denmark	X	—	Gooseberries ^a , Black currants ^a , Other currants ^a	Uruguay	*X	*X	Other fruit-bearing bushes and plants*
Finland	*X	*X	Gooseberries ^{a,2} , Black currants ^{a,2} , Red and white currants ^{a,2}	ASIA			
Luxembourg	X	—	—	Japan	*X	*X	Gooseberries*, Currants*
Netherlands	X	X	Gooseberries, Black currants, Red currants, White currants, Other small fruits	Philippines	*X	—	—
Norway	X	X	Gooseberries ^a , Black currants ^a , Other currants ^a	AFRICA			
Sweden	a X	X	—	Egypt	X	—	—
Switzerland	X	X	Currants, Other small fruits	Mozambique	*X	—	—
United Kingdom	X	X	Blackberries and loganberries ^a , Gooseberries, Black currants, Red and white currants, Mixed and other kinds of small fruits ^b	Union of South Africa	—	X	—
OCEANIA							
				Australia	*X	*X	Currants*, Gooseberries, Loganberries, Blackberries, etc.*
				New Zealand	—	X	Gooseberries, Black currants, Red currants, Other bush fruits and berries

Belgium ^a separate questions on crops under high-and low-stemmed trees and sole crops.
 Belgium ^b length of rows, not area.
 Belgium ^c number of bushes, not area.
 Czechoslovakia ^a same remark as under Belgium ^b.
 Denmark ^a same remark as under Belgium ^b.
 Finland ^a same remark as under Belgium ^b.

Norway ^a number of berry bushes.
 Sweden ^a separate questions on crop grown on arable land and in home garden.
 United Kingdom ^a England and Wales only.
 United Kingdom ^b Scotland only.
 Argentina ^a Chile strawberries (*Fragaria chilensis*).
 Uruguay ^a Chile strawberries (*Fragaria chilensis*).

TABLE 29. QUESTIONS IN NATIONAL CENSUSES ON OTHER CULTIVATED FRUITS

ITEM	Bananas and plantains	Pine-apples	Other cultivated fruits (Papayas, etc.)	ITEM	Bananas and plantains	Pine-apples	Other cultivated fruits (Papayas, etc.)
Code in the Expanded List	E-19.1	E-19.2	E-19.3				
Code in the Short List	35	—	—				
Number of censuses asking the question on area	58	30	22				
Number of censuses asking the question on production	47	24	14				
COUNTRY							
NORTH AND CENTRAL AMERICA							
Barbados	*.1 X	—	—				
Bermuda	*.1 X	—	—				
British Honduras	1 X	—	—				
Costa Rica	*.2, a X	* X	—				
Dominican Republic	*.2, a X	* X	Papayas*				
El Salvador ^a	* X	* X	—				
Guatemala	*.2, a X	* X	—				
Haiti	*.2 X	—	—				
Honduras	*.2, a X	—	—				
Jamaica	*.2, a X	—	—				
Leeward Islands	*.1 X	1 X	—				
Mexico	*.3, a X	* X	—				
Panama	*.2 X	—	—				
Puerto Rico	*.1, 2 X	* X	Papayas*.1				
Trinidad and Tobago	*.1 X	—	—				
Virgin Islands	*.2 X	* X	—				
Windward Islands	*.1 X	1 X	—				
SOUTH AFRICA							
Bolivia	*.a X	* X	Papayas*				
Brazil	*.3 X	*.1, a X	—				
British Guiana	*.1, 3 X	—	—				
Colombia	*.1, 3, a X	* X	Papayas*				
Ecuador	*.2 X	* X	Other semi perennial crops*				
Venezuela	*.2 X	* X	Other fruit crops*				
ASIA							
Brunei	* X	—	—				
Burma	1 X	—	—				
Ceylon	a X	X	Papayas ^b				
Cyprus	*.3 X	—	—				
AFRICA							
Belgian Congo							
Europeans and developed Negroes	*.3 X	—	—				
Undeveloped Negroes	*.a X	—	—				
Egypt	3 X	—	—				
Gambia	1 X	—	—				
Gold Coast and British Togoland	*.1 X	—	—				
Mauritius	1 X	—	—				
Mozambique ^a	* X	—	—				
Nigeria and British Cameroons	X	X	Papayas				
Nyasaland	*.1 X	—	—				
Seychelles	*.1 X	—	—				
Southern Rhodesia	—	—	Papayas				
European holdings	—	—	—				
Swaziland	*.3 X	—	—				
Uganda	*.1 X	—	—				
Union of South Africa "White" holdings	*.1, 3 X	*.1 X	Papayas				
Zanzibar and Pemba	*.1 X	—	—				
OCEANIA							
American Samoa	*.3 X	—	* X Papayas*				
Australia	*.3 X	—	* X Papayas*, Passion fruit (Passiflora spp.)*, Other non-orchard fruit (state kind)*				
British Solomon Islands	*.1 X	—	—				
Cook and Niue Islands	a X	a X	Papayas ^b				
Fiji	* X	—	—				
Guam	*.3 X	—	* X Papayas*				
Hawaii	*.3 X	—	* X Papayas*.1				
New Zealand	—	—	—				
Papua and New Guinea	X	—	—				
Tonga ¹	* X	—	* X				
Western Samoa	X	—	X Papayas				

¹) area, not number of plants.
²) separate questions on bananas and plantains.
³) bananas only.
 Costa Rica ^a) area of compact plantations plus number of scattered trees.
 Dominican Republic ^a) also a separate question on rulos (another kind of banana).
 El Salvador ^a) same remark as under Costa Rica ^a).
 Guatemala ^a) also a separate question on "banano de sombra".
 Honduras ^a) also a separate question on other banana fruit.
 Jamaica ^a) also separate questions on Gros Michel, Lacatan, and other banana varieties.
 Mexico ^a) a separate question on other related fruits.
 Bolivia ^a) Plantains only.
 Brazil ^a) Abacaxi, a Brazilian variety of pineapple.
 Colombia ^a) also a separate question on Hartón Dominicó, etc.
 Ceylon ^a) plantains only.
 Ceylon ^b) on the estate schedule, separate questions on papayas for papain and others.
 Belgian Congo ^a) same remark as under Ceylon ^a).
 Mozambique ^a) both area and number of plants.

Cook Islands ^a) both number of trees and area planted.
 Cook Islands ^b) female trees only.

Note to item E-19.

The papaya, mentioned by way of definition under item E-19.3 in the Program, is the only non-Program species which was asked for separately in a considerable number of censuses (18). It will be seen from the notes, especially the general notes (2) and (3), that item E-19.1 was more often subdivided into two or more questions than asked as one question. Of the 58 censuses that specified this item, 18 asked for bananas only, 11 asked separate questions on bananas and plantains, two for plantains only, while Belgian Congo asked for bananas only on behalf of developed and for plantains only on behalf of undeveloped agriculture. Thus 32 censuses split the item one way or another, and only 26 followed the Program literally; 21 of these are British dependencies following the London Program for colonial and underdeveloped territories, while three others are dependencies of Australia and New Zealand. El Salvador appears to be the only independent country that asked the question as proposed in the FAO Program.

TABLE 30. QUESTIONS IN NATIONAL CENSUSES ON MISCELLANEOUS CULTIVATED TREES, SHRUBS AND VINES

ITEM	Coffee	Tea	Cacao	Coconut	Oil palms	Kola nut	Kapok	Cinchona	Mulberry	Rubber, gum and resin plants	Rubber	Other cultivated trees shrubs and vines, not included under the previous headings: (Palmyra palms, sago palms, trees for cork, for tanbarks, wattle bark, bamboo, etc.)
Code in the Expanded List	E-20.1	E-20.2	E-20.3	E-20.4	E-20.5	E-20.6	E-20.7	E-20.8	E-20.9	E-20.10	a	E-20.11
Code in the Short List	31	37	38	34	—	—	—	—	—	—	—	—
Number of censuses asking the question on area or number of trees	41	7	29	49	7	—	5	4	10	1	19	32
Number of censuses asking the question on production	36	13	25	38	6	—	3	2	3	2	15	22
COUNTRY												
EUROPE												
Czechoslovakia	—	—	—	—	—	—	—	—	X	—	—	—
Greece	—	—	—	—	—	—	—	—	X	—	—	—
NORTH AND CENTRAL AMERICA												
British Honduras	—	—	—	* X	—	—	—	—	—	—	—	—
Costa Rica	*.a X	—	* X	* X	—	—	—	—	—	—	—	—
Dominican Republic	*.1 X	—	*.1 X	* X	—	—	—	—	—	—	—	—
El Salvador	*.1 X	—	*.a X	*.a X	—	—	—	—	—	—	—	—
Guatemala	* X	—	* X	* X	—	—	—	* X	—	—	—	—
Haiti	* X	—	* X	* X	—	—	—	—	—	—	—	—
Honduras	*.a X	—	—	* X	—	—	—	—	—	—	—	—
Jamaica	—	—	—	* X	—	—	—	—	—	—	—	—
Leeward Islands ¹	—	—	* X	* X	—	—	—	—	—	—	—	—
Mexico	* X	—	* X	* X	—	—	—	—	—	—	—	—
Panama	* X	—	—	* X	—	—	—	—	—	—	—	—
Puerto Rico	*.1 X	—	* X	* X	—	—	—	—	—	—	—	—
Trinidad and Tobago ¹	* X	—	* X	* X	—	—	—	—	—	—	—	—
United States	—	—	—	—	—	—	—	—	—	—	—	—
Virgin Islands	—	—	* X	* X	—	—	—	—	—	—	—	—
Windward Islands	*.1 X	—	*.1 X	*.1 X	—	—	—	—	—	—	—	—
SOUTH AMERICA												
Argentina	—	X	—	—	—	—	—	—	—	—	—	—
Bolivia	* X	—	* X	—	—	—	—	—	—	—	—	—
Brazil	* X	* X	* X	* X	—	—	—	—	—	—	—	—
British Guiana ¹	* X	—	* X	* X	—	—	—	—	—	—	—	—
Colombia	* X	—	* X	* X	—	—	—	—	—	—	—	—
Ecuador	* X	—	* X	* X	—	—	—	—	—	—	—	—
Venezuela	* X	—	* X	* X	—	—	—	—	—	—	—	—
ASIA												
Brunei ¹	* X	—	* X	* X	—	—	—	—	—	—	—	—
Burma ¹	* X	* X	—	* X	—	—	—	—	—	—	—	—
Ceylon	X	*.a X	*.a X	*.a X	—	—	b X	b X	—	*.a, c X	—	—
India ¹	X	X	—	X	—	—	—	—	X	—	—	—
Japan	—	*.a X	—	—	—	—	—	—	*.a X	—	—	—

TABLE 30. QUESTIONS IN NATIONAL CENSUSES ON MISCELLANEOUS CULTIVATED TREES, SHRUBS AND VINES

Code in the Expanded List	E-20.1	E-20.2	E-20.3	E-20.4	E-20.5	E-20.6	E-20.7	E-20.8	E-20.9	E-20.10	a	E-20.11
Jordan										X		
Malaya, Federation of ¹	*X	*X	X	*X	*X		X					*X Gutta percha*. Sago palm* Nipah palm (<i>Uncaria Gambier</i>)*. Tung. Areca palm*
North Borneo ¹	*X	*X	X	*X	X		*X					*X Sago palm*
Philippines	*X		*X	*X	*X		*X	*X	*X			*X Bamboo*. Malunggay (<i>Moringa oleifera</i>)*. Buri (<i>Corypha elata</i>)*. Cabo negro palm or sugar palm (<i>Arenga saccharifera</i>)*. Areca palm. Katu-ray (<i>Sesbania grandiflora</i>)*. Candle-nut tree (<i>Aleurites triloba</i>)*. Annatto tree (<i>Bixa orellana</i>)* ^a
Sarawak				X								*X Sago palm*
Singapore Island ¹				*X								*X
Thailand	X	X		X				X	X			X Sugar palm. Lac tree. Areca palm
AFRICA												
Belgian Congo												
Europeans and developed												
Negroes	*X	*X		*X	*X							*X
Undeveloped Negroes			*X		*X					X		Camphor
Egypt				X	*X							
Gambia												
Gold Coast and British Togoland	*X		*X	*X								*X
Kenya	X	X										Wattle bark trees.
Mauritius		*X										
Mozambique	*X	*X		*X					*X			Pecans* <i>Sumaumeria (Eriodendron)</i> . Other cultivated trees, shrubs and nuts.
Nigeria and British Cameroons	X		*X	X	*X							*X
Northern Rhodesia												Other perennial crops (specify kind)
European holdings												*X Tung nuts*
Nyasaland ¹	*X	*X		X								
Seychelles ¹	*X			X								
Sierra Leone ¹	*X		*X	X	*X							
Southern Rhodesia												
European holdings	*X	*X										Tung nuts*. Wattle trees
Swaziland												*X
Uganda ¹	*X	*X										Tung nuts*. Wattle trees*
Union of South Africa												
"White" holdings												Tung nuts. Pecans. Tanbark trees. Wattle trees
Native farming												Tan wattles. Other wattles.
Zanzibar and Pemba ¹	*X		X	*X								
OCEANIA												
American Samoa	*X			*X								
British Solomon Islands				*X								
Cook and Niue Islands				*X								
Fiji	*X	*X	X	*X								*X Candlenut tree (<i>Aleurites triloba</i>)* Pandanus odoratissimus*
Gilbert and Ellice Islands ¹				*X								
Guam	*X			*X				*X				
Hawaii	*X											
New Hebrides ¹	*X											
Papua and New Guinea	*X		*X	*X								
Tonga				*X								
Western Samoa			X	X								X Paper mulberry*

¹) Area, not number of trees.

Costa Rica ^a) separate questions on Arabic, hybrid, and other varieties.

El Salvador ^a) area of compact plantations plus number of scattered trees.

Honduras ^a) same remark as under Costa Rica ^a).

Ceylon ^a) production asked for on estates only, not on small holdings.

Ceylon ^b) asked for on estates only, not on small holdings.

Ceylon ^c) area on estates, numbers of trees on small holdings. On the former

distinction was also made as to kind and age of the trees, and between

wholly planted and interplanted area.

Ceylon ^d) asked for on small holdings only.

Japan ^a) same remark as under El Salvador ^a).

North Borneo ^a) separate questions on Robusta and other coffee.

Sierra Leone ^a) same remark as under North Borneo ^a).

Uganda ^a) separate questions on Arabica and Robusta coffee.

Cook Islands ^a) both number of trees and area.

Fiji ^a) separate questions on Arabica and other coffee.

New Hebrides ^a) European area only.

Papua and New Guinea ^a) bearing trees only.

Note to item E-20.

Items E-20.10, b-f have been omitted from the table because only one of them, in one country (gutta percha in Malaya) could be identified with certainty as having been asked for separately. In some other cases, it may be open to doubt whether the question referred to the specific variety known as "rubber" (E-20.10. a) or to rubber plants in general (E-20.10).

Among the kinds of trees tentatively listed in the Program under E-20.11, the Palmyra palm was asked in two censuses, the sago palm in four, the cork trees in none, trees for tanbark in one, wattle trees in three and bamboo in one census. The last four types mentioned are likely in some cases to have been reckoned as growing on forest area rather than cropland, which may have contributed to their scarcity of appearance.

Several additional items have been listed under E-20.11, most of them appearing in only one or two censuses each. However, tung nuts (an oil crop) were asked for in eight censuses, and the areca (betel) nut tree in six.

TABLE 31. QUESTIONS IN NATIONAL CENSUSES ON NURSERIES

ITEM	Nurseries of fruit and nut trees, vines and olive trees	Nurseries of ornamental trees and bushes	Nurseries of forest trees	Flowers	Other nurseries
Code in the Expanded List	E-21.1	E-21.2	E-21.3	E-21.4	E-21.5
Number of censuses asking the question on area	11	7	7	3	4
COUNTRY					
EUROPE					
Austria	X	X	X	aX	-
Belgium	X	X	X	-	-
Czechoslovakia	X	X	X	-	-
Finland			aX		
Germany, (Federal Republic)			X	X	-
Luxembourg	aX	bX	X	cX	Mother plants. change.
Netherlands	aX	bX	-	-	Soil
Norway			aX		
Saar			aX		
Sweden			X		
Switzerland			a,bX		
United Kingdom			X		
NORTH AND CENTRAL AMERICA					
Canada			X		Coffee ^a
Costa Rica			-		Coffee ^a
El Salvador			aX		
United States			X		
SOUTH AMERICA					
Argentina	aX	-	aX	-	Other nurseries
ASIA					
Israel			X		
Jewish holdings	X	X	X	-	-
Japan			X		
AFRICA					
Algeria	aX	-	-	-	-
Belgian Congo			X		
Europeans and developed Negroes	X	-	-	-	-
Mozambique	X	X	X	-	-
Egypt	aX	-	-	-	-
Tunisia			X		
OCEANIA					
Australia	X	X	X	-	-
New Zealand			X		

Belgium a) flowers and vegetables for re-planting.
 Germany (Federal Republic) a) tree nurseries outside forestry enterprises.
 Netherlands a) two separate questions.
 Netherlands b) eight separate questions.
 Norway a) separate questions on fruit trees and berry bushes.
 Norway b) separate questions on hedge plants, ornamental coniferous trees and others.
 Norway c) separate questions on roses, grafted lilacs and perennial flower plants.
 Saar a) outside forestry enterprises.

Sweden a) separate questions on area of land classified as arable and such classified as garden.
 United Kingdom a) England and Wales.
 United Kingdom b) hardy nursery stock.
 Costa Rica a) number of plants in nursery.
 El Salvador a) area of seedbeds, plus number of plants in nurseries.
 United States a) on specialized nursery holdings, questions were also asked on the number of plants of a large number of specified crops.
 Argentina a) number of plants, not area.
 Algeria a) separate questions on nurseries for vines and for fruit trees.
 Tunisia a) same remark as under Algeria a).

items. At the end of each table, wherever applicable, a short special note gives an account of the number of countries which asked separate questions on the crops thus tentatively mentioned, as well as on other crops asked by any considerable number of countries.

Section F. Livestock

Participation in this section was larger than in any other, being, in fact, almost universal. Switzerland and Bechuanaland are the only censuses not to include livestock. The material available from Czechoslovakia did not permit of a completely exhaustive analysis.

Nearly all farm and other animals were specified in the FAO Program. Very few non-Program species were asked for in national censuses and, with the possible exception of ostriches in South Africa, none of these additional items seems to be of much importance in the agricultural life of the countries concerned. Three countries (India, the Ryukyu Islands, and Belgian Congo) asked for specification of nonlisted animals.

On the other hand, response to classification by age, sex, and use or destination proposed by the Program for most species was uneven and incomplete. Many countries used systems deviating in greater or lesser degree from that of the Program.

For the synoptic tables, the following rules were applied to show the degree of conformity. The national census which applied more refined classification than the Program, but in such a way that the Program items could be obtained by addition, is regarded as conforming, and the separate questions which add up to the item are mentioned in a footnote. When conformity is approximate though not exact, the difference has also been mentioned in this way.

As regards age limits, conformity is indicated and any divergences footnoted, whenever the Program age composition could reasonably be regarded as capable of estimation from the age limits actually used by the country. For the purpose of this table emphasis is accordingly laid on the factual rather than the literal conformity. Even when there was full literal conformity with the Program, data on age composition would not always be fully comparable unless the particulars related to the same season or, rather, the same phase of the reproduction cycle of the species, which may be different according to the climatic and other determinant factors of the country. Therefore, any somewhat distinct age stratification, that makes it possible to reconstruct the age structure of the animal population, has been noted as a kind of response to the Program. The crucial point is the distinction between mature and young animals.

On the other hand, when the divergence in age limits between Census and Program is considerable (for instance, calves three months of age instead of one year of age and under), then the national questions are regarded as not in conformity with the Program.

As in the case of crop areas and crop production, the synoptic tabular system on livestock has had to be divided into a number of subsections, corresponding with the main subdivision in the Program.

It is very evident that the degree of conformity was greater for items on the Short List than for those only on the Expanded List.

HORSES

A few comments may be made on the response to the question on the ages of horses, etc. The difference between the number of questions on adult animals (50 + 2 = 52) and those on young animals (36 + 15 = 51) is due to the fact that in Hungary, the Philippines and Singapore a question referred respectively to adult animals (draft horses), animals 3 years of age and over or animals under 2 years of age. Deducting 50 from 92 (Hungary, Philippines and Singapore excepted) we find that 42 censuses asked for only the total number of horses. This number should however be reduced by one because while Czechoslovakia asked for age and sex detail, this detail has not been made available for analysis. The number of censuses asking only the total number of horses is thus 41. Most of these countries are in two groups: 23 British dependencies which took their census according to the London Program for colonial and underdeveloped areas, and the United States and its six dependencies. Apart from these two groups, there are thus only eleven countries that asked for only the total number of horses, as against 52 asking for young and mature animals separately.

As regards the age limits used, out of 47 censuses which distinguished horses over one year of age into two separate age strata, 37 drew this limit at three years of age, as proposed in the Program. Four censuses (Yugoslavia, Canada, Chile and the Philippines) divided at two years, and one census (Mexico) at four years of age. Five censuses (Guatemala, Brazil, Israel [Arab holdings], Mozambique, Western Samoa) did not state clearly the distinction between young and adult animals, some vague indication only being given.

Distinction of two or more age strata within those of the FAO Program occurred in seven censuses (Belgium, Finland, Luxembourg, Netherlands, Norway, Sweden and Argentina).

CATTLE

Cattle appeared on more census schedules than any other item in the Program. Of the 106 censuses under review, 104 have asked questions on live-stock; of this number, only two (Gilbert and Ellice Islands, and Papua and New Guinea) did not ask any questions about cattle.

Adding together the number of questions classified under F-2.1.a, and jointly under F-2.1.a-b, we obtain 55 + 15 = 70 censuses which discriminated between young and mature animals; the addition of the number of questions classified under F-2.1.c and those classified jointly under F-2.1.b-c (28 + 42) gives the same answer, which is also the total of the numbers of questions classified under a-b jointly, b separately, and b-c jointly (16 + 25 + 28). The Czechoslovak census asked for a discrimination of this kind, but the detail is not available. There thus remain 31 censuses which did not discriminate between young and mature animals. This number is made up mainly of two groups of censuses, namely 20 among those British dependencies that took their censuses according to the London Program for colonial and underdeveloped areas, and the United States and five of its six dependencies (Puerto Rico being the exception); in the latter group, only an age limit at three months was distinguished, which cannot be deemed to meet the intentions underlying the FAO Program. Besides these two groups, only five censuses omitted to ask questions on the age of cattle (Hungary, Portugal, Haiti, Iraq and Cook Islands). The distinction between two classes of animals over one year of age was made in 52 censuses. Of these, 38 drew the limit at two years as proposed in the FAO Program, six at three years (India, Malaya, Singapore, Thailand, Egypt, Kenya) and one country at four years (Burma). Five censuses (Guatemala, Cuba, Puerto Rico, Mozambique, and Western Samoa - village surveys) and also Israel (Arab holdings) gave only a vague indication on this age limit.

Subsidiary age limits were used to a considerable extent: at three years in Ireland, Cuba, Mexico, Uruguay, Ceylon, and Southern Rhodesia; at four years in Chile and Southern Rhodesia; at three months in Belgium, Federal Republic of Germany, Alaska, United States and Virgin Islands.

BUFFALOES

The degree of conformity with the Program shown by the table is not entirely conclusive as to the occurrence of buffaloes in census countries. One country (Romania) explicitly stated that buffaloes should be included with the cattle and this, of course, may have been the case in other countries too.

As regards age limits, most of the countries in the table have not followed the FAO Program. Out of 11 countries distinguishing between mature and young animals, four took the point of division at two years as proposed; six put it at three years (India, Malaya, Philippines, Singapore, Thailand, Egypt); one (Burma) at four years and one census (Belgian Congo) gave only a vague indication. Among the four censuses following the Program, one (Ceylon) asked for an additional age limit at three years.

SHEEP

As regards the age limits of sheep used in the questionnaires, of the 48 censuses which made a distinction between young and mature animals, for 38 the limit was one year as proposed; five censuses (Belgium, Cuba, Guatemala and Mozambique and Israel [Arab holdings]) gave only a vague indication. Three censuses took the limit at six months (Alaska, Mexico, United States), one at five months (Philippines), one at four months and a half (Netherlands) and one at three months (Hawaii). Additional age strata were asked in Argentina and India.

GOATS

Although the total number of censuses asking questions on goats is nearly the same as for sheep, conformity with the Program on subdivision into age strata is much lower, apparently because the Short List did not propose such an analysis.

Among the 22 censuses asking for age stratification, 15 divided at one year as proposed by FAO, while five censuses (Cuba, Guatemala, Algeria, Mozambique and Tunisia) only gave a vague indication, a single country (Mexico) took the limit at six months and another country (Philippines) at five months. Additional age limits were asked in Mexico and India.

PIGS

As regards age limits used in the national censuses, it may be observed that, of 59 censuses which made an age distribution, 40 fixed the limit at six months as proposed by the FAO Program. Nine censuses did not explicitly state the limit but gave only a vague indication (Denmark, United Kingdom, Cuba, Argentina, Mozambique, Australia, Cook Islands, Hawaii and Western Samoa). Five censuses had the limit at four months (Norway, Alaska, Puerto Rico, United States, and Virgin Islands), three used a three-month limit (Saar, Sweden, Thailand), while

TABLE 32. QUESTIONS IN NATIONAL CENSUSES ON HORSES, MULES AND ASSES

ITEM	Horses (Total)	Horses 3 years of age and over	Mares and stallions for breeding purposes	Other horses	Horses 1 year of age but under 3 years	Colts and fillies under 1 year of age	Mules (total)	Mules 3 years of age and over	Mules under 3 years of age	Asses (total)
	F-1.1	a	i	ii	b	c	F-1.2	a	b	F-1.3
Code in the Expanded List	41	42	—	—	43	—	44	—	—	45
Code in the Short List	95	50	5	5	13	15	47	6	6	52
Number of censuses asking the question			2		36			8		
COUNTRY										
EUROPE										
Austria	X	X	—	—	X	—	—	—	—	—
Belgium ^a	X	1X	^a ,b X	c X	d X	X	—	—	—	—
Czechoslovakia	a X	—	—	—	—	—	X	—	—	X
Denmark	X	a X	—	—	X	—	—	—	—	—
Finland	1X	a,b X	—	—	X	—	—	—	—	—
Germany (Federal Republic) ^a	X	X	—	—	—	X	—	—	—	—
Greece	1X	X	—	—	—	X	—	—	—	—
Hungary	—	a X	—	—	—	—	—	—	—	—
Ireland	X	a X	—	—	a X	X	X	—	—	X
Luxembourg	X	1X	a X	b X	c X	X	—	—	—	—
Malta and Gozo	X	—	—	—	—	—	X	—	—	X
Netherlands	a X	1X	b X	c X	d X	X	—	—	—	—
Norway	1X	a X	—	—	X	—	—	—	—	—
Portugal	X	—	—	—	—	—	X	—	—	X
Romania	X	X	—	—	—	X	—	—	—	—
Saar ^a	X	X	—	—	—	X	—	—	—	—
Sweden	a X	b X	—	—	X	—	X	—	—	—
United Kingdom	X	—	—	—	—	—	b X	—	—	—
Yugoslavia	X	^a ,a X	a,b X	a,c X	a X	X	X	—	—	X
NORTH AND CENTRAL AMERICA										
Alaska	a X	—	—	—	—	—	—	—	—	—
Bahamas	X	—	—	—	—	—	—	—	—	—
Barbados	X	—	—	—	—	—	X	—	—	X
Bermuda	X	X	—	—	—	X	—	—	—	—
British Honduras	a X	—	—	—	—	—	—	—	—	—
Canada	X	a,b X	—	—	a X	—	—	—	—	—
Costa Rica	X	X	—	—	X	X	X	—	—	X
Cuba	² X	—	—	—	—	—	X	—	—	² X
Dominican Republic	² X	—	—	—	—	—	X	—	—	X
El Salvador	X	X	—	—	X	—	X	—	—	X
Guatemala	X	1,a X	b X	X	a X	—	X	—	—	X
Haiti	X	—	—	—	—	—	X	—	—	X
Honduras	X	X	—	—	—	X	X	—	—	X
Leeward Islands	X	—	—	—	—	—	X	—	—	X
Mexico	X	a X	—	—	a X	X	X	X	X	X
Panama	X	² X	—	—	—	—	—	—	—	—
Puerto Rico	X	—	—	—	—	—	—	—	—	—
Trinidad and Tobago	X	—	—	—	—	—	—	—	—	—
United States	X	—	—	—	—	—	X	—	—	X
Virgin Islands	X	—	—	—	—	—	X	—	—	X
Windward Islands	X	—	—	—	—	—	X	—	—	X

[Text continued on page 129]

TABLE 32. QUESTIONS IN NATIONAL CENSUSES ON HORSES, MULES AND ASSES

Code in the Expanded List	F-1.1	a	i	ii	b	c	F-1.2	a	b	F-1.3
SOUTH AMERICA										
Argentina	X	aX			X		X	aX	X	2X
Bolivia	1X	X			X		X			X
Brazil	1X	a,b,cX			2,b,cX		cX			X
British Guiana	X						X			X
Chile	X	aX			aX		X	X	X	X
Colombia	X	2X			X		X			X
Ecuador	X				X		X			X
Falkland Islands	X	X						X		
Uruguay	X				X		X			X
Venezuela ²	X	X			X		X			X
ASIA										
Aden Protectorate										X
Brunei	X									X
Burma	X	2X			2X		X			X
Cyprus	X	X			X		X			X
Iraq	2X						X			X
Israel	X	2X			2X		X			X
Jewish holdings	X						X			X
Arab holdings	X						X			X
Japan	X	X			X		X			X
Jordan	X									
Malaya, Federation of	X	X			X					
North Borneo	X									
Philippines	aX				bX					
Ryukyu Islands	X	X			X		X			
Sarawak	X									
Singapore Island	X	X								
Thailand	1X	2X			1X					
Turkey ³	1X	2X			X		1X	X	X	bX
AFRICA										
Algeria	1X	2X			X		1X	X	X	X
Belgian Congo	1X	aX			X		X	X		X
Europeans and developed Negroes	X									X
British Somaliland	X						2X			2X
Egypt	2X									X
Gambia	X									X
Gold Coast and British Togoland	X									
Kenya	X									bX
Mozambique	X	aX			aX		X			X
Nigeria and British Cameroons	X									
Northern Rhodesia	X						X			X
European holdings										X
African agriculture										X
Nyasaland	X						X			X
Seychelles	X									X
Sierra Leone	X									
Southern Rhodesia	X	X			X		X			X
European holdings										X
African agriculture										X
St. Helena	X	X			X		X			X
Swaziland	X						X			X
Tunisia	1X	2X			X		1X	X	X	X
Uganda	X									
Union of South Africa	X	aX			X		X			X
"White" holdings	X						X			X
Native farming	X						X			X
Zanzibar and Pemba	X									

TABLE 32. QUESTIONS IN NATIONAL CENSUSES ON HORSES, MULES AND ASSES

Code in the Expanded List	F-1.1	a	i	ii	b	c	F-1.2	a	b	F-1.3
OCEANIA										
American Samoa	aX									
Australia	X									
British Solomon Islands	X									
Cook and Niue Islands	X									
Fiji	X	X								
Guam	X									
Hawaii	X									
New Hebrides	X									
New Zealand	X									
Tonga	X	X								
Western Samoa	X	a,bX								

1) By addition of the subitems.
 2) Separate questions on males and females.
 Belgium a) horses for agricultural use. On horses used outside agriculture a simpler set of questions was asked.
 Belgium b) separate questions on two age strata.
 Belgium c) separate questions on other mares, stallions and geldings, and among stallions, on two age strata.
 Belgium d) separate questions on stallions, mares and geldings.
 Czechoslovakia a) detailed classification (not available), according to age, sex and use, embraced 11 classes.
 Denmark a) same remark as under Belgium d).
 Finland a) separate questions on castrated and other horses.
 Finland b) separate questions on three age strata.
 Germany (Federal Republic) a) mules and asses included with the horses.
 Hungary a) draught horses only; no age limit indicated.
 Ireland a) by subtraction of the answer to one question from that to another one.
 Luxembourg a) separate questions on mares for breeding and stallions for breeding and, within each category, on four age strata.
 Luxembourg b) separate questions on stallions not for breeding and mares not for breeding and, within each category, on four age strata.
 Luxembourg c) separate questions on stallions and on mares and geldings and, within each of these two categories, on two age strata.
 Netherlands a) in the total is included a question on horses of small races (under 120 centimeters at the elbow), for which there is no breakdown on categories.
 Netherlands b) same remark as under Luxembourg c).
 Netherlands c) same remark as under Belgium c).
 Netherlands d) separate questions on two age strata and, within the upper one, on those already working and those not yet working.
 Norway a) separate questions on three age strata.
 Saar a) horses and mules.
 Sweden a) excludes army horses in pension on the farm.
 Sweden b) separate questions on stallions and on three age strata of mares and geldings.
 United Kingdom : a) in England and Wales and Scotland, separate questions on mares used for agricultural purposes (including those kept for breeding), geldings used for agricultural purposes, stallions kept for service, unbroken horses one year old and over, and all other horses; in England and Wales, among imbroken horses and stallions separate questions on

light and heavy horses; in Scotland, among unbroken horses, separate questions on mares and geldings, and among stallions separate questions on light and heavy horses; in Northern Ireland, separate questions on stallions kept for service, unbroken horses, and broken horses and, among the latter, on those used for agricultural purposes, for traffic and manufactures, and for amusement and recreation.
 United Kingdom b) in England and Wales and Scotland, separate questions on light and heavy horses.
 Yugoslavia a) age limit : 2 years.
 Yugoslavia b) separate questions on breeding stallions, geldings and working stallions, and other male horses.
 Yugoslavia c) separate questions on breeding mares, and other female horses.
 Alaska a) same remark as under Saar a).
 British Honduras a) same remark as under Saar a).
 Canada a) same remark as under Yugoslavia a).
 Canada b) separate questions on mares, stallions and geldings.
 Guatemala a) age limit not stated, only vaguely indicated.
 Guatemala b) separate questions on breeding stallions and other male horses.
 Mexico a) age limit : 4 years.
 Argentina a) same remark as under Belgium b).
 Brazil a) same remark as under Belgium d).
 Brazil b) same remark as under Guatemala a).
 Brazil c) also a separate question on work animals.
 Chile a) same remark as under Yugoslavia a).
 Israel a) same remark as under Guatemala a).
 Philippines a) also a separate question on females 2 years of age and over.
 Philippines b) same remark as under Yugoslavia a).
 Turkey a) asked from mukhtars (and large farms); on the sample holdings, only work animals were asked for.
 Turkey b) same remark as under Belgium b).
 Belgian Congo a) separate questions on breeding mares and other horses.
 Mozambique a) same remark as under Guatemala a).
 Mozambique b) also separate questions on adult and young animals.
 Union of South Africa a) separate questions on stallions, mares and geldings.
 American Samoa a) same remark as under Saar a).
 Australia a) separate questions on draught horses and other horses.
 Western Samoa a) same remark as under Guatemala a).
 Western Samoa b) same remark as under Union of South Africa a).

TABLE 33. QUESTIONS IN NATIONAL CENSUSES ON CATTLE

ITEM	Cattle (total)	Cattle 2 years of age and over		Young stock 1 year of age and under 2 years	Calves under 1 year of age		Heifers in calf and cows	Kept primarily for milk	Kept for other purposes		
		Male	Female		Male	Female					
Code in the Expanded List	F-2.1	a	i	ii	b	i	ii	c	d	i	ii
Code in the Short List	46	47	47	47	48 = 48 ^a + 48 ^b		49	—	—	—	—
Number of censuses asking the question	102	55	34	35	25	21	21	42	28	30	15
COUNTRY											
EUROPE											
Austria	² X	² X	aX	bX	←	X	→	bX	1X	1X	—
Belgium	X	aX	—	—	bX	bX	X	cX	4X	1X	1X
Czechoslovakia	aX	—	—	—	—	—	—	—	—	—	—
Denmark	X	←	aX	→	—	—	—	—	4X	—	—
Finland	² X	² X	aX	³ ,bX	² X	³ X	³ X	X	4X	—	—
Germany (Federal Republic)	X	aX	—	—	X	—	—	bX	—	1X	—
Greece	1X	² X	X	X	←	5X	→	—	—	—	—
Hungary	aX	—	—	—	—	—	—	—	—	—	—
Ireland	X	² ,aX	bX	cX	² ,dX	X	dX	5X	1,eX	—	—
Luxembourg	X	² X	aX	bX	² X	cX	X	dX	1,2X	1X	1X
Malta and Gozo	² X	X	—	—	X	X	X	5X	—	—	—
Netherlands	X	aX	—	—	X	—	—	cX	—	—	—
Norway	² X	² X	X	1X	² X	X	³ X	X	—	—	—
Portugal	X	X	—	—	—	—	—	X	1,2X	1X	1,aX
Romania	X	² X	X	X	←	X	→	—	—	—	—
Saar ^a	² X	² X	bX	1X	←	X	→	—	—	—	—
Sweden	² X	←	aX	→	—	—	—	bX	b,dX	eX	e,fX
United Kingdom	X	←	a,bX	→	—	—	—	—	1X	—	—
Yugoslavia	X	² X	aX	bX	² X	X	X	⁵ ,b,cX	—	—	—
NORTH AND CENTRAL AMERICA											
Alaska	aX	—	—	—	—	—	—	—	1X	—	—
Bahamas	X	—	—	—	—	—	—	—	—	—	—
Barbados	X	—	—	—	—	—	—	—	—	—	—
Bermuda	X	X	—	—	←	X	→	—	—	—	—
British Honduras	X	—	—	—	—	—	—	—	—	—	—
Canada	X	←	aX	→	—	—	bX	X	² ,4X	4X	4,cX
Costa Rica	X	² X	aX	bX	² X	X	cX	X	1X	1X	—
Cuba	X	² X	aX	² ,3X	² X	X	X	⁵ X	1,2X	1X	1X
Dominican Republic	X	² X	aX	X	² X	X	X	X	1X	1X	—
El Salvador	X	² X	aX	X	² X	X	X	X	—	—	—
Guatemala	X	←	³ ,aX	→	—	—	—	³ ,5X	1X	—	—
Haiti	aX	—	—	—	—	—	—	—	—	—	—
Honduras	X	² X	aX	X	←	5X	→	—	1X	1X	—
Jamaica	X	—	—	—	—	—	—	—	—	—	—
Leeward Islands	aX	—	—	—	—	—	—	—	—	—	—
Mexico ^a	X	bX	—	—	X	—	—	X	—	—	—
Panama	X	←	³ ,aX	→	—	—	—	³ X	X	—	—
Puerto Rico	X	←	³ ,aX	→	—	—	—	³ X	—	—	—
Trinidad and Tobago	X	—	—	1X	—	—	—	—	—	—	—
United States	aX	—	—	—	—	—	—	—	1X	1X	—
Virgin Islands	aX	—	—	—	—	—	—	—	1X	—	—
Windward Islands	X	—	—	—	—	—	—	—	—	—	—

TABLE 33. QUESTIONS IN NATIONAL CENSUSES ON CATTLE

Code in the Expanded List	F-2.1	a	i	ii	b	i	ii	c	d	i	ii
Argentina	X	←	³ ,aX	→	—	—	—	³ ,5,bX	cX	1X	—
Bolivia	² X	X ²	aX	bX	←	5X	→	X	X	1X	—
Brazil	² X	—	—	—	—	—	—	—	X	—	—
British Guiana	X	←	aX	→	—	—	—	—	X	X	—
Chile	X	² X	aX	bX	←	2X	→	X	X	—	—
Colombia	X	←	aX	→	—	—	—	—	X	—	—
Ecuador	X	X	—	—	←	X	→	—	—	—	—
Falkland Islands	X	² X	aX	bX	←	cX	→	5X	—	—	—
Uruguay	X	² X	bX	cX	←	2X	→	X	—	—	—
Venezuela ^a	X	² X	—	—	←	X	→	X	—	—	—
ASIA											
Aden Protectorate	X	—	—	—	—	—	—	—	—	—	—
Brunei	X	X	—	—	←	5,aX	→	—	—	—	—
Burma	X	² ,aX	aX	aX	←	—	→	—	—	—	—
Ceylon	X	aX	—	—	X	—	—	X	1,2X	1X	1X
Cyprus	X	X	—	—	←	—	→	—	—	—	—
India	² X	² ,aX	a,bX	a,cX	² ,aX	a,bX	a,cX	X	—	—	—
Iraq	⁵ X	—	—	—	—	—	—	—	—	—	—
Israel	X	² X	X	X	² X	aX	aX	⁵ X	—	—	—
Jewish holdings	X	←	3,bX	→	—	—	—	³ ,5X	—	—	—
Arab holdings	² X	←	X	→	X	bX	X	bX	1,2,cX	1X	1X
Japan ^a	X	X	X	X	X	—	—	X	1,2X	1X	1,bX
Jordan ^a	⁵ X	←	aX	→	—	—	—	—	—	—	—
Malaya, Federation of	X	a,bX	—	—	←	a,bX	→	—	—	—	—
North Borneo	X	X	—	—	←	X	→	—	—	—	—
Philippines	X	² X	aX	X	←	X	→	—	—	—	—
Ryukyu Islands	X	X	X	X	X	X	X	X	—	—	—
Sarawak	X	—	—	—	←	—	→	—	—	—	—
Singapore Island	X	a,bX	—	—	←	a,bX	→	—	—	—	—
Thailand ^a	² X	² ,bX	bX	bX	←	5,bX	→	—	—	—	—
Turkey ^a	² X	² X	bX	X	←	X	→	—	1X	—	—
AFRICA											
Algeria	² X	² X	aX	bX	←	X	→	—	—	—	—
Belgian Congo	X	—	—	—	←	—	→	—	—	—	—
Europeans and developed Negroes	² X	←	aX	→	—	—	—	X	—	1X	—
British Somaliland	X	—	—	—	←	aX	aX	aX	5X	—	—
Egypt	² X	aX	aX	aX	←	aX	aX	5X	—	—	—
Gambia	X	X	—	—	←	—	→	—	—	—	—
Gold Coast and British Togoland	X	—	—	—	←	—	→	—	—	—	—
Kenya	² X	a,b,cX	—	—	←	a,b,cX	→	—	—	—	—
Mauritius	X	X	—	—	←	X	→	—	—	—	—
Mozambique	X	² ,3X	³ ,aX	³ ,bX	² ,3X	³ X	³ X	³ X	² ,3X	³ X	³ X
Nigeria and British Cameroons	X	—	—	—	←	—	→	—	—	—	—
Northern Rhodesia	X	² X	X	X	←	5X	→	—	—	—	—
European holdings	X	X	—	—	←	—	→	—	—	—	—
African agriculture	X	X	—	—	←	—	→	—	—	—	—
Nyasaland	X	—	—	—	←	—	→	—	—	—	—
Seychelles	X	X	—	—	←	—	→	—	—	—	—
Sierra Leone	X	—	—	—	←	—	→	—	—	—	—
Southern Rhodesia	X	←	aX	→	—	—	—	5X	bX	1X	1,cX
European holdings	X	² X	X	X	←	5X	→	—	—	—	—
African agriculture	X	X	—	—	←	—	→	—	—	—	—
St. Helena	X	X	—	—	←	—	→	—	—	—	—
Swaziland	X	X	—	—	←	—	→	—	—	—	—
Tanganyika	X	—	—	—	←	—	→	—	—	—	—
Tunisia	² X	² X	aX	bX	←	X	→	—	—	—	—
Uganda	X	—	—	—	←	—	→	—	—	—	—

TABLE 33. QUESTIONS IN NATIONAL CENSUSES ON CATTLE

Code in the Expanded List	F-2.1	a	i	ii	b	i	ii	c	d	i	ii
Union of South Africa "White" holdings excluding natives Native farming Zanzibar and Pemba	X X X	² X ←	aX ←	bX ←	² X ←	X ←	X ←	⁵ X ←	1X ←	1X ←	1X ←
OCEANIA											
American Samoa	X									1X	
Australia ^a	X	←						X	² X	cX	⁴ X
British Solomon Islands	X										
Cook and Niue Islands	X										
Fiji	X	X									
Guam	X									aX	
Hawaii	X										
New Hebrides	X										
New Zealand ^a	X	X	bX	X	X	cX	X	^{5, d} X	eX	e, fX	eX
Tonga	X	X									
Western Samoa ^a	X	←	^{3, b} X					³ X			

¹) Cows only.
²) By addition of the subitems.
³) Age limit not stated, only vaguely indicated.
⁴) Including heifers, without distinguishing those in calf.
⁵) Separate questions on males and females.

Austria ^a) separate questions on breeding bulls, work oxen and other bulls and oxen.
Austria ^b) separate questions on heifers in calf, cows for milk only, cows for milk and work, and cows for slaughter and fattening.
Belgium ^a) separate questions on breeding bulls, oxen, cows for milk only, cows for milk and work, heifers, and animals for slaughter and fattening.
Belgium ^b) separate questions on young bulls used for breeding, young bulls not used for breeding and steers.
Belgium ^c) separate questions on calves under 3 months of age, males over 3 months and under 1 year, and females over 3 months and under 1 year of age.
Czechoslovakia ^a) detailed classification (not available) according to age, sex, and use, included 14 classes.
Denmark ^a) separate questions on bulls, steers, cows and heifers that have calved, and heifers that have not calved.
Finland ^a) separate questions on bulls and oxen (the latter 1 year of age and over).
Finland ^b) separate questions on Finnish race, Ayrshire race, and mixed breed and other races.
Germany (Federal Republic) ^a) separate questions on heifers, cows for milk only, cows for milk and work, working oxen, bulls and steers, and all other cattle 2 years of age and over (breeding bulls, oxen for fattening, cows for fattening, etc.).
Germany (Federal Republic) ^b) separate questions on two age strata (over and under 3 months).
Hungary ^a) separate questions on draft oxen and steers, and all cattle for productive purposes.
Ireland ^a) including all milk cows and all heifers in calf, regardless of age.
Ireland ^b) separate questions on bulls, other male cattle 3 years of age and upwards, and other male cattle two years old and under three years.
Ireland ^c) separate questions on milk cows (regardless of age) on farms sending milk to creameries, same category on other farms, heifers in calf (regardless of age), other female cattle three years of age and upwards, and other female cattle two years old and under 3 years.
Ireland ^d) excludes milk cows and heifers in calf (regardless of age).
Ireland ^e) separate questions on milk cows on farms sending milk to creameries, and on other farms.
Luxembourg ^a) separate questions on breeding bulls, draft oxen and steers, and other oxen and steers.
Luxembourg ^b) separate questions on heifers, milk cows, and all other cows (cattle for fattening and slaughter).

Luxembourg ^c) separate questions on young bulls used for breeding, and other male animals in the stratum.
Luxembourg ^d) separate questions on three age strata and, among the two upper strata, on males and females.
Netherlands ^a) separate questions on heifers 2 years of age and over and in calf, same category not in calf, cows (regardless of age), bulls 2 years of age and over, and other cattle for fattening (i.e., other than calves) 2 years of age and over.
Netherlands ^b) separate questions on heifers in calf, heifers not in calf, bulls, and other cattle (i.e., other than calves) for fattening.
Netherlands ^c) separate questions on calves for fattening and other calves, and, among the latter, on males and females.
Portugal ^a) also separate questions on cows for work and milk, and for work only.
Saar ^a) including buffaloes.
Saar ^b) separate questions on bulls and oxen.
Sweden ^a) separate questions on heifers, cows that have had one calf, other cows, oxen and steers, and bulls.
Sweden ^b) separate questions on those destined for slaughter and for livestock.
United Kingdom ^a) separate questions on cows and heifers in milk, cows in calf but not in milk, heifers in calf with first calf, bulls used for service, bulls (including bull calves) being reared for service, and other cattle 2 years of age and over (males and females separately), and other cattle 1 year and under 2 years of age (males and females separately).
United Kingdom ^b) in Scotland, separate questions on dairy cattle and beef cattle.
United Kingdom ^c) excluding bull calves reared for service.
United Kingdom ^d) separate questions on cows and heifers in milk, cows in calf but not in milk, and heifers in calf with first calf.
United Kingdom ^e) refers to Scotland only.
United Kingdom ^f) refers only to beef cattle.
Yugoslavia ^a) separate questions on bulls for breeding, oxen, and other male cattle.
Yugoslavia ^b) separate questions on cows and on heifers over 2 years of age.
Alaska ^a) separate questions on cows, calves under 3 months of age, heifers and heifer-calves over 3 months of age, and bulls, bull-calves and steer-calves over 3 months of age.
Canada ^a) separate questions on bulls, steers, cows and heifers years of age and over, and among the latter, on animals kept primarily for milk and for beef.
Canada ^b) separate questions on animals kept primarily for milk and for beef.
Canada ^c) beef cows.
Costa Rica ^a) separate questions on bulls, work oxen (regardless of age), and oxen for fattening.

Costa Rica ^b) including cows that have had calf, even though under 2 years of age.
Costa Rica ^c) excluding the category mentioned in previous note.
Cuba ^a) separate questions on young bulls 2 to 3 years of age, bulls for breeding (2 to 3 years of age), bulls not for breeding (3 years of age and over) and oxen and bulls for work.
Cuba ^b) separate questions on heifers 2 to 3 years of age, cows in calf and milk cows.
Dominican Republic ^a) separate questions on bulls 2 years of age and over.
El Salvador ^a) separate question on work oxen, regardless of age.
Guatemala ^a) separate questions on cows and heifers, bulls and steers, and work oxen.
Haiti ^a) separate question on cows, heifers, and calves and bulls.
Honduras ^a) same remark as under Saar ^b).
Jamaica ^a) separate question on beef, dairy, dual and draft animals.
Mexico ^a) separate questions on ordinary and improved breed.
Mexico ^b) separate questions on breeding bulls over 3 years of age, cows over 3 years of age whether productive or not, animals for fattening over 3 years of age, and animals 2 to 3 years of age.
Panama ^a) separate questions on dry cows and heifers, cows in milk, heifers in milk, bulls and steers, and oxen.
Puerto Rico ^a) same remark as under Guatemala ^a).
United States ^a) same remark as under Alaska ^a).
Virgin Islands ^a) same remark as under Alaska ^a).
Argentina ^a) separate questions on cows, heifers, bulls, steers and oxen, and three classes of young animals.
Argentina ^b) separate question on two age strata.
Argentina ^c) separate questions on heifers and cows.
Brazil ^a) separate questions on breeding bulls, oxen and steers, and work oxen.
Brazil ^b) separate questions on cows and heifers in calf, and heifers not in calf.
Chile ^a) separate questions on bulls 1 year of age and over, steers 1 to 4 years of age, oxen 4 years of age and over, heifers in calf and cows, and heifers 1 year of age and over.
Colombia ^a) separate questions on bulls 2 years of age and over, steers 2 years of age and over, and oxen.
Colombia ^b) separate questions on heifers 2 years of age and over, cows in calf, cows not in calf, and cows for fattening.
Ecuador ^a) separate questions on breeding bulls, young bulls 1 to 2 years of age, work oxen, other males 2 years of age and over, milking cows, dry cows and heifers 1 year of age and over.
Uruguay ^a) separate questions on bulls, oxen, steers 2 to 3 of age, and steers over 3 years of age.
Uruguay ^b) separate questions on females in calf, cows for fattening, and heifers up to 3 years of age and not in calf (i.e. including all heifers).
Uruguay ^c) separate questions on steers and young bulls.
Venezuela ^a) separate questions on domestic, crossbred, and pure races.
Venezuela ^b) separate questions on bulls, steers, and oxen.
Venezuela ^c) separate questions on cows for breeding, cows not for breeding, and heifers over 2 years of age.
Burma ^a) age limit 4 years.
Ceylon ^a) separate questions on young stock 2 years of age and under 3 years, and cattle 3 years of age and over, and among the latter, on bulls, cows kept primarily or exclusively for milk, and other cows.
India ^a) age limit : 3 years.
India ^b) separate questions on breeding bulls, work bulls and bullocks, and other bulls and bullocks.
India ^c) separate questions on dry cows and cows in milk.
Israel ^a) separate questions on two age strata.
Israel ^b) separate questions on cows and heifers, bulls and oxen.
Japan ^a) separate questions on cattle kept primarily for milk and for other purposes.

Japan ^b) no age distinction of male cattle under 2 years of age, for breeding purposes.
Japan ^c) a special question on heifers in calf among total number of cattle, female cattle 2 years of age and over, and 1 to 2 years.
Jordan ^a) by subtracting the answer to one question from that to another one.
Jordan ^b) for milk and other purposes.
Malaya ^a) same remark as under India ^a).
Malaya ^b) separate questions on bulls, oxen and female animals.
Philippines ^a) same remark as under Jordan ^a).
Singapore ^a) same remark as under India ^a).
Singapore ^b) same remark as under Malaya ^b).
Thailand ^a) same remark as under Japan ^a).
Thailand ^b) same remark as under India ^a).
Turkey ^a) asked only from *mukhtar* (and large farms); on sample holdings, only animals for milk and for work were asked for.
Turkey ^b) separate questions on bulls and oxen.
Algeria ^a) same remark as under Turkey ^b).
Algeria ^b) separate questions on milk cows of European race or crossbred, and other cows.
Belgian Congo ^a) separate questions on bulls, work cattle, slaughter cattle, and milk cows.
Egypt ^a) same remark as under India ^a).
Kenya ^a) same remark as under United Kingdom ^b).
Kenya ^b) same remark as under India ^a).
Kenya ^c) separate questions also on cows in milk, dry milk cows, beef cows, work oxen (or beef and "other" cattle), bulls and bull calves for stud, and other cattle over and under 3 years of age respectively.
Mozambique ^a) separate questions on bulls and oxen.
Mozambique ^b) separate questions on milk cows and other cows.
Southern Rhodesia ^a) separate questions on cows regularly milked for dairying purpose, other breeding cows, culled cows, heifers 1 year of age and over in calf, other heifers 1 year of age and over, bulls, 1 year of age and over, trek (draft) oxen, other oxen 1 to 2 years of age, other oxen 2 to 3 years of age, other oxen 3 to 4 years of age, and other oxen 4 years of age and over.
Southern Rhodesia ^b) separate questions on heifers in calf and on three classes of cows.
Southern Rhodesia ^c) separate questions on breeding cows and other than those milked for dairying purposes, and culled cows (only suitable for slaughter).
Tunisia ^a) same remark as under Turkey ^b).
Tunisia ^b) same remark as under Algeria ^b).
Union of South Africa ^a) same remark as under Turkey ^b).
Union of South Africa ^b) separate questions on heifers, milk cows, and all other cows (for fattening and slaughter).
Union of South Africa ^c) separate questions on cows and heifers, bulls and oxen of all ages.
Australia ^a) same remark as under United Kingdom ^b).
Australia ^b) separate questions on dairy cows in milk, dairy cows dry, heifers within 3 months of calving, other heifers within 1 year of age, other milking cows not in registered dairies, bulls 1 year of age and over, and other beef cattle (including spayed cows, bullocks, and steers).
Australia ^c) same remark as in preceding note, as far as applicable.
Hawaii ^a) including heifers that have calved.
New Zealand ^a) same remark as under United Kingdom ^b).
New Zealand ^b) a separate question on steers of beef cattle.
New Zealand ^c) including bull calves of dairy cattle.
New Zealand ^d) excluding bull calves of dairy cattle.
New Zealand ^e) cows and heifers 2 years of age and over, whether in calf or not.
New Zealand ^f) separate questions on cows in milk, heifers not yet in milk, and dry cows.
Western Samoa ^a) the schedules for planters, etc. had a more detailed breakdown, including distinct age limits at 2 years and 1 year of age.
Western Samoa ^b) separate questions on bulls, steers and cows.

TABLE 34. QUESTIONS IN NATIONAL CENSUSES ON BUFFALOES

ITEM	Buffaloes (total)	Buffaloes 2 years of age and over	Male	Female	Buffaloes 1 year of age and under 2 years	Male	Female	Buffaloes under 1 year of age	Heifers in calf and cows	Kept primarily for milk	Kept for other purposes
Code in the Expanded List	F-3.1	a	i	ii	b	i	ii	c	d	i	ii
Code in the Short List	50	51	a	b	52 52 ^a , 52 ^b			53	—	—	—
Number of censuses asking the question	19	11	6	6	3	2	2	4	1	—	—
		1		8							
COUNTRY											
EUROPE											
Greece	1X	1X	X	X	← aX →			—	—	—	—
Yugoslavia	X	—	—	—	—	—	—	—	—	—	—
NORTH AND CENTRAL AMERICA											
Trinidad and Tobago	aX	—	—	—	—	—	—	—	—	—	—
ASIA											
Brunei	X	—	—	—	—	—	—	—	—	—	—
Burma	X	1,aX	aX	aX	← a,bX →			—	—	—	—
Ceylon	X	aX	—	—	X	—	—	X	—	—	—
India	1X	1,aX	a,bX	a,cX	1,aX	a,bX	a,cX	X	—	—	—
Iraq	aX	—	—	—	—	—	—	—	—	—	—
Malaya, Federation of	X	a,bX	—	—	← a,bX →			—	—	—	—
North Borneo	X	X	—	—	← X →			—	—	—	—
Philippines ^a	X	b,cX	—	—	← bX →			—	—	—	—
Sarawak	X	—	—	—	—	—	—	—	—	—	—
Singapore Island	X	a,bX	—	—	← a,bX →			—	—	—	—
Thailand ^a	X	bX	bX	bX	← b,cX →			—	—	—	—
Turkey ^{a,b}	1,bX	1X	X	X	← X →			cX	—	—	—
AFRICA											
Belgian Congo	1X	← a,bX →			—	—	—	bX	—	—	—
Europeans and developed Negroes	1X	aX	aX	aX	aX	aX	aX	bX	—	—	—
Egypt	1X	—	—	—	—	—	—	—	—	—	—
OCEANIA											
American Samoa	aX	—	—	—	—	—	—	—	—	—	—
Guam	aX	—	—	—	—	—	—	—	—	—	—

1) By addition of the subitems.
 Greece a) separate questions on males and females.
 Trinidad and Tobago a) water buffaloes.
 Burma a) age limit: 4 years.
 Burma b) separate questions on males and females.
 Ceylon a) separate questions on young stock 2 years of age and under 3 years, bulls 3 years of age and over, and cows 3 years of age and over.
 India a) age limit: 3 years.
 India b) separate questions on breeding and working animals.
 India c) separate questions on females milking and dry.
 Iraq a) same remark as under Greece a).
 Malaya a) same remark as under India a).
 Malaya b) separate questions on Malayan swamp and Indian "murrah" and in each group, on males and females.
 Philippines a) separate questions on buffaloes and carabaos.
 Philippines b) same remark as under India a).

Philippines c) on behalf of carabaos, also a separate question on females 3 years of age and over.
 Singapore a) same remark as under India a).
 Singapore b) separate questions on Malayan swamp and Indian murrah and in each group, on males and females.
 Thailand a) same remark as under Trinidad and Tobago a).
 Thailand b) same remark as under India a).
 Thailand c) same remark as under Greece a).
 Turkey a) same remark as under Trinidad and Tobago a).
 Turkey b) asked from mukhtars (and large farms); on sample holdings, only animals for work and milk were asked for.
 Turkey c) cows only.
 Belgian Congo a) same remark as under Greece a).
 Belgian Congo b) age limit not stated, only vaguely indicated.
 Egypt a) same remark as under India a).
 Egypt b) same remark as under Greece a).
 American Samoa a) carabaos.
 Guam a) same remark as under American Samoa a).

TABLE 35. QUESTIONS IN NATIONAL CENSUSES ON SHEEP

ITEM	Sheep (total)	Males 1 year of age and over	Females 1 year of age and over	Kept primarily for milk	Kept for other purposes	Lambs under 1 year of age	Sheep clipped during the census year	Total production of wool
Code in the Expanded List	F-4.1	a	b	i	ii	c	d	e
Code in the Short List	54	55 ^a	55 ^b	—	—	56	—	—
Number of censuses asking the question	89	35	35	1	1	47	15	20
		13						
COUNTRY								
EUROPE								
Austria	X	—	—	—	—	—	—	—
Belgium	X	1X	1X	1X	1X	1,aX	—	—
Czechoslovakia	X	—	—	—	—	—	—	—
Denmark	aX	—	—	—	—	—	—	—
Finland	2X	X	X	—	—	X	—	X
Germany (Federal Republic)	X	—	—	—	—	—	—	—
Greece	2X	X	X	—	—	X	—	—
Hungary	aX	—	—	—	—	—	—	—
Ireland	X	aX	bX	—	—	X	—	—
Luxembourg	X	aX	X	—	—	X	—	—
Malta and Gozo	X	← aX →	—	—	—	aX	—	—
Netherlands	X	← aX →	—	—	—	b,cX	—	—
Norway	2X	X	X	—	—	X	—	—
Portugal	X	—	—	—	—	—	—	—
Romania	X	—	—	—	—	—	—	—
Saar	X	—	—	—	—	—	—	—
Sweden	2X	X	X	—	—	X	—	—
United Kingdom	X	a,bX	b,cX	—	—	d,eX	—	—
Yugoslavia	X	← aX →	—	—	—	bX	—	—
NORTH AND CENTRAL AMERICA								
Alaska	X	aX	aX	—	—	aX	X	X
Bahamas	X	—	—	—	—	—	—	—
Barbados	X	—	—	—	—	—	—	—
British Honduras	X	—	—	—	—	—	—	—
Canada	X	← aX →	—	—	—	X	X	X
Costa Rica	aX	—	—	—	—	—	—	—
Cuba	2X	1X	1X	—	—	1X	—	—
Dominican Republic	X	X	X	—	—	X	—	—
El Salvador	X	—	—	—	—	—	—	—
Guatemala	X	1X	1X	—	—	1X	—	X
Haiti	X	—	—	—	—	—	—	—
Honduras	X	—	—	—	—	—	—	—
Leeward Islands	X	—	—	—	—	—	—	—
Mexico	X	← a,bX →	—	—	—	aX	—	X
Puerto Rico	X	—	—	—	—	—	—	—
Trinidad and Tobago	X	—	—	—	—	—	—	—
United States	X	aX	aX	—	—	aX	X	X
Virgin Islands	X	—	—	—	—	—	—	—
Windward Islands	X	—	—	—	—	—	—	—
SOUTH AMERICA								
Argentina	X	1,aX	1,bX	—	—	1,c,dX	X	X
Bolivia	X	X	X	—	—	aX	—	X
Brazil	X	aX	X	—	—	X	X	X

TABLE 35. QUESTIONS IN NATIONAL CENSUSES ON SHEEP

Code in the Expanded List	F-4.1	a	b	i	ii	c	d	e
British Guiana	X	—	—	—	—	—	—	—
Chile	X	aX	X	—	—	X	X	X
Colombia	X	X	X	—	—	X	X	X
Ecuador	X	—	—	—	—	—	X	X
Falkland Islands	X	X	X	—	—	X	—	—
Uruguay	X	aX	X	—	—	X	bX	bX
Venezuela	aX	—	—	—	—	—	—	—
ASIA								
Aden Protectorate	X	—	—	—	—	—	—	—
Burma	X	—	—	—	—	—	—	—
Ceylon	X	X	X	—	—	X	—	—
Cyprus	X	X	X	—	—	X	—	X
India	X	← aX →	—	—	—	X	—	—
Iraq	X	← aX →	—	—	—	X	—	—
Israel	X	X	X	—	—	aX	—	—
Jewish holdings	X	X	X	—	—	—	—	—
Arab holdings	aX	1X	1X	—	—	1X	—	—
Japan	X	← X →	—	—	—	X	—	—
Jordan	X	X	X	—	—	X	X	aX
Malaya, Federation of	aX	—	—	—	—	—	—	—
North Borneo	X	X	X	—	—	X	—	—
Philippines	X	← a,bX →	—	—	—	bX	—	—
Thailand	X	—	—	—	—	—	—	—
Turkey	1,aX	aX	aX	—	—	aX	bX	bX
AFRICA								
Algeria	aX	X	X	—	—	X	—	—
Belgian Congo	aX	X	X	—	—	X	—	—
Europeans and developed Negroes	X	—	—	—	—	—	—	—
Undeveloped Negroes	X	—	—	—	—	—	—	—
British Somaliland	X	—	—	—	—	—	—	—
Egypt	aX	X	X	—	—	aX	—	—
Gambia	X	← X →	—	—	—	X	—	—
Gold Coast and British Togoland	X	—	—	—	—	—	—	—
Kenya	X	—	—	—	—	—	—	—
Mauritius	X	—	—	—	—	—	—	—
Mozambique	X	← 1X →	—	—	—	1X	—	—
Nigeria and British Cameroons	X	—	—	—	—	—	—	—
Northern Rhodesia	X	—	—	—	—	—	—	—
European holdings	X	—	—	—	—	—	—	—
African agriculture	X	X	X	—	—	X	—	—
Nyasaland	X	—	—	—	—	—	—	—
Seychelles	X	← X →	—	—	—	—	—	—
Sierra Leone	X	—	—	—	—	—	—	—
Southern Rhodesia	X	—	—	—	—	—	—	—
European holdings	X	X	X	—	—	X	—	—
African agriculture	X	—	—	—	—	—	—	—
St. Helena	X	X	X	—	—	X	—	—
Swaziland	X	—	—	—	—	—	—	—
Tanganyika	X	—	—	—	—	—	—	—
Tunisia	aX	X	X	—	—	X	—	—
Uganda	X	—	—	—	—	—	—	—
Union of South Africa	X	← aX →	—	—	—	aX	bX	bX
"White" holdings	X	—	—	—	—	—	—	—
Native farming	cX	—	—	—	—	—	—	—
Zanzibar and Pemba	X	—	—	—	—	—	—	—

TABLE 35. QUESTIONS IN NATIONAL CENSUSES ON SHEEP

Code in the Expanded List	F-4.1	a	b	i	ii	c	d	e
OCEANIA								
American Samoa	X	—	—	—	—	—	—	—
Australia	X	aX	bX	—	—	X	cX	cX
Fiji	X	—	—	—	—	—	—	—
Hawaii	X	aX	aX	—	—	aX	X	X
New Hebrides	X	—	—	—	—	—	—	—
New Zealand	—	—	—	—	—	—	aX	aX

1) Age limit not stated, only vaguely indicated.

2) By addition of the subitems.

Belgium a) "Other sheep" included with the lambs.

Denmark a) also a separate question on mother sheep.

Hungary a) including goats.

Ireland a) separate questions on rams for breeding (regardless of age), and other male sheep 1 year of age and upwards.

Ireland b) separate questions on ewes for breeding (regardless of age), and other female sheep 1 year of age and upwards.

Luxembourg a) separate questions on rams and wethers.

Malta and Gozo a) age limit: 6 months.

Netherlands a) separate questions on breeding rams, breeding ewes, wethers, and other sheep.

Netherlands b) age limit: 4½ months

Netherlands c) separate questions on males and females.

United Kingdom a) in England and Wales and Northern Ireland, separate questions on rams kept for service, and other male sheep 1 year of age and over.

United Kingdom b) in Scotland, separate questions on ewes kept for breeding (regardless of age), rams to be used for service in 1950 (regardless of age), other sheep 1 year of age and over kept for breeding, and other sheep 1 year of age and over - thus without full distinction between male and female animals.

United Kingdom c) in England and Wales and Northern Ireland, separate questions on ewes kept for breeding, two-tooth ewes (shearling ewes and gimmers to be put to the ram in 1950), and other female sheep 1 year of age and over.

United Kingdom d) in England and Wales and Northern Ireland, separate questions on ram lambs intended for service, and other sheep and lambs under 1 year of age.

United Kingdom e) in Scotland, excluding young ewes kept for breeding and rams to be used for service in 1950.

Yugoslavia a) separate questions on ewes for breeding, rams for breeding, and on wethers and barren ewes.

Yugoslavia b) separate questions on yearlings, male tegs up to 1 year of age and female tegs up to 1 year of age.

Alaska a) age limit: 6 months.

Canada a) separate questions on rams, and on wethers and ewes.

Costa Rica a) same remark as under Hungary a).

Mexico a) same remark as under Alaska a).

Mexico b) separate questions on ewes over 2 years of age, rams over 2 years of age and sheep, from 6 months to 2 years.

United States a) same remark as under Alaska a).

Argentina a) same remark as under Mexico b).

Argentina b) separate questions on ewes and young females.

Argentina c) separate questions on two age strata.

Argentina d) separate questions on males and females.

Bolivia a) same remark as under Argentina d).

Brazil a) separate questions on rams for breeding, and others.

Chile a) same remark as under Luxembourg a).

Uruguay a) separate questions on rams, and on wethers and young males.

Uruguay b) separate questions on vellón cordero (fleece) and cordero (lamb).

Venezuela a) separate questions on males and females.

India a) same remark as under Argentina c).

Iraq a) by subtraction of the answer to one question from that to another one.

Israel a) same remark as under Argentina d).

Jordan a) separate questions on wool sold and kept for home use.

Malaya a) same remark as under Argentina d).

Philippines a) same remark as under Iraq a).

Philippines b) age limit: 5 months.

Turkey a) asked from mukhtars (and large farms), and on sample holdings a question on number of grown breeding ewes.

Turkey b) asked from sample holdings.

Egypt a) same remark as under Argentina d).

Union of South Africa a) separate questions on merinos, karakul, other woolled, blackhead Persian, Africander, and non-woolled crossbred sheep.

Union of South Africa b) separate questions on merinos sheep, merinos lambs, other sheep and other lambs (and their wool, respectively).

Union of South Africa c) separate questions on woolled and non-woolled sheep.

Australia a) same remark as under Luxembourg a).

Australia b) same remark as under Ireland a).

Australia c) separate questions on sheep and lambs, and their wool, respectively.

Hawaii a) age limit: 3 months.

New Zealand a) same remark as under Australia a).

TABLE 36. QUESTIONS IN NATIONAL CENSUSES ON GOATS

ITEM	Goats (total)	Males 1 year of age and over	Females 1 year of age and over	Kept primarily for milk	Kept for other purposes	Kids under 1 year of age	Goats clipped during the census year	Total production of mohair
Code in the Expanded List	F-5.1	a	b	i	ii	c	d	e
Code in the Short List	57	—	—	—	—	—	—	—
Number of censuses asking the question	94	14	14	1	—	24	4	4
		10						
COUNTRY								
EUROPE								
Austria	X	—	—	—	X	—	—	—
Belgium	X	—	—	—	—	—	—	—
Czechoslovakia	X	—	—	—	—	—	—	—
Denmark	¹ X	X	—	—	—	—	—	—
Finland	X	—	—	—	—	—	—	—
Germany (Federal Republic)	^a X	—	—	—	—	—	—	—
Greece	X	—	—	—	—	—	^a X	—
Ireland	X	^a X	—	—	—	—	X	—
Malta and Gozo	¹ X	X	X	—	—	—	—	—
Norway	X	—	—	—	—	—	—	—
Portugal	X	—	—	—	—	—	—	—
Romania	X	—	—	—	—	—	—	—
Saar	X	—	—	—	—	X	—	—
Sweden	X	X	X	—	—	—	—	—
United Kingdom ^a	X	—	—	—	—	—	—	—
Yugoslavia	X	—	—	—	—	—	—	—
NORTH AND CENTRAL AMERICA								
Alaska	X	—	—	—	—	—	—	—
Bahamas	X	—	—	—	—	—	—	—
Barbados	X	—	—	—	—	—	—	—
Bermuda	X	—	—	—	—	—	—	—
British Honduras	X	—	—	—	—	—	—	—
Canada	¹ X	² X	² X	—	—	² X	—	—
Cuba	X	X	X	—	—	—	—	—
Dominican Republic	X	—	—	—	—	² X	—	—
El Salvador	X	² X	² X	—	—	—	—	—
Guatemala	X	—	—	—	—	—	—	—
Haiti	X	—	—	—	—	—	—	—
Honduras	X	—	—	—	—	—	—	—
Leeward Islands	X	^{a,b} X	—	—	—	^a X	—	—
Mexico	X	—	—	—	—	—	—	—
Panama	X	—	—	—	—	—	—	—
Puerto Rico	X	—	—	—	—	—	X	X
Trinidad and Tobago	^a X	—	—	—	—	—	—	—
United States	X	—	—	—	—	—	—	—
Virgin Islands	X	—	—	—	—	—	—	—
Windward Islands	X	—	—	—	—	—	—	—
SOUTH AMERICA								
Argentina	X	—	—	—	—	—	—	—
Bolivia	X	—	—	—	—	—	—	—
Brazil	X	—	—	—	—	—	—	—
British Guiana	X	—	—	—	—	—	—	—

TABLE 36. QUESTIONS IN NATIONAL CENSUSES ON GOATS

Code in the Expanded List	F-5.1	a	b	i	ii	c	d	e
Chile	X	—	—	—	—	—	—	—
Colombia	X	—	X	—	—	X	—	—
Ecuador	X	—	—	—	—	—	—	—
Falkland Islands	X	—	—	—	—	—	—	—
Uruguay	X	—	—	—	—	—	—	—
Venezuela	^a X	—	—	—	—	—	—	—
ASIA								
Aden Protectorate	X	—	—	—	—	—	—	—
Brunei	X	—	—	—	—	—	—	—
Burma	X	—	—	—	—	—	—	—
Ceylon	X	X	X	—	—	X	—	—
Cyprus	X	—	—	—	—	—	—	—
India	X	^a X	—	—	—	X	—	—
Iraq	X	^a X	—	—	—	X	—	—
Israel	X	—	—	—	—	—	—	—
Jewish holdings	X	X	X	—	—	X	—	—
Arab holdings	¹ X	² X	—	—	—	² X	—	—
Japan	X	X	X	—	—	X	—	—
Jordan	X	X	X	—	—	X	X	^a X
Malaya	^a X	—	—	—	—	—	—	—
North Borneo	X	—	—	—	—	—	—	—
Philippines	X	^{a,b} X	^b X	—	—	^b X	—	—
Ryukyu Islands	X	X	X	—	—	^a X	—	—
Sarawak	X	—	—	—	—	—	—	—
Singapore Island	X	—	—	—	—	—	—	—
Thailand	¹ X	X	X	—	—	^a X	—	—
Turkey ^a	^{1,b} X	^b X	^b X	—	—	^b X	^c X	^c X
AFRICA								
Algeria	¹ X	² X	—	—	—	² X	—	—
Belgian Congo	X	—	—	—	—	—	—	—
British Somaliland	X	—	—	—	—	—	—	—
Egypt	¹ X	X	X	—	—	^a X	—	—
Gambia	X	—	—	—	—	—	—	—
Gold Coast and British Togoland	X	—	—	—	—	—	—	—
Mauritius	X	—	—	—	—	—	—	—
Mozambique	X	² X	—	—	—	² X	—	—
Nigeria and British Cameroons	X	—	—	—	—	—	—	—
Northern Rhodesia	X	—	—	—	—	—	—	—
African agriculture	X	—	—	—	—	—	—	—
Nyasaland	X	—	—	—	—	—	—	—
Seychelles	X	—	—	—	—	—	—	—
Sierra Leone	X	—	—	—	—	—	—	—
Southern Rhodesia	X	—	—	—	—	—	—	—
European holdings	X	—	—	—	—	—	—	—
African agriculture	X	—	—	—	—	—	—	—
St. Helena	X	—	—	—	—	—	—	—
Swaziland	X	—	—	—	—	—	—	—
Tanganyika	X	—	—	—	—	—	—	—
Tunisia	¹ X	² X	—	—	—	² X	—	—
Uganda	X	—	—	—	—	—	—	—
Union of South Africa	X	^a X	—	—	—	^a X	^b X	^b X
"White" holdings	X	^a X	—	—	—	^a X	^b X	^b X
Native farming	^a X	—	—	—	—	—	—	—
Zanzibar and Pemba	X	—	—	—	—	—	—	—

TABLE 36. QUESTIONS IN NATIONAL CENSUSES ON GOATS

Code in the Expanded List	F-5.1	a	b	i	ii	c	d	e
OCEANIA								
American Samoa	X	—	—	—	—	—	—	—
British Solomon Islands	X	—	—	—	—	—	—	—
Cook and Niue Islands	X	—	—	—	—	—	—	—
Fiji	X	—	—	—	—	—	—	—
Guam	X	—	—	—	—	—	—	—
Hawaii	X	—	—	—	—	—	—	—
New Hebrides	X	—	—	—	—	—	—	—
Tonga	X	—	—	—	—	—	—	—
Western Samoa	X	—	—	—	—	—	—	—

1) by addition of the subitems.
 2) age limit not stated, only vaguely indicated.
 Greece a) separate questions on goats kept on a farm and kept in the open air.
 Malta and Gozo a) age limit : 6 months.
 United Kingdom a) Northern Ireland only.
 Mexico a) age limit : 6 months.
 Mexico b) separate question on males over 2 years of age, females over 2 years of age, and goats from 6 months to 2 years of age.
 United States a) separate questions on Angora and other goats.
 Venezuela a) separate questions on males and females.
 India a) separate questions on two age strata.
 Iraq a) by subtraction of the answer to one question from that to another one.
 Jordan a) separate questions on hair sold and kept for home use.

Malaya, Federation of a) separate questions on males and females.
 Philippines a) same remark as under Iraq a).
 Philippines b) age limit : 5 months.
 Ryukyu Islands a) separate questions on males and females.
 Thailand a) separate questions on males and females.
 Turkey a) separate questions on Angora goats and common goats, and their hair.
 Turkey b) asked from mukhtars (and large farms), and on sample holdings, a question on number of breeding female goats.
 Turkey c) asked from sample holdings.
 Egypt a) separate questions on males and females.
 Union of South Africa a) separate questions on Angora and other goats.
 Union of South Africa b) refers to Angora goats only.

TABLE 37. QUESTIONS IN NATIONAL CENSUSES ON PIGS

ITEM	Pigs (total)	Pigs 6 months of age and over	Sows and gilts for breeding	Other pigs	Pigs under 6 months of age
Code in the Expanded List	F-6.1	a	i	ii	b
Code in the Short List	58	59-60	59	60	61
Number of censuses asking the question	97	60	39	33	60
				2	
COUNTRY					
EUROPE					
Austria	1 X	X	a X	b X	c X
Belgium	X	1 X	a, b X	c X	b X
Czechoslovakia	a X	—	—	—	—
Denmark	X	2 X	2, a X	2, b X	a, c X
Finland	1 X	1 X	X	a X	b X
Germany (Federal Republic)	X	1, a X	a X	a X	a X
Greece	1 X	X	—	—	X
Hungary	X	—	—	—	—
Ireland	X	a X	2 X	b X	X
Luxembourg	X	1 X	a X	b X	c X
Malta and Gozo	X	1 X	X	X	X
Netherlands	X	—	a X	← b X →	—
Norway	1 X	1, a X	a X	a, b X	a X
Portugal	X	—	—	—	—
Romania	a X	—	—	—	—
Saar	1 X	1, a X	a X	a, b X	a X
Sweden	1 X	1, a X	a, b X	a, c X	a X
United Kingdom	X	1, 2 X	2, a X	2, b X	2, c, d X
Yugoslavia	X	1 X	X	a X	b X
NORTH AND CENTRAL AMERICA					
Alaska	X	a X	—	—	a X
Bahamas	X	—	—	—	—
Barbados	X	—	—	—	—
Bermuda	X	1 X	X	X	X
British Honduras	X	—	—	—	—
Canada	X	X	—	—	X
Costa Rica	X	a X	—	—	X
Cuba	1 X	2, a X	—	—	2 X
Dominican Republic	X	1 X	X	a X	X
El Salvador	X	X	—	—	X
Guatemala	X	1 X	X	a X	X
Haiti	X	—	—	—	—
Honduras	X	a X	—	—	X
Jamaica	X	—	—	—	—
Leeward Islands	X	—	—	—	—
Mexico	X	a X	—	—	X
Panama	X	a X	—	—	a X
Puerto Rico	X	a X	—	—	a X
Trinidad and Tobago	X	X	—	—	X
United States	X	a X	—	—	a X
Virgin Islands	X	a X	—	—	a X
Windward Islands	X	X	—	—	X
SOUTH AMERICA					
Argentina	X	1, 2 X	2 X	2, a X	2, b X
Bolivia	1 X	a X	—	—	a X
Brazil	X	1 X	X	a X	X
British Guiana	X	—	a X	—	—
Chile	X	X	—	—	X
Colombia	X	X	a X	—	X

TABLE 37. QUESTIONS IN NATIONAL CENSUSES ON PIGS

Code in the Expanded List	F-6.1	a	i	ii	b
Ecuador	X	—	—	—	—
Falkland Islands	X	—	—	—	—
Uruguay	X	a X	—	—	X
Venezuela	X	a X	—	—	a X
ASIA					
Brunei	X	1 X	X	X	X
Burma	X	—	—	—	—
Ceylon	X	a, b X	—	—	b X
Cyprus	X	1 X	X	X	X
Japan	X	1 X	X	X	X
Jordan	X	—	—	—	—
Malaya, Federation of	X	—	X	—	—
North Borneo	X	1 X	X	X	X
Philippines	X	X	X	a X	X
Ryukyu Islands	X	a X	—	—	a X
Sarawak	X	—	—	—	—
Singapore Island	X	1 X	X	X	X
Thailand	1 X	a, b X	—	—	a, b X
AFRICA					
Algeria	1 X	1 X	X	a X	X
Belgian Congo	—	—	—	—	—
Europeans and developed Negroes	1 X	—	X	a X	—
Egypt	X	—	—	—	—
Gambia	X	X	—	—	X
Gold Coast and British Togoland	X	—	—	—	—
Kenya	X	—	—	—	—
Mauritius	X	—	—	—	—
Mozambique	X	2 X	—	—	2 X
Nigeria and British Cameroons	X	—	—	—	—
Northern Rhodesia	X	—	—	—	—
Nyasaland	X	—	—	—	—
Seychelles	X	1 X	X	X	X
Sierra Leone	X	—	—	—	—
Southern Rhodesia	—	—	—	—	—
European holdings	X	1 X	X	a X	X
African agriculture	X	—	—	—	—
St. Helena	X	1 X	X	X	X
Swaziland	X	—	—	—	—
Tunisia	1 X	1 X	X	a X	X
Uganda	X	—	—	—	—
Union of South Africa	—	—	—	—	—
"White" holdings	a X	—	b X	—	—
Native farming	X	—	—	—	—
Zanzibar and Pemba	X	—	—	—	—
OCEANIA					
American Samoa	X	—	—	—	—
Australia	X	2 X	2 X	2, a X	2 X
British Solomon Islands	X	—	—	—	—
Cook and Niue Islands	X	2, a X	—	—	2 X
Fiji	X	1 X	X	X	X
Gilbert and Ellice Islands	X	—	—	—	—
Guam	X	—	—	—	—
Hawaii	X	1, 2 X	2 X	2 X	2 X
New Hebrides	X	—	—	—	—
New Zealand	X	a X	—	—	X
Papua and New Guinea	X	—	—	—	—
Tonga	X	1 X	X	X	X
Western Samoa	X	2, a X	—	—	2 X

1) By addition of the subitems.
 2) Age limit not stated, only vaguely indicated.
 Austria a) separate questions on animals served and not served.
 Austria b) separate questions on breeding boars and pigs for slaughter and fattening.
 Austria c) separate questions on two age strata.
 Belgium a) same remark as under Austria a).
 Belgium b) same remark as under Austria c).
 Belgium c) same remark as under Austria b).
 Czechoslovakia a) detailed classification (not available) included 5 classes.
 Denmark a) separate questions on sows giving litter for the first time and for the second time, sows with litter, and sows not actually breeding.
 Denmark b) separate questions on breeding boars, and sows for slaughter.
 Denmark c) separate questions on litter with the sows, and pigs not with the sows, the latter distinguished on four weight classes.
 Finland a) same remark as under Austria a).
 Finland b) same remark as under Austria c).
 Germany (Federal Republic) a) age limit: 8 weeks.
 Ireland a) by subtraction of the answer to one question from that to another one.
 Ireland b) separate questions on boars 5 months of age and upwards, and other pigs 6 months of age and upwards.
 Luxembourg a) separate questions on two age strata and, within each, on animals served and not served.
 Luxembourg b) separate questions on breeding boars, boars and sows over 6 months old for fattening, and other pigs over 6 months old for fattening.
 Luxembourg c) separate questions on three age strata.
 Netherlands a) same remark as under Denmark a).
 Netherlands b) same remark as under Austria b).
 Norway a) age limit: 4 months.
 Norway b) same remark as under Austria b).
 Romania a) animals over 2 months of age.
 Saar a) age limit: 3 months.
 Saar b) separate questions on breeding boars and other pigs.
 Sweden a) same remark as under Saar a).
 Sweden b) separate questions on sows in pigs for the first time, and others.
 Sweden c) separate questions on breeding boars and other pigs.
 United Kingdom a) separate questions on sows in pigs, gilts in pigs, and other sows kept for breeding.
 United Kingdom b) separate questions on barren sows kept for fattening, boars being used for service, young boars being reared for service, and all other pigs 5 months of age and over.
 United Kingdom c) age limit: 5 months. Separate questions on two age strata.
 United Kingdom d) upper age limit: 5 months.

Yugoslavia a) separate questions on boars for breeding, pigs for fattening, other male pigs 6 months of age and over, and other female pigs 6 months of age and over.
 Yugoslavia b) separate questions on sucklings and other pigs.
 Alaska a) same remark as under Norway a).
 Costa Rica a) separate questions on males and females.
 Cuba a) same remark as under Costa Rica a).
 Dominican Republic a) separate questions on males 6 to 10 months of age, females 6 to 10 months of age, and males 10 months and over.
 Guatemala a) separate questions on breeding boars, and castrated male and female pigs.
 Honduras a) same remark as under Costa Rica a).
 Mexico a) separate questions on males over 1 year of age, females over 1 year of age, and pigs 6 months to 1 year of age.
 Panama a) same remark as under Costa Rica a).
 Puerto Rico a) same remark as under Norway a).
 United States a) same remark as under Norway a).
 Virgin Islands a) same remark as under Norway a).
 Argentina a) same remark as under Austria b).
 Argentina b) same remark as under Costa Rica a).
 Bolivia a) same remark as under Costa Rica a).
 Brazil a) same remark as under Austria b).
 British Guiana a) excluding gilts.
 Colombia a) same remark as under Ireland a).
 Uruguay a) same remark as under Austria c).
 Venezuela a) separate questions on males and females.
 Ceylon a) same remark as under Costa Rica a).
 Ceylon b) age limit: 1 year.
 Philippines a) same remark as under Ireland a).
 Ryukyu Islands a) separate questions on males and females.
 Thailand a) same remark as under Saar a).
 Thailand b) same remark as under Costa Rica b).
 Algeria a) separate questions on boars and other pigs.
 Belgian Congo a) same remark as under Algeria a).
 Southern Rhodesia a) separate questions on males for breeding, other males, and other females (i.e., than those for breeding).
 Tunisia a) separate questions on boars and other pigs.
 Unions of South Africa a) same remark as under Romania a).
 Union of South Africa a) same remark as under Ceylon a).
 Australia a) separate questions, on boars, baconers and porkers, and back-fatters and stores.
 Cook Islands a) separate questions on boars, sows and others.
 New Zealand a) same remark as under Mexico a).
 Western Samoa a) separate questions on boars, sows and barrows.

TABLE 38. QUESTIONS IN NATIONAL CENSUSES ON POULTRY

ITEM	Chickens (total)		Cocks, capons, hens and pullets 6 months of age and over		Cockerels, pullets and chicks under 6 months of age		Ducks (total)		Ducks 6 months of age and over		Ducks and ducklings under 6 months of age		Geese (total)		Geese 6 months of age and over		Geese and goslings under 6 months of age		Turkeys (total)		Turkeys 6 months of age and over		Turkeys and poults under 6 months of age		Guinea fowl (total)		Guinea fowl 6 months of age and over		Guinea fowl under 6 months of age		Other kind of poultry			
	F-7.1	i	ii	F-7.2	i	ii	F-7.3	i	ii	F-7.4	i	ii	F-7.5	i	ii	F-7.6	i	ii	F-7.7	i	ii	F-7.8	i	ii	F-7.9	i	ii	F-7.10	i	ii	F-7.11	i	ii	
Code in the Expanded List	62			63			64			65																								
Code in the Short List	62			63			64			65																								
Number of censuses asking the question	50	33	27	40	8	6	32	5	3	38	6	3	5	1	1																		10	
COUNTRY																																		
EUROPE																																		
Austria	X			X			X			X																								
Belgium	X	1X		X			X			X																								
Czechoslovakia	X	1X		X			X			X																								
Denmark	X	1X		X			X			X																								
Finland	X	1X		X			X			X																								
Germany (Federal Republic)	X	1X		X			X			X																								
Greece	X	1X		X			X			X																								
Ireland	X	1,3X		X			X			X																								
Luxembourg	X	1,3X		X			X			X																								
Netherlands	X	1,3X		X			X			X																								
Norway	X	1,3X		X			X			X																								
Romania	X	1,3X		X			X			X																								
Saar	X	1,3X		X			X			X																								
Sweden	X	1,3X		X			X			X																								
United Kingdom	X	1,3X		X			X			X																								
Yugoslavia	X	1,3X		X			X			X																								
NORTH AND CENTRAL AMERICA																																		
Alaska	X			X			X			X																								Pigeons
Bahamas	X			X			X			X																								
Barbados	X			X			X			X																								
British Honduras	X			X			X			X																								
Canada	X			X			X			X																								
Costa Rica	X			X			X			X																								
Dominican Republic	X			X			X			X																								
El Salvador	X			X			X			X																								
Guatemala	X			X			X			X																								
Haiti	X			X			X			X																								
Honduras	X			X			X			X																								
Leeward Islands	X			X			X			X																								
Mexico	X			X			X			X																								
Panama	X			X			X			X																								
Puerto Rico	X			X			X			X																								
United States	X			X			X			X																								
Virgin Islands	X			X			X			X																								
SOUTH AMERICA																																		
Argentina	X			X			X			X																								
Bolivia	X			X			X			X																								
Brazil	X			X			X			X																								
British Guiana	X			X			X			X																								
Chile	X			X			X			X																								

TABLE 38. QUESTIONS IN NATIONAL CENSUSES ON POULTRY

Code in the Expanded List	F-7.1		F-7.2		F-7.3		F-7.4		F-7.5		F-7.6		F-7.7		F-7.8		F-7.9		F-7.10		F-7.11		
	i	ii	i	ii	i	ii	i	ii	i	ii	i	ii	i	ii	i	ii	i	ii	i	ii	i	ii	
Colombia	X				X																		
Ecuador	X				X																		
Uruguay	X	1X			X																		
Venezuela	X				X																		
ASIA																							
Burma	X				X																		
Ceylon	X	1,3X			X																		
India	X				X																		
Israel	X				X																		
Jewish holdings	X	1,3X			X																		
Arab holdings	X				X																		
Japan	X				X																		
Jordan	X				X																		
Malaya, Federation of	X				X																		
North Borneo	X				X																		
Philippines	X				X																		
Rjukyu Islands	X				X																		
Singapore Island	X				X																		
Thailand	X				X																		
Turkey ^a	X				X																		
AFRICA																							
Egypt	X				X																		
Gambia	X				X																		
Gold Coast and British	X				X																		
Togoland	X				X																		
Kenya	X		</																				

TABLE 39. QUESTIONS IN NATIONAL CENSUSES ON RABBITS AND BEES

ITEM	Rabbits	Beehives	Honey	ITEM	Rabbits	Beehives	Honey
Code in the Expanded List	F-8	F-9.1	F-9.2	Code in the Expanded List	F-8	F-9.1	F-9.2
Number of censuses asking the question	17	42	23				
COUNTRY				SOUTH AMERICA			
EUROPE				Argentina X X X Bolivia — — X Brazil — X X British Guiana — X — Chile X X X Colombia aX X X Uruguay aX bX X Venezuela — X X			
Austria — X — Belgium — aX — Czechoslovakia — X — Denmark X — — Finland aX bX — Germany (Federal Republic) — X — Greece X aX — Luxembourg — aX — Netherlands — X X Norway aX X — Portugal — aX — Romania — X — Saar — X — Sweden aX X — United Kingdom^a — bX cX Yugoslavia X aX —				ASIA			
NORTH AND CENTRAL AMERICA				Cyprus — — X Iraq — X — Israel — X — Japan aX X — Jordan X X — Thailand X — —			
Canada — X X Costa Rica — X X Dominican Republic — a,bX X El Salvador — X X Guatemala — X X Mexico — X X Puerto Rico — X X Trinidad and Tobago X — — United States — X X Virgin Islands — X X Windward Islands X — —				AFRICA			
				Algeria — aX — Egypt X aX — Mozambique X — X Tunisia — aX — Union of South Africa — X X "White" holdings — — X			
				OCEANIA			
				Australia — aX X Hawaii — X X New Zealand — X —			

Belgium ^a) separate questions on hives of straw, and boxes with mobile frames.
 Finland ^a) separate questions on animals over and under 6 months of age
 Finland ^b) same remark as under Belgium ^a).
 Greece ^a) separate questions on hives with mobile frames and those of indigenous type.
 Luxembourg ^a) separate questions on hives of straw and boxes with mobile frames.
 Norway ^a) separate questions on animals over and under 6 months of age.
 Portugal ^a) same remark as under Belgium ^a).
 Sweden ^a) animals over 7 months of age.
 United Kingdom ^a) asked in Northern Ireland only.
 United Kingdom ^b) separate questions on hives having mobile honeycombs and others.

United Kingdom ^c) separate questions on run honey and section honey
 Yugoslavia ^a) separate questions on hives having movable and fixed honey-combs.
 Dominican Republic ^a) same remark as under Belgium ^a).
 Dominican Republic ^b) separate questions on Italian and indigenous bees.
 Colombia ^a) including curies (Peruvian rabbits, *Cavia cobaya*, or *Cavia aperea*).
 Uruguay ^a) separate questions on Angora, Gigant de Flandres, and other races.
 Uruguay ^b) separate questions on fixed and mobile hives.
 Japan ^a) separate questions on Angora and other races.
 Algeria ^a) same remark as under United Kingdom ^c).
 Egypt ^a) separate questions on native and modern hives.
 Tunisia ^a) same remark as under United Kingdom ^c).
 Australia ^a) separate questions on hives producing and not producing honey.

TABLE 40. QUESTIONS IN NATIONAL CENSUSES ON FUR-BEARING ANIMALS

ITEM	Fur-bearing animals (total)	Foxes	Skunks	Minks	Others
Code in the Expanded List	F-10.1	a	b	c	d
Number of censuses asking the question	8	7	—	7	6
COUNTRY					
EUROPE					
Czechoslovakia X Denmark^a 1X Finland 1X Norway^a 1X Sweden^a 1X					
NORTH AND CENTRAL AMERICA					
Alaska^a 1X Canada 1X					
ASIA					
Japan 1X					

¹) By addition of the subitems.
 Denmark ^a) asked for in special enquiry by holdings referring to the same date as the agricultural census.
 Finland ^a) separate questions on silver and white faced foxes, platinum foxes, and blue and white foxes.
 Finland ^b) separate questions on animals over and under 1 year of age.
 Finland ^c) separate questions on ordinary minks and mutation minks.
 Norway ^a) separate questions on mature and young animals.
 Norway ^b) same remark as under Finland ^a).

Norway ^c) same remark as under Finland ^c).
 Sweden ^a) breeding animals only.
 Sweden ^b) separate questions on silver fox and similar variants, and blue and white foxes and similar variants.
 Alaska ^a) female animals 3 months of age and over.
 Alaska ^b) separate questions on blue foxes, silver foxes, and all other foxes.
 In addition to these questions on numbers of fur-bearing animals in the countries listed on the table, the census of the United States asked only for the existence of fur-bearing animals, to be answered by yes or by no.

TABLE 41. QUESTIONS IN NATIONAL CENSUSES ON DOMESTICATED ANIMALS PECULIAR TO CERTAIN COUNTRIES

ITEM	Camels (total)	Camels 4 years old and over	Camels under 4 years of age	Llamas, guanacos and vicunas (total)	Zebras (total)	Reindeer (total)	Elephants (total)
Code in the Expanded List	F-11.1	i	ii	F-11.2	F-11.3	F-11.4	F-11.5
Number of censuses asking the question	11	4	4	3	—	1	—
COUNTRY							
EUROPE							
Finland	—	—	—	—	—	a X	—
SOUTH AMERICA							
Argentina	—	—	—	a X	—	—	—
Bolivia	—	—	—	a X	—	—	—
Chile	—	—	—	a X	—	—	—
ASIA							
Aden Protectorate	X	—	—	—	—	—	—
Cyprus	X	—	—	—	—	—	—
Iraq	X	—	—	—	—	—	—
Israel	—	—	—	—	—	—	—
Arab holdings	X	—	—	—	—	—	—
Jordan	X	X	X	—	—	—	—
Turkey ^a	b X	c X	c X	—	—	—	—
AFRICA							
Algeria	a X	b X	b X	—	—	—	—
British Somaliland	X	—	—	—	—	—	—
Egypt	a X	—	—	—	—	—	—
Nigeria and British Cameroons	X	—	—	—	—	—	—
Tunisia	a X	b X	b X	—	—	—	—

Finland ^a animals 1 year of age and over.

Argentina ^a llamas.

Bolivia ^a separate questions on llamas and alpacas.

Chile ^a same remark as under Bolivia ^a).

Turkey ^a asked from *mukhtars* (and large farms), not from sample holdings.

Turkey ^b by addition of the subitems.

Turkey ^c age limit: 2 years.

Algeria ^a same remark as under Turkey ^a).

Algeria ^b age limit not stated, only vaguely indicated.

Egypt ^a separate questions on males and females.

Tunisia ^a same remark as under Turkey ^a).

Tunisia ^b same remark as under Algeria ^b).

TABLE 42. QUESTIONS IN NATIONAL CENSUSES ON SILKWORMS

ITEM	Silkworm eggs placed in incubation	Fresh cocoons produced	ITEM	Silkworm eggs placed in incubation	Fresh cocoons produced
Code in the Expanded List	F-12.1	F-12.2			
Number of censuses asking the question	1	5	ASIA		
COUNTRY					
SOUTH AMERICA					
Argentina	—	X	Cyprus	—	X
Brazil	—	X	Japan	a X	a X
			Thailand	—	X

Japan ^a separate questions on "domesticated" worms (spring- and autumn-bred separately), and "wild" worms.

one census used a limit of eight weeks (Federal Republic of Germany) and another of one year (Ceylon).

Additional age strata were asked in the questionnaires of Austria, Belgium, Finland, Luxembourg, Dominican Republic, and New Zealand.

LIVESTOCK PRODUCTS

The FAO Program for the 1950 World Census had not in general envisaged the collection of data on animal products at the agricultural census. The exceptions are four products for which the prospects of obtaining information through a census were deemed to be better than for other products, namely wool, mohair, honey, and silk (items F — 4.1 (e), F — 5.1 (e), F — 9.2, and F — 12.2). The response in respect of these items is shown in Tables 35, 36, 39 and 42. The coverage is greater than might appear from the frequency of response, since most of the principal producers among countries taking censuses are represented. On the other hand, several of the countries producing these products did not participate in the 1950 World Census.

Several countries have however collected particulars of other livestock products. Most frequent among such additional items is *milk production*, which was asked for in 29 censuses, namely: two in Europe (Finland, Ireland); nine in North and Central America (Canada, United States, Costa Rica, Dominican Republic, El Salvador, Guatemala, Mexico, Panama and Puerto Rico); eight in South America (Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Uruguay, Venezuela, comprising therefore all independent countries in the zone participating in the 1950 World Census); six in Asia (Ceylon, Cyprus, India, Japan, Philippines, Turkey); three in Africa (Kenya, Mozambique, Union of South Africa); one in Oceania (Hawaii).

Most of these countries asked only for production "yesterday". Venezuela asked for production "last week", Panama during a certain month, while Puerto Rico, Brazil, Ceylon, Cyprus, the Philippines, Kenya and Mozambique tried to obtain the data for the previous year only. Finland (on a sample basis), Argentina, Bolivia, and Hawaii asked for production both yesterday and during the census year, and Canada both yesterday and during the month of May. India asked for milk yield per day, and Japan and Turkey complemented the question on yesterday's milk output with questions regarding the average number of days the animals were milked annually.

Next in frequency is *egg production*, which was asked for in 24 censuses, namely: two in Europe (Finland, Ireland); eight in North and Central America (Alaska, Canada, Costa Rica, Dominican Republic, El Salvador, Guatemala, Mexico and Panama); seven in South America (Bolivia, Brazil, Chile, Colombia, Ecuador, Uruguay, and Venezuela); five in Asia (Cyprus, Japan, Philippines, Thailand and Turkey); two in Africa (Mozambique and Union of South Africa) two in Oceania (Australia, Hawaii). Most of these countries asked only for yesterday's production. Venezuela also asked this question in relation to last week, Panama supplemented it by another question referring to "last November", while in Canada the question on chicken eggs pertained to "last May" and on turkey eggs to the past season. Bolivia and Union of South Africa asked for production both yesterday and last year, while Finland, Alaska, Mexico, Brazil, Cyprus, the Philippines, Mozambique and Australia asked only for last year's production.

Questions on *dairy products* (butter and/or cheese, in some cases also cream) were asked in 15 censuses, namely: Finland, Canada, United States, El Salvador, Guatemala, Mexico, Panama, Bolivia, Chile,

Uruguay, Venezuela, Mozambique, Union of South Africa, Australia, and New Zealand. In most cases, these questions referred to the census year.

Slaughtering of livestock has, in varying degree, been asked for also in 16 censuses, namely: Austria, Finland, Ireland, Alaska, Canada, United States, Guatemala, Argentina, Brazil, Ryukyu Islands, Mozambique, Southern Rhodesia, Union of South Africa, Hawaii, Australia, and New Zealand. All of these questions refer to the census year.

Sales of livestock products have been asked for in 14 censuses (Finland, Ireland, Alaska, Canada, United States, Panama, Puerto Rico, Virgin Islands, Ryukyu Islands, Kenya, Southern Rhodesia, Union of South Africa, Hawaii, and Australia). Most of the questions related to live animals. They all referred to the census year.

Births of calves were asked for in Austria, Belgium, Ireland, Luxembourg, England and Wales, Scotland, Northern Ireland, Brazil and Turkey. Northern Ireland asked for births of foals, lambs and pigs; births of pigs were asked for in the census of Puerto Rico, pigs and foals in Belgium and Luxembourg, other livestock in Brazil and buffaloes in Turkey.

It may be added that the census of Czechoslovakia is known to have asked several questions on livestock products, although no detail on these questions has been available for analysis.

Apart from the questions on births (which may or may not be indicative of interest in production), questions on at least one of the items milk, eggs, dairy products, slaughtering, and sales of livestock products were asked in 36 censuses (two in Europe, eleven in North and Central America, eight in South America, eight in Asia, four in Africa and three in Oceania). This total frequency becomes even more impressive when one considers that all these censuses were taken by enumeration by holdings and that none of the territories taking their census according to the London Program for colonial and underdeveloped areas has asked any such questions. It then becomes apparent that questions on livestock products have more or less the same geographical distribution as those on crop production. They are weakly represented in Europe and not at all in North Africa, but they occur in the majority of censuses by holdings taken in the Americas, Asia, Africa south of the Sahara, and Oceania.

Section G. Agricultural Technology

Response in this section was very incomplete and uneven. Very few censuses have asked most of the questions proposed by the FAO Program. On the other hand, many countries have dealt with the topics

proposed, though in a way deviating from that proposed by FAO, and many censuses went far beyond the scope of the Program by including questions on equipment and facilities on which the Program did not propose any questions.

The number of participating countries is limited to the extent that countries taking their census according to the London Program for colonial and underdeveloped areas did not include any such questions in their censuses. The formulation of almost all the questions proposed in the FAO Program is such that they may be asked only when the census is taken by holdings. Most of the questions proposed even presume that the aim is producing data on "number of holdings reporting", which excludes any possibility of obtaining them on a basis other than by holdings. This also means that a relatively slight difference in the wording of the question in the national census will exclude conformity with the FAO Program, as well as international comparability, because figures on "number of holdings reporting" are not additive.

In the few questions in this section of the Program the emphasis of interest was chiefly on motorization. The section as drafted did not envisage the possibility of assessing the increased use of simpler mechanical or technically improved nonmechanical implements and tools in the earlier phase of agricultural development. The latter aspect has interested several of the national censuses, sometimes more than that of motorization.

From the census of Czechoslovakia, no detailed information was available for analysis, although it is clear that there was a section on agricultural technology.

As will be seen from the following synoptic tables, the simple questions as to whether the holdings used animal or mechanical power was of interest mainly in some of the underdeveloped countries. In general, countries where most farms have adequate draft power did not ask these questions. The question on the use of specific kind of power was asked, as regards tractors, by a few countries, and by fewer still about other sources of power. The questions on electric power were asked by relatively many countries, though more often in the form of only one question than of the two proposed by the Program. The question about all-weather roads was asked by only four countries, and without any modification by only two among them.

With regard to machinery specified in the Program, the question on number of tractors on the holding evoked a large measure of conformity. The questions on number of reapers, harvester-threshers, trucks, and automobiles on the holding were asked in a num-

ber of censuses. The questions on the use of reapers, harvester-threshers, and threshers on the other hand, were asked by only one country each.

In a considerable number of instances, national censuses have asked questions which deal with the same topics as those envisaged by questions in the FAO Program, though with an approach which deviates too widely from that of the Program to be said to conform with it.

The type of questions asking for "kind of power used" (G-3), and "kind of equipment used" (G-9, G-11, and G-13), has thus in a number of instances been split into separate questions on equipment: (a) belonging to the holding or its owner, and (b) owned elsewhere. Such is the case in the censuses of Austria, Federal Republic of Germany, Netherlands, Norway, Saar, India and Jordan. The census of Denmark asked for machinery owned and whether or not the holding is being served by a machinery station, which is much the same distinction. The census of Panama subdivides the questions on the use of tractors into two questions, referring to different types of tractors. Although this division of the questions does not formally meet with the requirements of the Program, the answers to it could be produced, if needed, when processing the data.

The census of Ireland divides the questions on use of electricity (G-4 and G-5) into two each, referring to different sources of supply. The data directly produced from these questions are not additive. This is also the case with the estate schedule on Ceylon, where questions G-4 and G-5 have been added up into one joint question, split into two according to source of supply. Some of the countries entered on the synoptic table as having asked a question of this type also asked separately for two sources of supply but, at the same time, also asked for "no supply at all". Since from the latter question, by simple subtraction the total of holdings having any supply can be obtained, these cases have been taken as conforming with the FAO Program.

Information related to question G-7 (distance to nearest all-weather road) was asked, with a different approach, by a number of countries. Thus Norway asked whether there is a road to the holding and, if so, of what quality. The United States, Hawaii, and the Virgin Islands asked on what kind of road the holding is located. Costa Rica, Guatemala and Panama asked generally for means of transporting the products and the distance to various transport facilities. The estate schedule in Ceylon asked for distance to the nearest railway station and bus route. Against four countries conforming with the FAO Program, at least eight others have dealt with the topic in a different way.

Instead of asking for numbers of tractors, reapers, harvester-threshers, trucks, and automobiles physically located on the holding on the census date, some countries asked for one or more of these items, but with reference to machines owned by the holder or normally belonging to the equipment of the holding. Such is the case with a number of countries combining questions of this type with questions on the use of outside equipment, as already mentioned (Austria, Denmark, Federal Republic of Germany, Norway, Saar, India, Jordan); further, this is also the case of Hungary, Luxembourg, Switzerland, England and Wales, Scotland, Northern Ireland, Yugoslavia, Guatemala, Honduras, Mexico, Chile, Uruguay, and Egypt. Data on "number of machines" under various definitions may therefore be communicated by at least 20 censuses more than those indicated on the synoptic tables as conforming with the FAO Program. The number of censuses asking for number of tractors is no less than 55. The census of Portugal also asked for certain machines belonging to the holding, although only for their presence ("yes or no"), not for their number.

The censuses of Luxembourg and the Netherlands have virtually met the questions on use of animal power by combining questions on own draft animals with questions on alien draft animals used. A number of countries have listed draft animals owned by the holder or normally belonging to the holding, under the same definitions as the questions on livestock.

The tabular series pertaining to this section consists of Table 43 dealing with the use of power and road facilities (questions G-1 to G-7) and Table 44 dealing with the presence and use of specified equipment (questions G-8 to G-15).

A third synoptic table (Table 45) has been added to show the frequency of questions on the most important kinds of equipment asked for in national censuses, though not proposed in the FAO Program.

Summarizing the impression from all three tables, it will be seen that 67 censuses asked some questions on agricultural technology. This total comprises nearly all the censuses by holdings (the exceptions being six: Malta and Gozo, Haiti, Jamaica, Cyprus, Mauritius, and Seychelles). The exceptions only confirm that almost all independent countries asked some of the national questions and those censuses not asking these questions are almost all of them dependencies. The great majority of countries asking some questions on agricultural technology asked about some kind of specified equipment; those which confined themselves exclusively to "kind of power used" are Greece, the Leeward Islands, Ecuador, and Thailand.

TABLE 43. QUESTIONS IN NATIONAL CENSUSES ON USE OF POWER AND DISTANCE TO NEAREST ALL-WEATHER ROAD

ITEM	Was animal power used on the holding last year?	Was mechanical power used on the holding last year?	Horses, mules, or asses	Oxen	Cows	Other animals	Tractors	Other self-propelled machines	Other motors	Is electricity used for lighting on the holding?	Is electricity used for other purposes on the holding?	Is there an electric distribution line within 400 meters (1/4 mile) of the holding?	Distance to nearest all-weather road
Code in the Expanded List	G-1	G-2	G-3.a	b	c	d	e	f	g-k	G-4	G-5	G-6	G-7
Code in the Short List	39	40	—	—	—	—	—	—	—	—	—	—	—
Number of censuses asking the question	18	20	2	1	1	1	6	3	5	5	4	—	4
	1			1				1		10			
COUNTRY													
EUROPE													
Austria	—	—	—	—	—	—	—	—	—	X	X	—	—
Czechoslovakia	—	—	—	—	—	—	—	—	—	X	—	—	—
Finland	—	—	—	—	—	—	—	—	—	X	X	—	a X
								Electric motors, Steam engines, Combustion engines					
Germany (Federal Republic)	—	—	—	—	—	—	—	—	—	X	—	—	—
Greece	X	X	—	—	—	—	—	—	—	—	—	—	—
Netherlands	—	—	—	—	—	—	—	—	—	X	—	—	—
Norway	—	—	—	—	—	—	—	—	—	X	a X	—	—
Sweden	—	—	—	—	—	—	X	Cars adapted as tractors	Electric motors ^a	—	—	—	—
United Kingdom	—	—	—	—	—	—	—	—	—	—	—	—	—
England and Wales	—	X	—	—	—	—	—	—	—	—	—	—	—
Yugoslavia	—	—	—	—	—	—	—	—	—	X	a X	—	—
NORTH AND CENTRAL AMERICA													
Alaska	—	—	—	—	—	—	—	—	—	X	—	—	—
Canada	—	—	—	—	—	—	—	—	—	X	—	—	—
Costa Rica	a X	a X	—	—	—	—	—	—	—	X	—	—	—
Dominican Republic	—	—	—	—	—	—	—	—	—	—	—	—	X
El Salvador	X	X	—	—	—	—	—	—	—	—	—	—	—
Guatemala	a X	a X	—	—	—	—	—	—	—	X	—	—	—
Honduras	—	a X	—	—	—	—	—	—	—	X	—	—	—
Leeward Islands	X	X	—	—	—	—	—	—	—	—	—	—	—
Mexico	a X	a X	—	—	—	—	b X	—	—	—	—	—	—
Panama	X	X	—	—	—	—	—	—	—	—	—	—	—
United States	—	—	—	—	—	—	—	—	—	X	—	—	—
SOUTH AMERICA													
Bolivia	a X	a X	b X	X	—	—	—	—	—	—	—	—	—
Brazil	X	X	—	—	—	—	—	—	—	—	—	—	—
Chile	X	a X	—	—	—	—	—	—	—	X	—	—	—
Colombia	X	X	—	—	—	—	—	—	—	—	—	—	—
Ecuador	X	X	—	—	—	—	—	—	—	—	—	—	—
Venezuela	X	X	—	—	—	—	—	—	—	—	—	—	—

TABLE 43. QUESTIONS IN NATIONAL CENSUSES ON USE OF POWER AND DISTANCE TO NEAREST ALL-WEATHER ROAD

Code in the Expanded List	G-1	G-2	G-3.a	b	c	d	e	f	g-k	G-4	G-5	G-6	G-7
ASIA													
Ceylon	X	X	—	—	—	—	—	—	—	—	—	—	—
Iraq	X	X	—	—	—	—	—	X	Other machine used for cultivation	Electric motors, Water power, Windmills	—	—	—
Israel	—	—	—	—	—	—	—	—	—	—	—	—	—
Jewish holdings	X	X	—	—	—	—	—	—	—	—	—	—	a X
Arab holdings	X	b X	—	—	—	—	—	X	X	X	—	—	—
Japan	—	—	a X	—	X	—	—	X	Motor-driven cultivators.	Electric motors, Water power, Windmills, Kerosene motor	—	—	—
Jordan	—	—	—	—	—	—	—	—	—	—	—	—	—
Thailand	a X	a X	—	b X	—	—	X	—	—	—	X	—	X
	a X	a X	—	—	—	—	—	—	—	—	—	Water power ^b , Windmills ^b , Other motors ^a	—
AFRICA													
Mozambique	X	X	—	—	—	—	—	—	—	—	—	—	—
OCEANIA													
Hawaii	—	—	—	—	—	—	—	—	—	—	—	X	—

Finland ^a) all-weather road or railway station.
 Norway ^a) separate questions with reference to heating and cooking.
 Sweden ^a) separate questions on motors over and under 6 H.P.
 Yugoslavia ^a) for operating agricultural devices.
 Costa Rica ^a) with reference to field work only.
 Guatemala ^a) same remark as under Costa Rica ^a).
 Honduras ^a) same remark as under Costa Rica ^a).
 Mexico ^a) refers to draft power only.
 Mexico ^b) number of days' work done on the holding with one or more tractors, own or others'
 Bolivia ^a) same remark as under Mexico ^a).

Bolivia ^b) separate questions on horses and mules.
 Chile ^a) separate questions on tractors, and on hired machinery in general.
 Israel ^a) nearest road.
 Israel ^b) separate questions on tractors and other mechanical power.
 Japan ^a) horses.
 Jordan ^a) animals or tractors.
 Jordan ^b) to be specified.
 Thailand ^a) separate questions on power for water regulation and for cultivation.
 Thailand ^b) refers to water regulation only.

TABLE 44. QUESTIONS IN NATIONAL CENSUSES ON USE AND EXISTENCE OF SPECIFIED EQUIPMENT AS PROPOSED IN THE FAO PROGRAM

ITEM	Number of tractors now on the holding		Was a reaper or a reaper and binder used on the holding last year?		Self-propelled		Drawn		Number of reapers or reapers and binders now on the holding		Was a harvester-thresher used on the holding last year?		Self-propelled		Drawn		Number of harvester-threshers now on the holding		Was a thresher used on the holding last year?		Number of trucks (motor lorries) now on the holding		Number of automobiles now on the holding	
	G-8	G-9	a	b	G-10.a	b	G-11	a	b	G-12.a	b	G-13	G-14	G-15										
Code in the Expanded List	G-8	G-9	a	b	G-10.a	b	G-11	a	b	G-12.a	b	G-13	G-14	G-15										
Number of censuses asking the question	37	1	—	—	2	3	1	—	—	6	5	1	27	14										
					16					8														
COUNTRY																								
EUROPE																								
Belgium ^a	bX	—	—	—	X	cX	—	—	—	X	cX	—	X	—										
Czechoslovakia	X	—	—	—	—	—	—	—	—	X	—	—	X	—										
Finland	a,bX	—	—	—	a,cX	—	—	—	—	—	—	X	aX	aX										
Ireland	aX	—	—	—	bX	—	—	—	—	X	—	—	X	X										
Netherlands	aX	—	—	—	—	a,bX	—	—	—	aX	aX	—	X	—										
Romania	X	—	—	—	—	—	—	—	—	—	—	—	—	—										
Sweden	aX	X	—	—	aX	—	X	—	—	aX	—	—	—	—										
NORTH AND CENTRAL AMERICA																								
Alaska	aX	—	—	—	—	—	—	—	—	—	—	—	X	X										
Canada	X	—	—	—	X	—	—	—	—	X	—	—	X	X										
Costa Rica	X	—	—	—	—	—	—	—	—	—	—	—	X	—										
Dominican Republic	X	—	—	—	—	—	—	—	—	—	—	—	X	—										
El Salvador	aX	—	—	—	—	—	—	—	—	—	—	—	aX	—										
Panama	aX	—	—	—	X	—	—	—	—	—	—	—	X	—										
Puerto Rico	aX	—	—	—	—	—	—	—	—	—	—	—	—	—										
United States	aX	—	—	—	—	—	—	—	—	X	—	—	X	X										
Virgin Islands	X	—	—	—	—	—	—	—	—	—	—	—	X	X										
SOUTH AMERICA																								
Argentina	aX	—	—	—	bX	bX	—	—	—	—	—	—	—	—										
Bolivia	X	—	—	—	X	—	—	—	—	—	—	—	X	—										
Brazil	aX	—	—	—	X	—	—	—	—	—	—	—	X	—										
Colombia	aX	—	—	—	X	—	—	—	—	X	—	—	X	—										
Venezuela	X	—	—	—	—	—	—	—	—	—	—	—	—	—										
ASIA																								
Ceylon	aX	—	—	—	—	—	—	—	—	—	—	—	aX	—										
Israel	X	—	—	—	—	—	—	—	—	X	—	—	X	—										
Jewish holdings	X	—	—	—	—	—	—	—	—	—	—	—	—	—										
Arab holdings	aX	—	—	—	bX	—	—	—	—	—	—	—	—	X										
Jordan	X	—	—	—	—	—	—	—	—	—	—	—	—	—										
Philippines	X	—	—	—	—	—	—	—	—	—	—	—	—	—										
Turkey ^a	X	—	—	—	bX	—	—	—	—	X	X	—	—	—										
AFRICA																								
Algeria	aX	—	—	—	X	—	—	—	—	X	X	—	bX	X										
Belgian Congo	X	—	—	—	—	—	—	—	—	—	—	—	—	—										
European and developed Negroes	X	—	—	—	—	—	—	—	—	—	—	—	X	X										
Kenya	X	—	—	—	—	—	—	—	—	X	—	—	X	—										
Mozambique	X	—	—	—	X	—	—	—	—	—	—	—	X	X										

TABLE 44. QUESTIONS IN NATIONAL CENSUSES ON USE AND EXISTENCE OF SPECIFIED EQUIPMENT AS PROPOSED IN THE FAO PROGRAM

Code in the Expanded List	G-8	G-9	a	b	G-10.a	b	G-11	a	b	G-12.a	b	G-13	G-14	G-15
Northern Rhodesia	X	—	—	—	—	—	—	—	—	X	—	—	—	—
European holdings	X	—	—	—	—	—	—	—	—	—	—	—	—	—
Southern Rhodesia	aX	—	—	—	—	—	—	—	—	X	X	—	bX	X
European holdings	X	—	—	—	—	—	—	—	—	—	—	—	—	—
Tunisia	aX	—	—	—	—	—	—	—	—	X	—	—	X	X
Union of South Africa														
"White" holdings														
OCEANIA														
Australia	aX	—	—	—	—	—	—	—	—	—	—	—	X	—
Hawaii	aX	—	—	—	—	—	—	—	—	—	—	—	X	X
New Zealand	a,bX	—	—	—	—	—	—	—	—	—	—	—	X	X
Western Samoa														
Planters, etc.	X	—	—	—	—	—	—	—	—	—	—	—	X	—

Belgium ^a) separate questions on machines owned and used on own holding, owned and mainly let out, and held in co-ownership or co-operation.
 Belgium ^b) separate questions on four categories.
 Belgium ^c) also a separate question on machines with an auxiliary motor.
 Finland ^a) separate questions on own and others' machines.
 Finland ^b) separate questions on four-wheel tractors with iron wheels, four-wheel tractors with rubber tyres, and crawler tractors.
 Finland ^c) separate questions on reapers-and-binders, and reapers that are not binders.
 Ireland ^a) separate questions on one- and two-wheeled tractors, and other types.
 Ireland ^b) separate questions on mowers and reapers, and binders.
 Netherlands ^a) separate questions on equipment owned and not yet owned present on the holding at the census date.
 Netherlands ^b) also separate questions on horse-drawn and tractor-drawn models.
 Sweden ^a) same remark as under Netherlands ^a).
 Alaska ^a) separate questions on wheel tractors other than garden tractors, garden tractors, and crawlers.
 El Salvador ^a) same remark as under Finland ^a).
 Panama ^a) separate questions on wheel and crawler tractors.
 Puerto Rico ^a) same remark as under Panama ^a).
 United States ^a) same remark as under Alaska ^a).
 Argentina ^a) separate questions on Diesel and other types.

Argentina ^b) also a separate question on maize harvesters, without indication as to type of traction.
 Brazil ^a) separate questions on tractors over and under 10 H.P.
 Colombia ^a) same remark as under Panama ^a).
 Ceylon ^a) asked on estates only, not on small holdings.
 Israel ^a) on a village basis, not by holding.
 Israel ^b) separate questions on mowers and binders.
 Turkey ^a) asked only from mukhtars (and large farms), not from sample holdings.
 Turkey ^b) separate questions on mowers and other reapers (all kinds).
 Algeria ^a) separate questions on models driven by benzine, petrol and gasoline.
 Algeria ^b) separate questions on trucks over and under 2 tons.
 Tunisia ^a) same remark as under Algeria ^a).
 Tunisia ^b) same remark as under Algeria ^b).
 Union of South Africa ^a) separate questions on tractors exclusively petrol-driven, chiefly paraffin-driven and chiefly crude oil-driven.
 Union of South Africa ^b) same remark as under Finland ^c).
 Australia ^a) same remark as under Panama ^a).
 Australia ^b) same remark as under Finland ^c).
 Hawaii ^a) same remark as under Alaska ^a).
 New Zealand ^a) same remark as under Alaska ^a).
 New Zealand ^b) separate questions on tractors driven by diesel oil, petrol and paraffin.

TABLE 45. QUESTIONS IN NATIONAL CENSUSES ON SPECIFIED EQUIPMENT NOT PROPOSED IN THE FAO PROGRAM

ITEM	Plows	Sowing machines	Reapers (all kinds)	Threshing machines	Carts	Electric motors	Combustion engines	Cultivators	Harrow	Silos	Sprayers and dusters	Milking machines	Rakes	Potato harvesters	Steam engines	Straw presses	Hoing machines	Grinding mills	
Number of censuses asking the question	38	32	32	31	30	27	27	26	22	21	21	20	17	13	14	16	16	13	
COUNTRY																			
EUROPE																			
Austria	x	x	x	x	x	x	x	x	-	x	x	x	-	x	-	x	x	-	
Belgium	x	x	x	x	x	x	x	x	x	x	x	x	-	x	-	x	x	-	
Czechoslovakia	x	x	x	x	-	x	x	x	-	-	-	-	-	-	-	x	-	-	
Denmark	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	
Finland	x	x	x	x	x	x	x	-	x	x	-	x	x	x	x	-	-	-	
Germany (Federal Republic)	-	x	x	x	x	x	x	x	-	x	x	x	-	x	x	x	x	x	
Hungary	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ireland	x	x	x	x	x	x	x	x	x	x	x	x	-	x	-	x	x	x	
Luxembourg	x	x	x	x	x	x	x	x	x	x	x	x	-	x	-	x	x	x	
Netherlands	x	x	x	x	x	x	x	x	-	x	x	x	-	-	-	-	-	-	
Norway	x	x	x	x	x	x	x	x	-	-	-	-	-	-	x	-	-	-	
Portugal	-	-	-	-	-	x	x	x	-	-	-	-	-	-	-	-	-	-	
Romania	x	x	x	x	x	-	-	-	x	-	x	-	-	x	x	x	x	x	
Saar	-	x	x	x	x	x	x	-	-	x	x	-	-	-	-	-	-	-	
Sweden	-	-	x	-	-	x	-	-	-	x	-	x	-	-	-	-	-	-	
Switzerland	-	x	x	x	-	-	-	x	-	-	x	x	-	-	-	-	x	x	
United Kingdom	x	x	x	x	x	x	x	x	-	-	x	x	-	-	-	-	x	x	
Yugoslavia	x	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	x	-	
NORTH AND CENTRAL AMERICA																			
Alaska	-	-	-	-	-	-	-	-	-	x	-	x	-	-	-	-	-	-	
Canada	-	-	x	x	-	x	x	-	-	-	-	-	-	-	-	-	-	-	
Costa Rica	x	-	x	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dominican Republic	x	x	-	x	x	-	-	x	x	-	-	-	-	-	-	-	-	-	
El Salvador	x	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	
Guatemala	x	x	-	-	x	x	x	-	-	-	-	-	-	-	x	-	-	x	
Honduras	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mexico	x	x	x	x	x	-	-	x	x	-	-	-	-	-	-	-	-	-	
Panama	x	x	x	-	x	-	-	-	-	x	-	-	-	-	-	-	-	x	
United States	-	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-	
SOUTH AMERICA																			
Argentina	x	x	x	x	-	-	-	x	x	-	x	x	-	-	-	x	-	-	
Bolivia	x	x	x	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	
Brazil	x	x	x	-	x	-	-	x	x	x	x	-	-	-	-	-	-	-	
Chile	x	-	x	x	x	-	-	-	-	x	-	-	-	-	-	x	-	-	
Colombia	x	x	x	x	x	x	x	x	-	x	x	-	x	-	-	-	-	x	
Uruguay	x	x	x	x	x	x	x	x	x	-	x	-	-	-	x	-	-	-	
Venezuela	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ASIA																			
Burma	x	-	-	-	x	-	-	-	x	-	x	-	-	-	-	-	-	-	
Ceylon	-	-	-	-	x	x	x	-	-	-	-	-	-	-	x	-	-	-	
India	x	-	-	-	x	x	x	-	x	-	-	-	-	-	-	-	-	-	
Israel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Jewish holdings	-	x	x	-	-	x	x	-	-	-	x	x	-	x	-	-	-	-	
Arab holdings	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Philippines	x	-	-	x	x	-	-	-	-	x	-	-	-	x	-	-	-	-	
Ryukyu Islands	x	-	-	x	x	-	-	x	-	-	-	-	-	-	-	-	-	-	
Turkey	x	x	x	x	x	-	-	x	-	-	-	-	-	-	-	-	-	-	

TABLE 45. QUESTIONS IN NATIONAL CENSUSES ON SPECIFIED EQUIPMENT NOT PROPOSED IN THE FAO PROGRAM

ITEM	Plows	Sowing machines	Reapers (all kinds)	Threshing machines	Carts	Electric motors	Combustion engines	Cultivators	Harrow	Silos	Sprayers and dusters	Milking machines	Rakes	Potato harvesters	Steam engines	Straw presses	Hoing machines	Grinding mills	
AFRICA																			
Algeria	x	x	x	x	-	x	x	x	-	x	x	-	-	-	x	x	x	-	
Belgian Congo	-	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	
Egypt	x	-	-	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mozambique	x	x	x	x	x	x	x	x	x	x	x	-	-	-	x	-	x	-	
Tunisia	x	x	x	x	-	x	x	x	-	x	x	-	x	-	x	x	x	-	
Union of South Africa	x	x	x	x	x	x	x	x	x	x	-	-	x	-	x	x	-	-	
OCEANIA																			
Australia	x	x	x	-	-	x	x	x	x	-	x	x	x	x	-	x	x	-	
Cook Islands	x	-	-	-	-	-	-	x	x	-	-	x	-	x	-	-	-	-	
Hawaii	-	x	-	-	-	x	-	-	-	x	-	x	x	-	-	-	-	-	
New Zealand	x	x	x	x	x	x	x	x	-	-	x	x	x	x	-	-	-	-	
Western Samoa	-	-	-	-	-	-	x	-	-	-	-	-	-	-	-	-	-	-	

Cook Islands ^{a)} including hoes.

Section H. Fertilizers and Soil Dressings

This section is one in which the FAO Program has been followed by only a few countries. The number of censuses listed in Table 46 is 16; among these several asked only part of the questions, and some in a limited way only, as will be seen from the footnotes.

The Program had proposed investigation of areas to which fertilizers were applied. A competing approach has been to ask the quantity of fertilizers used. Quantities only were asked in seven censuses (Belgium, Finland, Malta and Gozo, Guatemala, Belgian Congo, Egypt, and the Union of South Africa), which therefore are not listed in the synoptic table. Eleven additional censuses asked both quantities and areas (Czechoslovakia, Costa Rica, Leeward Islands, Chile, Venezuela, India, Ryukyu Islands, Mozambique, Northern Rhodesia, Australia and New Zealand). The total number of censuses investigating quantities alone or in combination with the area approach of the Program, is thus 18, nearly the same as the number which adopted the Program.

Six other censuses deviated still more from the Program. Southern Rhodesia asked the quantity of compost made and kraal manure used. The Arab sector of the census of Israel asked whether organic manure or chemical fertilizers were used, questions to be answered by "yes" or "no". Five censuses which did not ask any questions on quantity of fertilizers used or area to which they were applied, asked instead for the expenditure on the purchase of ferti-

lizers (Norway, Alaska, Puerto Rico, Virgin Islands, and Brazil). The census of Mexico also asked this question in addition to the area treated.

The total number of censuses asking any kind of question on fertilizers and soil dressings thus appears to have been 30. This number should be compared to the total number, 73, of censuses by holdings. The London Program did not propose any inquiry on this topic and, in fact, none of the colonial and underdeveloped areas adhering to that program asked any question on it.

Section I. Irrigation and Drainage

Among the countries taking a census by holdings, about half asked the question on irrigation proposed by the FAO Program. A few countries dealt with the topic in a manner different from that of the Program. Austria and Norway asked about irrigation equipment, Saar for irrigated meadows, Romania for irrigated vegetable gardens. Belgium inquired about new irrigation introduced during the last five years.

The questions on drainage were asked by very few countries. Belgium also asked about area drained during the last five years, while Luxembourg and Norway asked about areas in need of drainage.

Section J. Fragmentation

The two complementary questions on fragmentation of farm land met with response from about 20 countries. Several among them asked only the

TABLE 46. QUESTIONS IN NATIONAL CENSUSES ON FERTILIZERS AND SOIL DRESSINGS

ITEM	Total area to which organic or chemical fertilizers were applied	Animal manure	Green manure	Chemical fertilizers	Other fertilizers	Lime and other soil dressings	Other fertilizers and soil dressings
Code in the Expanded List	H-1	a	b	c	d	H-2	—
Number of censuses asking the question	7	7	4	12	1	3	3
		5					
COUNTRY							
EUROPE							
Czechoslovakia	—	X	—	—	—	—	—
Greece	—	aX	—	X	—	—	—
NORTH AND CENTRAL AMERICA							
Costa Rica	—	aX	—	X	—	—	—
El Salvador	X	aX	—	X	—	—	—
Leeward Islands	—	X	X	X	—	—	Cottonseed meal, filter press mud from sugar factories
Mexico	X	—	—	—	—	—	—
SOUTH AMERICA							
Chile	aX	—	—	bX	—	cX	Other fertilizers (manure, fish-meal, ceniza, etc.)
Colombia	X	aX	—	X	—	X	Both chemical fertilizers and lime
Venezuela	—	aX	—	X	—	—	—
ASIA							
Ceylon	—	aX	—	—	aX	—	—
India ^a	bX	cX	—	dX	—	—	—
Ryukyu Islands ^a	bX	X	—	cX	—	—	—
AFRICA							
Mozambique	aX	X	X	X	—	—	—
Northern Rhodesia	—	aX	bX	—	—	—	—
European holdings	—	—	—	—	—	—	—
OCEANIA							
Australia	—	—	X	aX	—	—	—
New Zealand	—	—	—	aX	—	aX	—

Greece ^a) organic fertilizers.
 Costa Rica ^a) organic fertilizers.
 El Salvador ^a) organic fertilizers.
 Chile ^a) by addition of the subitems.
 Chile ^b) separate questions on white guano, red guano, other phosphates (Melón, pelicano, hueso molido etc.), sodium salt, potassium salt, and mixed fertilizers (Taranto, Condor, Germinal, etc.).
 Chile ^c) limes (yeso, and other limes).
 Colombia ^a) organic fertilizers.
 Venezuela ^a) organic fertilizers.
 Ceylon ^a) number of coconut trees treated only; asked only on the estate schedule.
 India ^a) asked for on the basis of households, not on operational holdings.
 India ^b) by addition of the subitems.

India ^c) organic manure; separate questions on farmyard and town compost.
 India ^d) inorganic fertilizers.
 Ryukyu Islands ^a) separate questions, as per area unit, on behalf of all crops specified in the crop list.
 Ryukyu Islands ^b) by addition of the subitems.
 Ryukyu Islands ^c) separate questions on five kinds.
 Mozambique ^a) by addition of the subitems.
 Northern Rhodesia ^a) compost and kraal manure.
 Northern Rhodesia ^b) separate questions referring to various crops used as green manure.
 Australia ^a) separate questions on areas destined to various crops, as well as on pasture areas.
 New Zealand ^a) grassland top-dressed only.

TABLE 47. QUESTIONS IN NATIONAL CENSUSES ON IRRIGATION AND DRAINAGE

ITEM	Area of land irrigated	Area of land drained	Area drained by pumping	Open drains	Covered drains	Area drained by gravity flow through covered drains	ITEM	Area of land irrigated	Area of land drained	Area drained by pumping	Open drains	Covered drains	Area drained by gravity flow through covered drains
Code in the Expanded List	I-1	I-2	a	a-i	a-ii	b	Code in the Expanded List	I-1	I-2	a	a-i	a-ii	b
Number of censuses asking the question	39	5	—	—	—	2							
COUNTRY							ASIA						
Burma	—	—	—	—	—	—	Burma	X	X	—	—	—	—
Ceylon	—	—	—	—	—	—	Ceylon	X	—	—	—	—	—
India	—	—	—	—	—	—	India	X	—	—	—	—	—
Iraq	—	—	—	—	—	—	Iraq	aX	—	—	—	—	—
Israel	—	—	—	—	—	—	Israel	X	—	—	—	—	—
Jordan	—	—	—	—	—	—	Jordan	X	—	—	—	—	—
Philippines	—	—	—	—	—	—	Philippines	X	—	—	—	—	—
Thailand	—	—	—	—	—	—	Thailand	aX	—	—	—	—	—
Turkey	—	—	—	—	—	—	Turkey	aX	—	—	—	—	—
EUROPE							AFRICA						
Czechoslovakia	X	X	—	—	—	—	Algeria	X	—	—	—	—	—
Finland	—	aX	—	—	—	—	Egypt	—	X	—	—	—	—
Germany (Federal Republic)	aX	—	—	—	—	—	Mozambique	X	X	—	—	—	—
Greece	X	—	—	—	—	—	Northern Rhodesia	—	—	—	—	—	—
Luxembourg	X	—	—	—	—	—	European holdings	X	—	—	—	—	—
Malta and Gozo	X	—	—	—	—	—	Southern Rhodesia	—	—	—	—	—	—
Portugal	aX	—	—	—	—	—	European holdings	X	—	—	—	—	—
Sweden	—	—	—	—	—	aX	Tunisia	X	—	—	—	—	—
NORTH AND CENTRAL AMERICA							Union of South Africa	X	—	—	—	—	—
Canada	X	—	—	—	—	—	"White" holdings	X	—	—	—	—	—
Costa Rica	X	—	—	—	—	—	OCEANIA						
Dominican Republic	X	—	—	—	—	—	Australia	X	—	—	—	—	—
El Salvador	X	—	—	—	—	—	Hawaii	X	—	—	—	—	—
Guatemala	X	—	—	—	—	—	New Zealand	X	—	—	—	—	—
Mexico	aX	—	—	—	—	—							
Puerto Rico	X	—	—	—	—	—							
United States	X	—	—	—	—	—							
Virgin Islands	X	—	—	—	—	—							
SOUTH AMERICA													
Bolivia	X	—	—	—	—	—							
Chile	aX	—	—	—	—	—							
Colombia	aX	—	—	—	—	—							
Ecuador	X	—	—	—	—	—							
Uruguay	aX	—	—	—	—	—							
Venezuela	X	—	—	—	—	—							

Finland ^a) separate questions on area drained by open and covered drains.
 Germany (Federal Republic) ^a) area irrigated by means of spraying equipment.
 Portugal ^a) refers only to arable land (with or without trees, separately).
 Sweden ^a) separate questions on area drained by tile pipes and by other material.
 Mexico ^a) separate questions with reference to arable land and land for growing trees, vines and shrubs.
 Chile ^a) area irrigated in normal years, or as an average.

Colombia ^a) maximum area that might be irrigated with existing equipment.
 Uruguay ^a) separate questions on land destined for a number of specified crops.
 Iraq ^a) separate questions on land irrigated by (artificial) "rainfall", flow waterwheels, pumps, and other means.
 Thailand ^a) same remark as under Mexico ^a).
 Turkey ^a) asked from mukhtars (and large farms), not from sample holdings.

TABLE 48. QUESTIONS IN NATIONAL CENSUSES ON FRAGMENTATION

ITEM	Is all the holding in one piece of land?	If not, how many non-contiguous parcels of land are included in the holding?	ITEM	Is all the holding in one piece of land?	If not, how many non-contiguous parcels of land are included in the holding?
Code in the Expanded List	J-1	J-2	Code in the Expanded List	J-1	J-2
Number of censuses asking the question	5	5			
	16				
COUNTRY					
EUROPE					
Belgium ¹	X	X			
Czechoslovakia		X			
Germany (Federal Republic) ¹		X			
Greece ¹		aX			
Luxembourg ¹	X			X	
Netherlands ¹	X			X	
Portugal	X			X	
Romania		X			
Yugoslavia		aX			
NORTH AND CENTRAL AMERICA					
Costa Rica		X			
Dominican Republic		aX			
			Guatemala		X
			Honduras		X
			SOUTH AMERICA		
			Colombia	X	X
			Ecuador		X
			ASIA		
			India		X
			Israel		X
			AFRICA		
			Algeria		X
			Egypt		X
			Tunisia		X

¹) refers to agricultural area.
Greece ²) separate questions on number of plots owned and number of plots rented. Since an owned and a rented plot may together form a "parcel" in the sense of the FAO Program, the answers to these questions are not strictly additive. In the majority of cases, which are held under one ten-

ure form only, however, these questions are conducive to the answers envisaged by the FAO Program.
Yugoslavia ³) refers to arable land only.
Dominican Republic ⁴) refers to parcels within the same seccion (subdivision of municipal district).

TABLE 49. QUESTIONS IN NATIONAL CENSUSES ON WOOD PRODUCTS

ITEM	Firewood	Fence posts	Saw logs	Pulpwood	Pitprops	Railway ties or sleepers	Other wood products
Code in the Expanded List	K-1.a	b	c	d	e	f	g
Number of censuses asking the question	11	7	10	3	2	3	9
			1				
COUNTRY							
NORTH AND CENTRAL AMERICA							
Alaska	X	X	aX	—	—	—	—
Canada	X	X	aX	X	X	—	Telephone and telegraph poles
Guatemala	aX	← bX →		—	—	—	Charcoal ^a
Mexico	X	X	X	—	—	aX	Charcoal. Resina. Rafters. Other forest products
United States	X	X	aX	X	—	—	Piling and poles
SOUTH AMERICA							
Bolivia	X	—	X	—	—	—	Charcoal. Thola (Baccaris tola). Yareta (Azorella yareta)
Brazil	X	X	X	—	—	X	Charcoal
Venezuela	X	—	aX	—	—	—	Charcoal Tanning material ^b
AFRICA							
Mozambique	X	X	X	—	—	X	Charcoal. Tanbark
Union of South Africa ³	X	—	bX	X	X	—	Poplar wood for matches. Poles, spars and droppers
OCEANIA							
Hawaii	X	X	X	—	—	—	—

Alaska ^a) including veneer logs.
Canada ^a) same remark as under Alaska ^a).
Guatemala ^a) for sale only.
Guatemala ^b) separate questions on six kinds of timber trees and the output, in square feet of each.
Mexico ^a) separate questions on sleepers for normal and for narrow rails.

United States ^a) same remark as under Alaska ^a).
Venezuela ^a) separate questions on soft, hard, and high-priced timber.
Venezuela ^b) Mangrove bark, dividivi (Caesalpinia) and other.
Union of S. Africa ^a) separate questions on products from plantations and indigenous forest.
Union of S. Africa ^b) separate questions on softwood and hardwood timber.

second of the two questions which, however, implicitly covers also the first.

Section K. Wood and Fishery Products

Only a few countries asked questions on wood products in such a way that it is clear, or reasonably inferable, that the products were cut on the holding. Only one country (Czechoslovakia) asked questions on fishery products in such a form as to make it evident that the answers should relate solely or mainly to products taken from the waters of the holding.

Czechoslovakia also asked questions on points covered by K—1, although the details are not available.

Although the questions asked on wood and forestry products produced from the land of the holding do not exceed those shown by the synoptic table, some

countries approached the topic of forestry in a different way. Norway asked whether the holding had forest enough for its needs of timber and fuel (separately). Panama asked for production of charcoal (among domestic industries listed). Finland asked about sawlogs sawn on a gang or circular saw existing on the holding.

The questions K—2 were not directly asked by any census except that of Czechoslovakia, from which details are not available for analysis. The topic was treated in a different way by Finland and Turkey, which asked for fish caught, without distinguishing whether caught inside or outside the holding (Finland) or the *mukhtarlik* or village (Turkey). Finally, the censuses of the Ryukyu Islands, Cook Islands, and Western Samoa asked about the existence of fishing craft, without requiring the quantities of fish caught.

DEFINITIONS AND CONCEPTS

SECTION A - HOLDER AND TENURE

1. The Agricultural Holding as Conceived in the Program

The 1950 World Census of Agriculture was in principle envisaged as a direct enumeration of individual holdings in each country. The Program defined the unit of enumeration as follows:

"A holding or farm, for census purposes, is all land that is used wholly or partly for agricultural production and is operated, directed or managed by one person, alone or with the assistance of others, without regard to title, size or location. It may consist of two or more parcels of land, even if widely separated, provided that they form part of the same technical and economic unit."

This is exactly the definition used for the 1940 Census and basically that of the 1930 Program. In the 1930 and the 1940 Programs "agricultural production" was not further defined. The 1930 definition of a holding was, to a certain extent, ambiguous in stating that a holding might be in one or more separate pieces if they were in the same neighborhood and were known and operated as a single holding or property. In fact, according to the 1930 definition, a holding was land known and operated as a holding. This part of the definition was considerably improved in the 1940 Program in the statement that the holding might consist of two or more parcels of land, even if widely separated, provided that they formed part of the same technical and economic unit.

The definition in the 1950 Program included four major points. The first part of the holding definition referred to "all land used wholly or partly for agricultural production". Agricultural production was further defined as the growing of field crops, fruits,

nuts, seeds, tree in nurseries, bulbs, vegetables and flowers both in the open and under glass, and the production of livestock and livestock products, poultry and poultry products, honey, rabbits, fur-bearing animals, etc. The holding definition did not mention cultivated land. Enterprises not including any cultivated land, but producing livestock products, (piggeries, hatcheries, poultry batteries, city dairies, rabbitries, apiaries, etc.) were considered as farms or holdings whether they were located in rural or urban areas.

Secondly, the definition stated that the land should be "operated, directed or managed by one person alone or with the assistance of others". The one person mentioned in the definition might be a civil or juridical person. Where the holding was operated by two or more related or associated persons, they were to be considered as constituting one person for the purpose of the census.

Thirdly, the holding definition stated that title, size, or location, were to be disregarded. At the same time, however, the Program recognized that practical considerations made it necessary to limit the enumeration to those holdings which conformed to certain recognized criteria and which fell above certain lower limits as to size of holdings or size of operation or both. No limitations were contemplated in the Program as regards title and location.

As to the fourth point in the holding definition, it was explained that a holding might consist of two or more parcels of land, even if widely separated, provided that they formed part of the same technical and economic unit. This part of the definition was essential. Being part of the same technical and economic unit means that these pieces of land were being worked by the same persons, with the same draft animals and implements and that the risk of the operation was borne by the same person or group of associated persons.

2. The Agricultural Holding in the National Censuses

Out of the 106 countries and territories which participated in the 1950 World Census of Agriculture, 71 took a census by holdings, including eight which collected the census information partly by holdings and partly on some other basis.

For the identification of the holding as an enumeration unit three main methods were used:

(1) In 36 countries¹ the enumeration unit was explicitly defined as an agricultural holding, more or less on FAO lines. This approach has been followed in Czechoslovakia, Greece, Ireland, Portugal, Romania, Canada, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Leeward Islands, Mexico, Panama, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Venezuela, Burma, India, Iraq, Japan, the Philippines, Ryukyu Islands, Thailand, Algeria, Mozambique, Northern Rhodesia, Tunisia, Union of South Africa and New Zealand.

(2) In 27 countries the enumeration unit was identified through the person or unit who was expected to supply the desired information. This procedure was followed in many cases where there was a legal obligation to supply the census information. Typical of this approach was the rule included in the census questionnaire of the Federal Republic of Germany: "Every operator or manager of an area of at least half an hectare (=50 ares =5,000 square meters) which area is used wholly or partly as arable land, meadow, pasture, forest, fishing water, for fruit cultivation or viticulture, has to complete a questionnaire for the area (holding) operated by him".

An approach of this type was adopted in Austria, Belgium, Denmark, Finland, Federal Republic of Germany, Luxembourg, Malta and Gozo, Netherlands, Norway, Saar, Sweden, Switzerland, United Kingdom (except Northern Ireland), Yugoslavia, Uruguay, Cyprus, Israel, Jordan, Turkey, Egypt, Belgian Congo, Kenya, Mauritius, Seychelles, Southern Rhodesia, American Samoa, Australia and Western Samoa. Ceylon used the form of definition at (1) for small holdings and the form at (2) for estates.

(3) In the United States of America, no holding definition was given to the enumerators, nor was the holding defined through an obligation or indication of the person or unit who was expected to supply the information. The enumerator was expected to collect information for all places considered by the operator as a farm, each place of three or more acres,

¹The word "country" is here and subsequently assumed to include territories.

even though not considered a farm and for certain specialized operations such as nurseries and green houses, small poultry enterprises, and apiaries, regardless of acreage. Similar rules were given for the territories of Alaska, Puerto Rico, Virgin Islands, Guam, Hawaii.

The determination as to which questionnaires represented a farm was made at the Bureau of the Census, Washington, D.C.

The three systems of identification leave different degrees of freedom to enumerators and respondents for the inclusion or exclusion of holdings in the census. In using the approach followed by the largest number of countries the enumerator was given the definition of an agricultural holding, and from the circumstances as he found them he had to decide for inclusion in or exclusion from the census. In using the system (2) less freedom of discretion was left to the enumerator. The most precise rules were probably those of the Netherlands where the following were included in the census: (i) everyone who was registered or should be registered with a Provincial Food Commissioner, except keepers of goats "with a registration number of 500,000 and above"; (ii) every member of an agricultural marketing board, insofar as they can supply information requested in the census questionnaire; (iii) everyone who grows tobacco or herbs (medicinal, aromatic, or similar herbs) for sale.

By the system used in the United States and its territories more questionnaires were taken and later eliminated in the processing than in any previous census, when the definition of a farm was given to the enumerators.

The foregoing commentary referred to the method which countries have followed to identify the holding as unit of enumeration. The actual contents of the holding concepts used by the various countries will now be considered.

FAO's holding concept, as pointed out in the preceding section, includes four major points:

- (1) land used wholly or partly for agricultural production;
- (2) being operated, directed, or managed by one person;
- (3) without regard to (a) title, (b) size, or (c) location;
- (4) if consisting of two or more parcels of land, they must form part of the same technical and economic unit.

(1) The main deviation in regard to this point is the inclusion of *forest holdings* in the agricultural censuses in Austria, Czechoslovakia, Denmark, Federal Republic of Germany, Luxembourg, Romania,

Saar, Sweden, El Salvador, Mexico, Brazil, Chile, Venezuela, Ryukyu Islands, and New Zealand, in the latter country as regards plantations of timber trees and other forest trees. Canada included the production of maple products which can also be considered as forest products. The holding definition that was used in Canada deviated further on this first point, insofar as it took the agricultural operations and not the land as a starting point. These operations comprised the production of all crops (including pasturing of livestock), greenhouse and nursery products, livestock (including furbearing animals), livestock products and maple products. Czechoslovakia, Finland, Federal Republic of Germany, Saar, Sweden and Ryukyu Islands included fisheries wholly or partly in the agricultural census. Czechoslovakia and Sweden covered hunting.

A number of countries included, as holdings in the census, units which were not actually used for agricultural production. Sweden, Costa Rica, Dominican Republic, Mexico, and Brazil included *inactive holdings*, which are units that have previously been holdings but which were not operated in the census period or at the census date. The census of European holdings of Kenya and of Northern Rhodesia included some which, although owned, were not yet occupied or developed by the owners.

(2) Although on this point the holding definition requires only that the land is being operated, directed or managed by one person, some countries have further defined this person in their censuses. The Benelux countries which took their censuses in two parts with a different scope, introduced in the second part the profession of the holder as a criterion for defining the holding, so as to limit this part to agriculture in a narrower sense. In the livestock census in Yugoslavia, as far as the private sector was concerned, those households were included whose members were devoting more than 50 percent of their working time to agricultural operations.

In one country only the title under which the land is held was taken into account. Land held by Maoris under the communal system was not included in the agricultural census of New Zealand.

(3) Many deviations from the FAO definition have been introduced by taking into account the *size of holding*. The Program recognized, as has been mentioned earlier, that practical considerations make it necessary to limit the enumeration to those holdings which conform to certain recognized criteria and which fall above certain lower limits as to size of holding or size of operation or both. No fewer than 33 countries have used an *area limit* in taking the census. This practice was followed in Austria,

Belgium, Federal Republic of Germany, Greece, Luxembourg, Netherlands, Saar, Switzerland, United Kingdom, Alaska, Canada, Guatemala, Jamaica, Puerto Rico, United States, Argentina, Cyprus, Israel, Japan, Philippines, Ryukyu Islands, Thailand, Turkey, Algeria, Kenya, Northern Rhodesia, Tunisia, Union of South Africa, Australia, Hawaii and New Zealand.

Frequently even several area limits were used. In general a much lower limit was used for certain specialized cultivations than for the crops grown in a more extensive way. In many cases there is no lower limit at all for these cultivations. The limit also varies from country to country with the intensity of cultivation, i.e., from 1 are in Belgium to 50 hectares for Tunisian farms in regions with biennial cereal crops.

A few countries have used the *number of livestock or poultry* to exclude very small holdings from the census. These countries, viz., Greece, Switzerland, Alaska, Puerto Rico, United States, Cyprus, Israel, Turkey, American Samoa, and Guam, mostly combine this criterion with an area limit. Alaska and the United States of America have also taken into account the *quantity of animal production*.

The *value of production* was used to limit the number of holdings to be enumerated in: Alaska, Canada, United States of America, Virgin Islands, Argentina, Japan, Ryukyu Islands, Thailand and Hawaii. Others used for this purpose the *destination of the production* by excluding production not for sale, namely: Austria, Belgium, Finland, Luxembourg, Netherlands, Switzerland, Alaska, Dominican Republic, Puerto Rico, United States, Argentina, Brazil, Cyprus, Northern Rhodesia, Union of South Africa, Australia, and Hawaii. In the census of Jewish farms in Israel, the size of the holding to be included in the enumeration of the so-called "established farms" was measured by the *number of working days* it provided per annum.

Several deviations have also taken place with regard to the *location of the land*. Departing from the rule given in the FAO definition several countries have limited the holding concept to: (a) land located in the same neighborhood, or (b) land located in the same administrative unit. To group (a) belong Ireland, Mexico, and five states of Australia. In group (b) are included Greece, Norway, Northern Ireland, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Panama, Brazil, Chile, Colombia, Venezuela, the Union of South Africa, and Western Australia. Taking into account the location of the holding may also be a deviation from the rule that separate parcels have to be considered as one holding if they *form part of the same technical and economic unit*.

In the United States of America, land located at a distance further away than in the adjoining county was to be included in a separate questionnaire. This treatment did not necessarily involve an appreciable deviation from the FAO holding concept, as it is not likely that such land formed part of the same technical and economic unit in the great majority of cases.

A special treatment has been given in the census of agriculture of Israel to the *moshvei olim*. These co-operative smallholders' settlements of immigrants are planned to operate on the principle of separate holdings. The division of the land, however, is normally not made during the first few years of their existence. Consequently most settlers did not qualify for the definition of holder. On the other hand, these immigrants were regarded as more than potential farmers, as they were already partners in the as yet undivided village farm. To cover *moshvei olim* a full questionnaire was completed for the undivided village farm, while for the individual settlers a very much abbreviated schedule was used. A great part of these settlers worked on roads, afforestation, etc., and had not yet been absorbed in agriculture. In the census results they have been listed as "partly established farmers".

Table 50 gives a synopsis of the various extensions and of the limitations used by the various countries in their national censuses as compared with the holding concept of the FAO Program. In this table \times indicates that the enlargement or limitation concerned was applied. A dash indicates that according to available documents no deviation has appeared.

3. Land Tenure as Conceived in the Program

Although the 1950 Program gave a much more prominent place to the items on land tenure than its two predecessors, the relevant part of the Program has nevertheless not been greatly developed. This was partly due to the lack of information on the different forms of land tenure existing in the various parts of the world, partly also to the expectation, at the time when the Program was drafted, that FAO would not have to deal with problems of land tenure and land reform. Contrary to that expectation, the General Assembly of the United Nations adopted, at its fifth session, on 20 November 1950, the resolution 401 (V) which recommended that the Secretary General, "in co-operation with the Food and Agriculture Organization, and in consultation with other appropriate agencies, prepare and submit to the thirteenth session of the Economic and Social Council, an analysis of the degree to which unsatisfactory forms of agrarian structure and, in particular, systems of land tenure, in the underdeveloped countries and territo-

ries impede economic development and thus depress the standards of living, especially of agricultural workers and tenants and of small and medium-sized farmers". When the resolution was adopted, FAO's Census Program was, however, already under way and therefore could not take into account the new need for data on systems of land tenure inimical to economic development.

The Program, as it was finalized in 1948, expected each country to report the area held under each of the major tenure forms existing in the country. It proposed in the first place to report the "amount of total area owned by the owner", in which was to be included land owned by the holder or one or more of his family's members, for the use of which he paid no rent and for the management of which he received no salary. Squatters on land and various types of concessionaires would be owners if the definition were taken literally, but such an interpretation was certainly not in accordance with the ideas of the Program framers. It expected only full ownership to be reported under this item, and also forms of tenure very closely approaching this. The Program further proposed to include a question in the census on the "amount of the total area rented by the holder from others", which item was to include rental from individuals, corporations or the government. The reply to this question was also to include land for the use of which payment was made by a share of the product. The Expanded List proposed separate items for the "area rented on fixed cash basis" and one for the "area rented for a share of the product".

The Program did not venture to itemize tenure forms other than ownership and tenancy, but only proposed that countries should report the amount of total area operated by the holder under a form of tenure not covered by the items on ownership and tenancy. It further requested the participating countries to explain the various forms of tenure included in this item such as the use of tribal land, seignorial land, etc.

4. Land Tenure in the National Censuses

Of the 71 countries which took a census by holdings, 53 countries included one or more items of land tenure in their questionnaires; 52 of these included separate items for *area owned* and *area rented*. Switzerland asked for area rented only.

In several countries, *ownership of land* was apparently considered as an established concept. Belgium, Czechoslovakia, Federal Republic of Germany, Luxembourg, Netherlands, Saar, United Kingdom, Bolivia, Brazil, Chile, Ecuador, Uruguay, Venezuela, Ceylon (estates), Israel (Jewish farms), Ryukyu

TABLE 50. DEVIATIONS FROM FAO'S HOLDING CONCEPT

REGION AND COUNTRY	Enlargement of the concept		Limitation of the concept						Other limitations
	Inclusion of forestry	Other enlargements	Minimum area	Minimum number of livestock and/or poultry	Minimum value of production	Destination of production	Land in the same neighborhood	Land in the same administrative unit	
EUROPE									
Austria	X	—	X	—	—	X	—	—	—
Belgium 1950 - I	—	—	X	—	—	X	—	—	—
Belgium 1950 - II	—	Contractors Machine stations	X	—	—	X	—	—	Excluded not mainly professional holdings under 1 hectare
Czechoslovakia	X	Fisheries Hunting	—	—	—	—	—	—	—
Denmark	X	Heath land Peat bogs	X	—	X	—	—	—	—
Finland	X	Fisheries Handicraft	X	—	—	X	—	—	—
Germany, Federal Republic	X	Fishing water	X	X	—	—	—	X	—
Greece	—	—	—	—	—	—	X	—	Land let in conacre or for grazing regarded as part of the holding of the holder who sublet the land
Ireland	—	—	—	—	—	—	—	—	—
Luxembourg 1950 - I	X	—	X	—	—	X	—	—	—
Luxembourg 1950 - II	—	Contractors Machine stations	X	—	—	X	—	—	Excluded nonprofessional growing of vegetables, fruits and nonprofessional livestock and poultry keeping
Malta and Gozo	—	—	—	—	—	—	—	—	—
Netherlands 1950 - I	—	—	X	—	—	X	—	—	—
Netherlands 1950 - II	—	Contractors Machine stations Machine stations	X	—	—	—	—	X	Excluded nonprofessional keeping of livestock
Norway	—	—	—	—	—	—	—	—	—
Portugal	X	—	—	—	—	—	—	—	—
Romania	X	Fishing water	X	—	—	—	—	—	—
Saar	X	Fishing and hunting	—	—	—	—	—	—	—
Sweden	X	inactive holdings	—	—	—	—	—	—	—
Switzerland	—	—	X	X	—	X	—	—	1 Excluded osiers in England and Wales
United Kingdom	—	—	X	—	—	—	—	—	Excluded non main-occupation holdings and holdings owned by Yugoslav People's Army, Home Department and enterprises for serum production and experimentation
Yugoslavia	—	—	—	—	—	—	—	—	—
NORTH AND CENTRAL AMERICA									
Alaska	—	—	X	X	X	1X	—	—	Quantity of animal production
Canada	—	Maple products	X	—	X	—	—	X	—
Costa Rica	—	Inactive holdings	—	—	—	—	—	—	—
Cuba	—	—	—	—	—	X	—	X	—
Dominican Republic	—	Inactive holdings	—	—	—	—	—	X	—
El Salvador	X	—	X	—	—	—	—	X	—
Guatemala	—	—	—	—	—	—	—	X	—
Honduras	—	—	X	—	—	—	—	X	—
Jamaica	—	—	—	—	—	—	X	—	—
Mexico	X	Inactive holdings	—	—	—	—	—	X	—
Panama	—	—	—	—	—	—	—	—	—
Puerto Rico	—	—	X	X	—	X	—	—	2 Quantity of animal production
United States	—	—	X	X	X	1X	—	—	—
Virgin Islands (U.S.)	—	—	—	—	X	—	—	—	—
SOUTH AMERICA									
Argentina	—	—	X	—	X	X	—	—	—
Bolivia	—	—	—	—	—	—	—	—	—

TABLE 50. DEVIATIONS FROM FAO'S HOLDING CONCEPT

REGION AND COUNTRY	Enlargement of the concept		Limitation of the concept						Other limitations
	Inclusion of forestry	Other enlargements	Minimum area	Minimum number of livestock and/or poultry	Minimum value of production	Destination of production	Land in the same neighborhood	Land in the same administrative unit	
Brazil									
Chile	X	Inactive holdings	—	—	—	X	X	—	—
Colombia	X	—	—	—	—	—	—	X	—
Ecuador	—	—	—	—	—	—	—	X	—
Uruguay	—	—	—	—	—	—	—	—	—
Venezuela	X	—	X	—	—	—	—	—	Location in a rural district
ASIA									
Burma									
Ceylon	—	—	—	—	—	—	—	—	Excluded livestock for keep-sake or mainly for home consumption
Cyprus	—	—	X	—	—	X	—	—	—
India	—	—	—	—	—	—	—	—	Excluded land under possession of the State and other public bodies, corporate bodies and other nonhousehold institutions
Iraq	—	—	—	—	—	—	—	—	—
Israel	—	—	X	X	—	—	—	—	Census of Jewish farms excluded all holdings providing less than 80 to 100 working days per annum.
Japan	—	—	X	—	X	X	—	—	Excluded establishments directly managed by the Allied occupation forces
Jordan	—	—	—	—	—	—	—	—	—
Philippines	—	—	X	—	—	—	—	—	—
Ryukyu Islands	—	—	X	—	X	—	—	—	—
Thailand	X	Fisheries	X	—	X	—	—	—	—
Turkey	—	—	X	X	—	—	—	—	—
AFRICA									
Algeria									
Belgian Congo (European holdings)	—	—	X	—	—	—	—	—	—
Egypt	—	—	—	—	—	—	—	—	—
Kenya (Non-African holdings)	—	—	—	—	—	—	—	—	—
Mauritius	—	—	X	—	—	—	—	—	Undeveloped or unoccupied holdings
Mozambique	—	—	—	—	—	—	—	—	—
Northern Rhodesia	—	—	—	—	—	—	—	—	—
European holdings	—	—	X	—	—	X	—	—	Some holdings neither occupied nor developed by the owner
Seychelles	—	—	—	—	—	—	—	—	—
Southern Rhodesia	—	—	—	—	—	—	—	—	—
European holdings	—	—	—	—	—	—	—	—	—
Tunisia	—	—	X	—	—	—	—	—	—
Union of South Africa	—	—	—	—	—	—	—	—	—
Nonnative holdings	X	—	X	—	—	X	—	X	—

TABLE 50. DEVIATIONS FROM FAO'S HOLDING CONCEPT

REGION AND COUNTRY	Enlargement of the concept		Limitation of the concept					Other limitations	
	Inclusion of forestry	Other enlargements	Minimum area	Minimum number of livestock and/or poultry	Minimum value of production	Destination of production	Land in the same neighborhood		Land in the same administrative unit
OCEANIA									
American Samoa	—	—	—	X	—	—	—	—	—
Australia	—	Land worked by sharefarmers included in the holding which gives the land	¹ X	—	—	² X	³ X	⁴ X	—
Guam	—	—	—	X	—	—	—	—	—
Hawaii	—	—	X	—	X	X	—	—	Excluded land held by Maoris on the communal system
New Zealand	X	—	X	—	—	—	—	—	—
Western Samoa	—	—	—	—	—	—	—	—	—
Non-village agriculture	—	—	—	—	—	—	—	—	—

United Kingdom ¹) X in Northern Ireland.
 Alaska, United States ²) Value of sales.
 United States ³) Land located at a distance farther away than the adjoining county was included in a separate questionnaire.
 Australia ⁴) In New South Wales, Victoria, South Australia, Western Australia.

Australia ²) in Queensland and Western Australia.
 Australia ³) in New South Wales, Victoria, Queensland, South Australia, Tasmania.
 Australia ⁴) in Western Australia.

Islands, Egypt, Northern Rhodesia, Southern Rhodesia, Australia and New Zealand did not define explicitly ownership of land or area owned in their censuses.

In several other countries ownership of land was more or less defined. Only four countries, Greece, Ceylon (for small holdings), Thailand and Mexico (for non-*ejidales* holdings of more than 5 hectares) followed the definition proposed in the Program. Two other main types of definitions can further be distinguished: (a) 17 countries referred to a *legal title of ownership* and (b) seven countries to the *degree of control* the holder had on the land. The first group included: Austria, Alaska, Canada, Dominican Republic, El Salvador, Mexico, Panama, Puerto Rico, United States, Virgin Islands (U.S.), Argentina, Colombia, Burma, India, Japan, Jordan, and Hawaii. In Panama, for instance, the following definition was used: "area owned includes only the land on which the holder has a title of ownership". Reference was made to the degree of control of the holder on the operation of the land in the definitions used in Costa Rica, Guatemala, Honduras, Israel (Arab and Druze farm economy), the Philippines, Algeria and Tunisia. As an illustration of this approach the Costa Rican definition may be given: "area owned under direct management includes all areas of land that have neither been taken nor given for rent, *esquilino*, nor have been ceded, or taken by *parasitos*, *colonos*, etc. It is land owned on which

the operator exerts control as to cultivation, harvests, livestock and with regard to the payment of taxes". Several definitions referred to family members whose ownership was considered as ownership of the holder. This was the case in Alaska, Canada, Guatemala, Puerto Rico, United States, Virgin Islands (U.S.), Colombia, Ceylon (small holdings), Japan, and Philippines. In Japan, for example, land owned included not only the land owned by one person but also by any member of his family. Thus, land owned by his father, son, brother and sister, etc., living in the family but holding land under their own titles, was to be included. A number of countries mentioned special inclusions in the concept of area owned:

NETHERLANDS: owned included tenure by long lease, usufruct and perpetual lease at a fixed rent.

EL SALVADOR: the peaceful and uninterrupted possession of land without legal title of ownership was also to be recorded as land owned.

BRAZIL: land in possession in virtue of a contract of promise of sale, land which a person occupied in the quality of heir, even when the inventory had not been made, land subject to a law suit but under actual occupation of the holder, land occupied by force of a pact of entail and land that was subject to a promise of sale to third persons, but which was still in the actual possession of the holder on the date of the census.

UNITED STATES: in the case of an Indian operator, land allotted in trust and also any reservation land assigned to him for his own use were to be considered as land owned.

BURMA: included area held by right of possession and also squatters' right.

CEYLON: the area jointly owned was subdivided into: (i) Tattumaru cultivation by co-owners in turn, (ii) other forms.

INDIA: a plot of land was to be considered to be owned by a person if he holds it with a right of permanent heritable possession, with or without the right of transfer of such title.

ISRAEL (JEWISH FARMS): land held in hereditary tenure from the Jewish National Fund was included in one item with land owned.

JAPAN: land for which the registration of the transfer was in process at the census date was reported as land owned, even if that registration had not been completed.

Area rented, like area owned, was not defined in a number of countries, including Austria, Belgium, Federal Republic of Germany, Luxembourg, Netherlands, Saar, United Kingdom, Alaska, United States, Bolivia, Ecuador, Uruguay, Belgian Congo, Egypt, Northern Rhodesia, Southern Rhodesia, Israel, Philippines, Ryukyu Islands.

Most of the countries which did define area rented have used the concept proposed in the FAO Program, which involved the payment of rent, in money, kind or services. Iraq, for instance, defined the area rented from others as "all land rented from individuals, corporations or the government, whether for a definite amount of money or a share of the produce". Definitions of a similar type were used in Czechoslovakia, Greece, Costa Rica, Dominican Republic, El Salvador, Honduras, Mexico, Panama, Argentina, Brazil, Chile, Colombia, Venezuela, Algeria, Tunisia, Burma, Ceylon, Iraq, Japan, Thailand. Several countries in which *sharecropping* was an important form of tenure included an item for this in their census, whether as a subitem of area rented or as an independent item. In the latter case the concept of area rented was limited to the area rented for a fixed amount of money or produce. The definition of sharecropper mostly followed the lines indicated by the FAO Program, as, for instance, the one used in Mexico. A sharecropper was considered to be the civil or juridical person who took a holding to operate by virtue of an agreement whereby he committed himself to give away a proportion of the harvest obtained, such as one half or one third, etc., without

having been subject to the owner for the management of the holding.

Similar concepts were used in the following countries (but in some cases no mention was made of the independence of the sharecropper in the operation of the holding): Costa Rica, Dominican Republic, Honduras, Argentina, Burma, Algeria, Tunisia (sharecropping of the European type), Ceylon, Australia (Queensland). In most cases where the independence of the sharecropper in the operation of the land was not explicitly expressed it was clearly understood. Detailed instructions have been given in Tunisia for the enumeration of various forms of sharecropping of the Moslem type.

Items for *other forms of tenure* were included in several censuses, either as such, or as one or more items for specific tenure forms referring to land other than owned or rented. These specific items were of a great variety and only a few of these could be classified in broad groups as follows:

(1) A tenure form for which one or more items were included in eight countries referred to *land received in use as part of wage or salary or with the obligation to work for it*. To this group belong: *Deputatland* and land held for service in Czechoslovakia, *Heuerlingsland* in the Federal Republic of Germany and Saar, land held in *colonato* in the Dominican Republic, El Salvador, Honduras and Bolivia, and also laborers' land in the latter country. The item for *huasipunguero* land in Ecuador is probably in this category. The essential feature of this tenure form is that the rent is not paid, or at least not fully paid, in money or produce but in services or labor.

In the Dominican Republic, for instance, land was considered as held in *colonato* when it was operated by a person who had rented it from another person from a company or from the State, with the right to the usufruct of the land, for payment in money or in produce, and with the obligation to cultivate the permanent crops agreed upon between the cultivator and the owner.

(2) Another group of items included in the censuses of seven countries referred to the *area occupied by squatters*, namely: the area taken without permission in Costa Rica, occupancy in Honduras, Brazil, Chile, Uruguay, Venezuela, and land operated by tolerated persons in Bolivia. This tenure form was defined in Brazil as "those lands belonging to the State or to private persons, the occupier of which does not possess any title or document certifying his rights to the land, and for which lands he does not pay any rent".

Tenure without title was involved in these cases, at least implicitly; legal occupancy on idle lands in

Mexico related to operators who had a title from the central or local government but not from the owner.

(3) Six countries included an item for land operated gratuitously: Romania, Costa Rica, Panama, Argentina, Brazil and Chile. In Argentina the item included "land the operator of which was not the owner, the tenant, or the sharecropper and which he was occupying because the owner had ceded it to him without requiring any payment of rent or sharing of the produce". The items classified in this group imply the permission of the owner to use the land. In Thailand all rent-free area was included in one item of the census regardless of whether the operator had it gratuitously or as squatter. A number of items referring to other forms of land tenure which could not be classified in the previous groups were defined in various national censuses as follows:

COSTA RICA. Areas taken as *colono* are those areas assigned to a group of persons who form a colony, appropriately constituted by means of a law which regulated its organization. The State is responsible for these colonies and occasionally directs their activities.

EL SALVADOR. Lands rented from others with a promise of sale are those lands for which the holder has the right to work them by paying periodic instalments (to a national institution or company), with the condition that by paying the last instalment specified the land becomes the property of the holder.

ARGENTINA. Fiscal lands are the areas the holder operates and which are the property of the State, the provinces or the municipalities. The holder may occupy these lands as tenant with an annually withdrawable permit, as caretaker or trustee without a contract, with a concession for obtaining the land in ownership or as a squatter — either in the sense of expecting an official decision which authorizes him to occupy it, or as a squatter in the absolute sense, without any authorization or permission to occupy it.

BURMA. Land rented from others on "privileged terms" means the land rented for a nominal rent fixed below the normal rents prevailing in the locality as a result of the parties being relations, or friends or owing to other obligations. Sometimes the privilege may mean that the land is rent-free.

CEYLON. Area jointly owned means land owned by the holder or members of his household in conjunction with others and for which he pays no rent, or for the management of which he receives no salary. In the small holders' schedule were included separate items for: (a) *tattumaru* and (b) other forms of joint ownership. The former was defined as the

system by which undivided land is cultivated in rotation by each of several co-owners in turn.

Although not a form of land tenure in the proper sense but a mode of operation, an item for *area managed* was included in a number of censuses, mostly in the land tenure section of the questionnaire. A few countries, Canada, the United States and its territories, Dominican Republic and Mexico have defined the concept of management. In the U.S.A. and territories a hired manager was defined as a person who is paid a salary to operate a farm for the person who employs him. Similar definitions in other cases did not make mention of the payment of a salary. The manager was regarded as the civil or juridical person who, not being the owner, is in charge of the administration or supervision of the land.

SECTION B - LAND UTILIZATION

1. Land Utilization as Conceived in the Program

This section of the Program aimed at the enumeration of the more enduring features of the use of land as distinguished from the more ephemeral use for specific crops in a certain season or year. For this purpose the Program proposed a classification of the land in agricultural holdings according to a small number of broad classes. Its Expanded List distinguished the following six main classes of land utilization:

- (1) Arable land.
- (2) Land for growing trees, vines and shrubs.
- (3) Permanent meadow and pasture.
- (4) Wood or forest land.
- (5) Productive marshland, heathland and other productive but uncultivated land.
- (6) All other land.

In the Short List, items (5) and (6) were combined.

ARABLE LAND

Arable land was defined as "land generally held under rotation, including land devoted to cereal crops and to other nonpermanent herbaceous crops; areas of land planted to crops but not harvested, for whatever reason; fallow land (land lying idle, neither seeded nor planted but under rotation and normally cultivated); and temporary meadows (for mowing and pasture)".

To be deemed "arable" (according to the FAO definition), the land should generally be held under rotation, i.e., one kind of crop should be followed on the same land by another kind in the next year or season. In the case of certain forms of cereals cultivation, as on wet paddy fields where rice was followed by the same crop in the next season or year, the land still had to be considered as arable because it was plowed between the crops, although there was no crop rotation in the proper sense. Area of land planted to crops but not harvested referred to land on which the crop had been destroyed, for instance by floods, and which was going to be plowed again. Fallow lands was also included. The Program defined "fallow land" as land not sown or planted and lying idle, but under rotation and normally plowed. The land left uncultivated for several years was to be considered as fallow land as long as it could be brought into cultivation by normal cultivation practices. When it could be returned to cultivation only by reclamation operations such as, for instance, deep plowing, bush clearing, special drainage, etc., the land had to be considered as "other land", or possibly as "wood or forest land", but not as "fallow land".

The definition of arable land also included temporary meadows (for mowing and pasture). The Program proposed to separate these from the permanent meadows and pastures by defining them objectively; for example, as land used only for mowing or pasture which was plowed within a specified number of years.

Arable land, according to the Program, included land under specialized vegetable cultivation. Because of its special character the area under specialized vegetable cultivation was separated in the Expanded List from "all other arable land". Land under specialized vegetable cultivation was defined as land exclusively devoted to the cultivation of vegetables for sale, or for consumption by persons living on, or associated with the holding. Accordingly home or farm-garden areas and greenhouses and other cultivation under glass (frames, etc.) were also included.

LAND FOR GROWING TREES, VINES AND SHRUBS

This class of land utilization was defined as the area used for growing trees, vines or shrubs, chiefly for fruit, nuts or other products, but excluding wood and timber. It included orchards, groves and nurseries. The main problem here was the separation of tree area from other classes of land, when herbaceous crops and tree crops were cultivated simultaneously on the same piece of land in such a way that it was difficult to ascertain which part of the total area

was to be ascribed to each crop. The two following cases were mentioned:

(a) Land occupied by trees, vines or shrubs, where the distance between the plants is large enough to permit the sowing of some crops in the intermediate land or the utilization of permanent grasses growing on the land;

(b) Arable land or permanent meadow, or pasture also containing a certain number of trees, vines or shrubs.

When such land had to be classified according to utilization, parts of the total area approximating to the area covered by herbaceous crops and by trees, vines or shrubs were to be reported as "arable land" or "permanent meadow and pasture" and as "land for growing trees, vines or shrubs" respectively, but if the arable crops or permanent grass and the trees, vines or shrubs were so intermingled that the area which belonged to either could not be distinguished, the whole area was to be classified according to the principal crop. It was left to the participating countries to decide whether a physical criterion (for instance the crop covering the largest area) or an economic criterion (the crop that produced the highest value) should be adopted. The Program further suggested that when combinations as indicated were common it might be desirable to distinguish between "arable land with trees" and "arable land without trees", and between "permanent meadow and pasture with trees" and that "without trees". Correspondingly, the land used for growing trees, vines and shrubs might be classified as to whether or not it also included field crops or permanent meadows and pasture.

The Program made no provision for the enumeration of the area under scattered tree crops. Scattered trees would very rarely be the most important crop and therefore should not appear in the land utilization data.

Crops on arable land, according to the concept of the FAO Program, were always nonperennial. Perennial herbaceous crops (except permanent meadow and pasture) were listed under land used for trees, vines and shrubs.

PERMANENT MEADOW AND PASTURE

This was defined as land in holdings used for herbaceous forage crops other than rotation grasses and clovers, either seeded or existing naturally (wild prairie and grazing land). Permanent meadows and pasture were to include only land in the holding. Common pastures, and other land on which farm animals might be grazing outside the holdings, as well as wild grazing or forest grazings, were to be excluded.

WOOD OR FOREST LAND

According to the Program, wood or forest land included all wood lots or tracts of timber, natural or planted, which comprised part of the holding and which had or would have value as wood, timber or forest products. Wood or forest land was only to be included when it was part of the holding. The Program did not indicate how this was to be determined.

For timber tracts to be regarded as "wood or forest land", it was necessary that they should have, at the time of the census or in the future, value as wood, timber or forest products. Parts of the holding which consisted of jungle which had, or in the future would probably have, no value as such were not to be included in wood or forest land.

PRODUCTIVE MARSHLAND, HEATHLAND AND OTHER PRODUCTIVE BUT UNCULTIVATED LAND

This item referred to the area of uncultivated land, not included under the preceding headings, which produced some kind of utilized vegetable product such as reeds and rushes for matting and bedding for livestock, or wild berries, plants and fruits. Two characteristics were outlined for this item. It had to be:

- (a) uncultivated;
- (b) producing some kind of utilized vegetable product to be indicated by examples.

ALL OTHER LAND

This was to include land occupied by buildings, roads or lanes, wasteland, land under water, and any other land not reported under the previous items.

2. Land Utilization in the National Censuses

The great majority of participating countries, that is, all but 13 countries, included items on land utilization in their census. The coverage of the items was not the same however in the various countries. In this respect countries were divided into two main groups: those with an enumeration by holdings covered only the area in holdings, while most of the countries participating in the census in a more global way covered the whole area of the country. The concepts and definitions adopted for the enumeration of land utilization items can be summarized as follows.

ARABLE LAND

Several countries did not define arable land, probably because the meaning of the term or terms used

in the census was considered to be sufficiently well known to obtain the relevant data with the desired precision. Of the countries which did define the concept, only five, namely Burma, Ceylon, Thailand, Algeria, Tunisia, used it in the strict sense of the FAO Program. In Thailand, for instance, the following definition was used:

"Arable land means land generally used for the cultivation of rotation crops and includes land producing food crops, vegetables, land with unharvested crops, resting land where crops have not yet been planted, temporary grassland for raising animals, or for cutting grass for feeding animals and also includes land used for producing vegetables for sale and for home consumption".

In principle the FAO definition of arable land was also adopted for most of the British colonial territories. In practice, conditions existing in these territories made many deviations necessary. These, however, fall outside the scope of this chapter.²

In some European countries the concept of arable land was more limited than that of the FAO Program. In these countries "arable land" excluded specialized cultivation of vegetables. It included the cultivation of vegetables only insofar as they were grown in rotation with other field crops. The area under specialized vegetable cultivation was enumerated in these countries jointly with tree crops in one or more items described as garden or horticultural land. The Finnish census included in its land utilization section, among others, an item for "garden" and one for "arable land". The latter was defined as: mineral and peat soils, which, under regular conditions, are subject to continued cultivation and on which are grown field crops, or, exceptionally, also garden crops. Gardens were considered to be the areas used for the cultivation of fruit trees and berry bushes and those permanently devoted to the growing of vegetables. Similar practices were followed in Austria, Czechoslovakia, Luxembourg, and Netherlands. In the Federal Republic of Germany, Saar and Uruguay the arable land included the area of vegetables grown for sale, but not the home and the kitchen garden. Burma excluded land that was temporarily cropped for a season and abandoned the next season.

Several of the Latin-American countries did not make a distinction between arable land and land for growing trees, vines and shrubs, but enumerated separately land under annual or transitory crops and land under permanent crops. The duration of the

²The main deviations are indicated in Volume I of this report: *Census Results by Countries*.

vegetation cycle, instead of the crop rotation, was the main point of the definition for this class of land utilization. Area from which annual harvests are obtained was defined in Costa Rica as "the area of all the land from which harvests of annual crops were obtained during the period included between 1 May 1949 and 30 April 1950". Annual crops were considered to be crops which were sown and harvested and disappeared within the period of one year or less. The difference from the FAO concept was mainly in regard to crops which, although subject to rotation, stayed in the field more than one year. Similar concepts were used in the Dominican Republic, Honduras, Argentina, Bolivia, Brazil, Colombia, Ecuador, Venezuela, and Mozambique.

Although fallow land was included as an item in the crop section of the Program, the concept is considered here because of its importance in the census for separating arable land from uncultivated land. Fallow land was in general considered as land which had not been under crops during the census year, but had been under cultivation previously. In the Dominican Republic, for instance, fallow land was land which had not been cultivated in the census year August 1949-50, although it had been cultivated in previous years.

Some countries have given more or less precise instruction for the enumeration of land that had not been cultivated for several years. For instance Ecuador included as fallow only land that was in cultivation for less than five years. In Nigeria such land was regarded as fallow only if it were included in a definite farming cycle. The Tunisian census also had regard to the crop rotation. Canada and the United States distinguished only summer fallow as a separate item; the remainder of the idle cropland was assigned to another composite item.

LAND FOR GROWING TREES, VINES AND SHRUBS

As has been seen from the synoptic table on land utilization in Chapter 3, several countries avoided the problem of separating arable land from land under tree crops, in the case of associated crops, by including land used for rotation crops and for tree crops in one item. Others gave no special instruction for the enumeration of such combined crops. Those which laid down rules for this purpose mostly followed the lines of the Program. Wherever possible a separate estimate was made for the two forms of utilization and, if separation were impossible, the area concerned had to be classified according to the crop which had the main value (Ireland, Northern Ireland) or, the major commercial importance (Ecuador) or, in still other cases, according to the principal or more

important crop (Yugoslavia, Ceylon, Iraq, Thailand). Three countries considered the density of the trees in allocating the area either to arable land or to land for growing trees, namely: Japan (intervals between trees lower than the standard), Algeria and Tunisia (50 trees per hectare). Austria, Czechoslovakia, Federal Republic of Germany and the Netherlands enumerated associated crops according to the herbaceous crop of the association if this crop was of sufficient importance. Greece included separate items respectively for land planted exclusively with tree crops and for land cultivated with annual crops associated with scattered trees.

Most of the countries which included in their censuses one or more items for arable land, also included one or more items for land for growing trees, vines and shrubs. The definition used will only be considered for those countries which enumerated the latter area in one item. Among these, Guatemala, Chile, Uruguay, Jordan, Ryukyu Islands, Northern Rhodesia, Southern Rhodesia and the Union of South Africa did not define this class of land utilization. Although in Nigeria detailed instructions were given for the enumeration of tree crops, these instructions did not include a definition in the proper sense. The FAO definition was used in Thailand and in most of the British colonial territories; in the latter case, amplified with the names of a number of tree crops.

In other countries land for growing trees, vines and shrubs was defined by reference to the length of the vegetation cycle, or to the permanent character of the crop, and by giving a list of the crops that were considered to be growing on this land. A typical example of such a definition was that of Costa Rica: "permanent crops are considered to be those of which the vegetation cycle is more than a year, i.e., cultivation in which from the moment of sowing to the moment of harvesting a period of more than a year elapse, such as coffee, cacao, sugar cane, fruits (oranges, lemons, grapefruits, etc.)".

Similar definitions were used in El Salvador, Argentina, Brazil, Venezuela and Burma.

The Dominican Republic, Honduras, Mexico, Bolivia, Ecuador and Ceylon defined the item only by giving a list of crops. In the Dominican Republic, for instance, land occupied by permanent crops was considered to be land on which were planted fruit trees or shrubs, cacao, coffee, plantains, sugar cane, oranges (all citrus fruits), coconuts, avocado, mango, pineapple, breadfruit, etc. Colombia defined area destined for permanent crops as the total area cultivated in the holding with crops of slow yield, such as coffee, cacao, palms, and fruit trees which gave the first harvest three or four years after having been planted.

The following deviations from the FAO concept of land for growing trees, vines and shrubs are of particular interest. In Costa Rica, the Dominican Republic and in Honduras, land under sugar cane was included in the land under permanent crops. On the other hand, in Guatemala land under bananas and pineapples was not included in cropland with fruit trees, but in cropland harvested or to be harvested. In Mexico, agaves were included with orchards and plantations in one item. Argentina and Egypt included forest areas in the land for growing trees, vines and shrubs.

PERMANENT MEADOW AND PASTURE

As was seen from the synoptic table on land utilization in Chapter 3, most countries included in their census several items for permanent grassland and did not limit the enumeration to the single Program item.

Argentina, Bolivia, India and several of the British colonial territories, however, confined themselves to the Program item. In Argentina the item was defined as the area covered by grassland, the plants of which last more than one year, being natural or cultivated.

Although the classification of grassland showed a great variety, two criteria were mainly used for subdividing the permanent grassland. In several European and a few other countries a distinction was made between meadows and pastures. Meadows were considered to be grasslands mainly used for mowing; pastures to be grassland mainly in use for the grazing of livestock. Such a distinction was applied in Austria, Belgium, Czechoslovakia, Denmark, Finland, the Federal Republic of Germany, Greece, Ireland, Luxembourg, Norway, Romania, United Kingdom (Northern Ireland), Yugoslavia, Japan, Algeria, and Tunisia.

In a number of other countries, mostly in Latin America, grassland was subdivided into natural and cultivated. This procedure was followed in Sweden, Costa Rica, Dominican Republic, Panama, Brazil, Chile, Colombia, Ecuador, Uruguay, Venezuela. In Colombia, artificial grassland referred to the areas occupied in holdings by pastures which had been sown by the cultivator and to areas occupied by artificial meadows for mowing. Natural grassland was the area in the holding in grassland which had not been sown by the cultivator, but had grown in a natural form, or spontaneously, without the help of the human hand. Some countries have used both criteria for the subclassification of the grassland.

Temporary meadows and pastures were explicitly enumerated with arable land or with the area under annual crops in Austria, Czechoslovakia, Denmark,

Finland, the Federal Republic of Germany, United Kingdom (Northern Ireland), Argentina, Bolivia, Brazil, Japan, Algeria and Tunisia.

Few countries included in their agricultural census a separate item for *rough grazings*. Only Austria, the Federal Republic of Germany, Ireland and United Kingdom, enumerated these pastures separately. In Ireland, for instance, rough grazing was defined as "any area of land (other than pasture) on which stock had been run at any time during the 12 months ending on the date of the enumeration".

WOOD OR FOREST LAND

The main point of the FAO definition referred to the present or future value as wood, timber or forest products. The following countries included this point in their censuses: Saar, Yugoslavia, Canada, Costa Rica, El Salvador, Guatemala, Honduras, Brazil, Chile, Ecuador, Venezuela, Ceylon, Thailand, Algeria, Tunisia. Other countries used a broader concept of forest and included trees and brushwood, whether or not it had or would have value as wood, timber or other forest products, e.g., Dominican Republic, Mexico, Colombia, Virgin Islands, Burma and Philippines.

In Austria, Czechoslovakia, the Federal Republic of Germany, Luxembourg, Saar and Yugoslavia, special attention was directed to the inclusion of temporary deforested land destined to be reforested, and in the first three countries and Saar also to nurseries of forest trees. In the United Kingdom, woodlands included osiers and willows.

UNCULTIVATED PRODUCTIVE LAND

Insofar as it was included as a separate item in the census, uncultivated productive land covered very heterogeneous kinds of land, but in most cases the item was in accordance with the definition of the Program.

Most of the countries which included a section on land utilization in their census enumerated also the *Remainder* of the holding, so as to arrive at the total area, which provided a check with other specifications of the same area, as for instance, according to land tenure.

SECTION C - AGRICULTURAL POPULATION

1. Agricultural Population as Conceived in the Program

Two criteria are generally used for distinguishing the agricultural population from other sections of the population, viz.,

- (1) Occupational affiliation with agriculture; and,
- (2) Residence on the farm.

When the first criterion is used, the agricultural population is defined as persons engaged in agricultural occupations, together with the unoccupied members of their households (or with persons dependent on them), or as the population in households whose heads are engaged in agriculture. When the criterion of residence was applied, the agricultural population was, in general, defined as the population living on farms or agricultural holdings.

In agricultural censuses conceived as enumerations of agricultural holdings, the residence criterion which is directly related to the holding seems, from the point of view of the enumeration technique, the most appropriate. In that case only the persons living on the holding are enumerated. In several countries, however, the farmers do not live on their land, but away from it, in villages. If therefore, only the agricultural population living on the holdings were to be enumerated, a large number of persons actually part of the agricultural population would be excluded. It was considered more important to enumerate the members of the holder's household. This question therefore was included in the more restricted List A. In the extended List B, however, an additional question was included concerning the number of persons living on the holding who were not members of the holder's household, regardless of whether such persons worked on the holding or not. While the more restricted list used the household criterion, the more adequate list used both the household and the residence criteria. In countries where most of the agricultural population live on the holdings, the residence criterion could be approximated in this way. In countries where holders in general do not live on farms, a larger number of persons could be covered than by the use of the residence criterion only. The number, however, would be different from that of occupational affiliation, because it would not cover agricultural laborers without a holding and not living on the farms. It would cover on the other hand agricultural holders and other persons living on the holding whose main occupation was outside agriculture.

To determine further the dependency of the holder on agriculture, the Program included a question concerning the number of days in the past twelve months spent by the holder on paid work not connected with the operation of the holding, with a further subdivision for work:

- (a) in agriculture on other holdings;
- (b) in nonagricultural pursuits.

Finally it was proposed to collect information on the kind of nonagricultural occupational affiliation by means of a question concerning the principal non-agricultural occupation of the holder. This question would make it possible to tabulate the members of the holder's household according to the latter's occupational affiliation.

2. Agricultural Population in the National Censuses

The various concepts used in the national censuses to define agricultural population show a great variety and may be summarized in the following broad groups:

COUNTRIES IDENTIFYING THE AGRICULTURAL POPULATION AS ALL PERSONS LIVING IN THE AGRICULTURAL HOUSEHOLD OF THE HOLDER

Eleven countries (Belgium, Greece, Luxembourg, Netherlands, Yugoslavia, Cyprus, India, Japan, Ryukyu Islands, Turkey, Tanganyika), defined the agricultural population as the holder and members of this family and other persons living in the household.

Five countries added that persons temporarily absent should be included (Belgium, Luxembourg, Netherlands, Yugoslavia and India). One country (Japan) called for information on the persons usually living in the household. The information asked in Austria referred to persons employed in agriculture living in the agricultural household of the holder and to the nonworkers who were continuously receiving board and lodging.

Norway and the Federal Republic of Germany used a somewhat different concept and included the holder and members of his family as well as unrelated persons who were both working on the holding and living in the household. Dependents of the workers who might live on the holding were not included.

COUNTRIES WHICH ENUMERATED MEMBERS OF THE HOLDER'S HOUSEHOLD AND OTHER PERSONS LIVING ON THE HOLDING

The four countries — Guatemala, Panama, Bolivia and Israel (Jewish holdings) — which adopted this criterion corresponding to that of the Expanded List of the FAO Program, used different definitions to identify the two groups on which information was required.

In Bolivia the first group was identified as the number of family members living in the house of the holder; in Guatemala, as the number of persons who constitute the holder's family, including domestic

servants ; in Panama as the number of persons who live on the dwelling of the holder ; and in Israel as all farmers and members of their household, even if they did not work on the holding. Among the other persons living on the holding there were included, in Guatemala, employees and other persons living within the area operated by the holder ; in Panama, other persons living on the holding, excluding holders of other holdings and members of their households ; in Bolivia, other persons residing on the holding such as *colonos*, wage workers (*jornaleros*) and other persons regardless of whether they worked on the holding or not ; and in Israel, farm workers who live on the holding but keep a separate household. Only in the case of Panama was reference made to the location of the holder's household, whether located in the holding or elsewhere.

COUNTRIES IDENTIFYING THE AGRICULTURAL POPULATION AS THE NUMBER OF PERSONS LIVING ON AGRICULTURAL HOLDINGS

This group includes Czechoslovakia, Dominican Republic, Argentina, Uruguay, Thailand, Belgian Congo (Europeans and developed negroes), Northern Rhodesia, Southern Rhodesia, Union of South Africa, Australia and New Zealand.

In general, it was stated that the population living on the holding should refer to the holder, members of his family and other persons such as children, workers, domestic servants. Some countries added that there should be included :

- (a) persons residing on the holding, excluding guests (Argentina) ;
- (b) persons residing permanently (Australia) ;
- (c) persons actually resident on the holding (New Zealand).

In Northern and Southern Rhodesia, the data on agricultural population on European holdings referred to Europeans only. Data on temporarily absent persons were asked in the Union of South Africa and Australia.

OTHER CRITERIA TO IDENTIFY THE AGRICULTURAL POPULATION

Venezuela asked for the number of persons supported by the holder, excluding the remunerated workers. Brazil enumerated the number of families, excluding the holder's family, who reside permanently on the holding.

SECTION D - EMPLOYMENT IN AGRICULTURE

1. Employment in Agriculture as Conceived in the Program

The Expanded List of the Program proposed the collection of information on the number of persons engaged in agricultural work connected with the operation of the holding. An inclusive definition of "agricultural work" was not given. The Program indicated, however, that agricultural work connected with the holding included care of poultry, cheese-making, etc., but not work related to the operation of the home.

For the enumeration of the agricultural employment two approaches were suggested. First, to relate the questions on this topic to a short and recent period of time, preferably the week preceding the census date. If this week was not representative of the usual or prevailing situation, it was considered preferable to use another approach, and to relate the questions to the whole year. It was also considered possible that some countries would obtain information on both the census week and the census year.

For both approaches a distinction was suggested between family workers and hired workers. In the first group the holder was to be included, regardless of how much time he spent in agricultural work. The members of his family, however, were to be enumerated only if they spent at least one third of normal working time in agricultural work connected with the holding. Both groups were to be classified by age and sex.

The Program was careful to qualify members of the holder's family by the phrase "not receiving full wages in money". Family members working on the holding in receipt of full wages were to be regarded as hired workers.

For the hired workers a classification was proposed according to duration of employment as follows :

- (i) employed for 12 months ;
- (ii) employed for 6 to 11 months ;
- (iii) employed for 1 to 5 months ;
- (iv) employed for less than one month.

The idea behind this proposal was that data were desired on the number of days worked by the temporary workers for the purpose, among others, of assessing equivalent number of man-years. It could not be expected, however, that the large numbers of farmers in various countries of the world who do not keep any records would be able to supply this information with a reasonable degree of accuracy. As a

substitute for the number of days worked, a broad classification according to duration of employment was proposed. It was assumed that every cultivator would be able to classify his paid laborers in one of these four duration classes, even if he had to rely on his memory only.

As a general check on the employment data, and also for the purpose of payroll statistics, an item was further included in the Program concerning the amount of cash paid, or to be paid, for work done on the holding during the past year. This was the only money item included in the whole Program.

2. Employment in Agriculture in the National Censuses

Employment in agricultural work connected with the holding was investigated by 58 countries and territories in their agricultural censuses. Seven more territories, all British dependencies, provided information on the subject which was based mainly on their census of population.

In enumerating agricultural labor, some countries excluded the holder, his wife and children under a certain age or still at school (Denmark and the United Kingdom) ; others asked for data on hired workers only, including members of the family of the holder who worked for pay (Canada). One country (Ireland) asked only for the males engaged in agriculture. Nigeria and British Cameroons investigated the number of male tax-payers engaged in agriculture (information collected partly in the 1950 agricultural survey and partly from the regular tax records) ; Northern and Southern Rhodesia required data on both Europeans and Africans working on European holdings, but Southern Rhodesia limited the data required on Africans to males only.

Eight countries specified a lower age limit for the persons to be included in the labor force. Malta and Gozo and Cyprus enumerated family members over 14 years of age, and the Ryukyu Islands those of 15 years of age and over. Ireland and Puerto Rico asked information for persons 14 years of age and over and Norway for persons 15 years of age and over. The Federal Republic of Germany adopted the age limit of 14 years and over for workers not belonging to the family of the holder. In the Dominican Republic the age limit was ten years.

The concepts and definitions used to identify the persons who were considered as engaged in agricultural work connected with the operation of the holding were as varied as those concerning agricultural population. The main concepts used can be summarized as follows.

EMPLOYMENT IN AGRICULTURE

Some countries regarded agricultural workers as those persons employed exclusively or mainly in agricultural work on the holding (Czechoslovakia, Mexico) ; other countries regarded as agricultural workers those who had been working on the holding for a minimum period, at least three days or its equivalent in hours (Honduras), or at least two days (Panama), during the week previous to the census day. The majority of the countries enumerated the number of persons who were engaged on agricultural work on the holding during the period taken as reference for the census (a day, a week, a year), and some others have specified the period that should be spent by the holder and members of his family to qualify as agricultural workers, according to the following practices.

The holder was to be included if he had worked during the census week at least one hour (United States and Hawaii), or at least two days (Puerto Rico), or if he had spent the great part of his normal working time on his farm (Ireland). Only in a very few cases was it explicitly stated that the holder should be included regardless of time worked (Chile, Argentina and Ecuador). Ceylon indicated that the holder should be included if he had actually worked.

The members of the holder's family were to be included if they had worked during the census week 15 hours or more (United States and Hawaii) ; at least two days or its equivalent during a week (Costa Rica, Chile, Puerto Rico) ; two days or more during a week or four months or more during the year (Colombia) ; if they had helped regularly or permanently on the holding (Honduras, Brazil, Ceylon) ; if they were working continuously on the holding for 30 days during the census year (Ecuador) ; if they were working permanently not less than three hours per day on the holding (Israel).

Agricultural work connected with the operation of the holding was not uniformly defined. Countries which included forestry holdings in their agricultural census in general considered work on those holdings as agricultural work, but Denmark, for instance, excluded it explicitly. The Federal Republic of Germany, Finland, Norway and the Union of South Africa included housework. Other countries expressly indicated that housework was not to be considered as agricultural work (Netherlands, Canada, United States, Costa Rica, El Salvador, Puerto Rico, Brazil, Australia, Hawaii), or that housework done by members of the holder's household should not be included as regular work of the holding (Dominican Republic, Honduras, Argentina, Chile, Colombia and Ecuador).

There are also some types of work which some countries considered as agricultural work, while others

did not. Some countries explicitly included the work of farm artisans (Austria, Germany, Algeria and Tunisia), while others have expressly excluded it (Denmark, Netherlands, Costa Rica). Finland investigated separately, and in an extensive form, the handicraft work done on the holding. Other countries indicated that agricultural industries such as sugar mills, slaughterhouses, etc., should not be included (Costa Rica, El Salvador, Brazil, Hawaii) and in one case even the making of butter and cheese was to be excluded (Costa Rica). The Dominican Republic stated that the feeding of poultry and small repairs were not to be considered as forming part of the agricultural work on the holding. Contract work was explicitly included in Belgium, Denmark and United Kingdom. Construction work was included in Finland but excluded in United Kingdom. Burma considered as nonfarm operations the making of rubber sheet and the manufacturing of molasses. Ceylon, on the other hand, included workers and technicians engaged in the manufacture of tea and rubber.

The tasks performed by family members which were to be regarded as agricultural work connected with the holding, have been described in a few cases, e.g., Chile and Ecuador indicated that such jobs would include care of livestock, cheese-making, etc., and Uruguay specified that chores done by the holder's wife, such as cooking for the agricultural workers or by children such as taking care of poultry, calves, etc., should be considered as work connected with the operation of the holding.

FAMILY WORKERS AND HIRED WORKERS

When making the distinction between workers belonging to the family of the holder and other workers, the main criterion adopted was whether they were unpaid or paid. Eighteen countries defined the family members as unpaid; one country classified separately those paid and those unpaid (Belgium); three countries specified that they might be paid or unpaid (Panama, Argentina, Ecuador) and 19 countries did not give any indication on the subject.

The second group of workers was defined by the majority of countries as hired workers and only in a very few cases as workers other than those belonging to the family of the holder (Austria, Denmark, Ireland, Netherlands and Saar). In a few cases only, hired workers included explicitly family members working for pay (Costa Rica, Honduras, United States, Brazil, Venezuela, Australia, Hawaii), and, as already mentioned, one country showed separately the family members working for pay and those who did not receive wages or salaries for their work.

PERMANENT AND TEMPORARY WORKERS

The different approaches to the definition of permanent and temporary workers are illustrated in the following.

Permanent workers

- (a) Those persons whose work input would be equivalent to at least half a year (Austria, Federal Republic of Germany and Saar) or who were engaged in types of work which require the whole year or at least six months (Panama);
- (b) Those persons working regularly on the holding for at least one third of their total working time (Netherlands, El Salvador);
- (c) Those regularly employed doing full-time work on the holding (United Kingdom), or working on a fixed or permanent basis (Argentina), engaged in work of long duration (Brazil) or working permanently during the agricultural season (Algeria, Tunisia);
- (d) Those regular workers whose expectation of employment was 150 days or more (United States, Hawaii).

Temporary workers

- (a) Those whose work input would be equivalent to less than half a year (Austria, Federal Republic of Germany, Saar);
- (b) Those persons working regularly, but employed on the holding for less than one third of their total labor time, including casual workers employed during certain seasons (Netherlands);
- (c) Those who have worked or were expected to work during the census year for less than 150 days (United States, Hawaii);
- (d) Those persons working for a day or some weeks (Dominican Republic) or for a period less than the agricultural season (Algeria, Tunisia); or for a short period, not exceeding two months (Panama).
- (e) Seasonal, temporary and regular part-time agricultural workers, including contract work (United Kingdom);
- (f) Occasional workers employed for special or transitory work (El Salvador, Argentina and Brazil).

SECTION E - CROPS

1. Crops as Conceived in the Program

The enumeration of crops in an agricultural census provides more detailed information on the agricultural structure of a country than can be derived from the broad classes of land utilization included in Section B. The ultimate object, however, is to determine crop production. The Program pointed out that for better estimates of production, other methods may yield better results than direct individual enumeration of all holdings. The Program has therefore been based on the assumption that, in most countries, crop production would be estimated by multiplying the number of producing units by the average yield per unit. For crops on arable land it proposed the enumeration of the area. In the case of tree crops the number of producing units was to be measured in general by the number of trees.

CROP AREA ON ARABLE LAND

The Program emphasized that the area to be reported under each crop should be carefully defined as to phase. If the census was taken after the crop had been harvested, the "area harvested" was expected to be reported. But if the census was taken during the growing season, it was considered most likely that the area enumerated should be reported. Furthermore, certain provisions were made for the enumeration of either "area sown" or "area under crops at the census date".

Associated or mixed crops. In Section B — Land Utilization, the rules given in the Program for the enumeration of associated crops belonging to different classes of land utilization have already been considered. For crop combinations belonging to the same class of land utilization the Program mentioned two cases: (1) crops sown between or in the rows where a row crop was already sown at approximately normal planting distance; (2) mixed plantings, including different kinds of trees, vines and shrubs. In both cases the area occupied by each crop should be given separately wherever it could be determined. If a more or less exact assessment were not possible, an estimate had to be made.

Special provisions also were made for the enumeration of areas sown more than once in the year (successive crops). When two or more crops were grown and harvested successively, but in the same agricultural year, on the same land, the area of such land had to be entered according to the Program opposite the first crop and included in the total for the related category. The same area had also to be

entered for the other crops with an appropriate indication. It was further stressed that in such cases, as well as in the case where two harvests of the same crop were taken on the same land in the same year, it was essential that the information should be obtained in such a way that the total area reported for a crop was correctly shown and that the duplication could be eliminated from the total area of the holding.

AREA AND NUMBER OF TREES

The Program proposed to collect data about the number of trees of bearing age. If preferred, the area under such trees could be reported. In that case, however, an indication was desired of the average number of trees per unit of area. For grapes the productive area and not the number of trees was asked.

Area was also asked for nurseries which, from the point of land utilization were listed in the class, "land for growing trees, vines and shrubs".

2. Crops in the National Censuses

CROP AREA ON ARABLE LAND

In the national censuses, in the main, two general concepts of crop area were used. One of these was the concept recommended by the FAO Program, according to which the crop area was not a physical entity, but an aggregate of all the areas of each crop grown during a certain period, mostly a calendar year or an agricultural year. The other concept used was the actual physical area under crops at a certain date, most often the census date when the census was taken during the main crop season. While the first concept was largely used in countries having more than one crop season of importance, the latter was applied in countries which have one predominant crop season and where the secondary crops are only of very minor importance. The physical area was used in most of the European countries which participated in the 1950 World Census. Most other countries used the aggregate crop area.

Gross and net area. Very few countries — as far as could be ascertained only four — indicated in their census instructions whether the *gross*, i.e., the whole area of the fields bearing the crops, including headlands, bunds, uncultivated patches, small irrigation ditches, etc., had to be enumerated, or whether the *net* area, the area actually under the crop should be reported. The reason for the absence of instructions in this matter might have been that there existed in the country a current method of measuring or expressing crop areas (e.g., cadastral area of fields) or

it might also have been that the difference between gross and net area was small (or, at any rate, relatively small) in comparison with the total margin of error in the crop areas reported.

Of the countries which gave specific instructions on this point the Netherlands, Ceylon (for small holdings) and Japan adopted the net area. In the Netherlands this meant the area actually under the crops, including the narrow paths inside or along the plots, but excluding shoulders, ditches, roads, shelter-belts, etc. In Ceylon the crop areas excluded the areas covered by bunds and ridges, which were to be entered under uncultivated arable land if they did not carry any agricultural crop. The United Kingdom (Scotland), on the contrary, included in the area under crops, headlands and ditches attributable to the crop.

Area sown and area harvested. Among the countries and territories which made this distinction, no strong preference can be observed, in the enumeration of rotation crops, for the use of either the area sown or area harvested. Against 34 countries using the first concept, 32 enumerated area harvested. To the first group belong: Yugoslavia, Dominican Republic, Panama, Argentina, Chile, Israel, Jordan, Philippines, Turkey, Northern Rhodesia, Southern Rhodesia, Union of South Africa, Australia, Cook Islands and 20 British dependencies. Area harvested was enumerated in Alaska, Canada, United States, Puerto Rico, Virgin Islands, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Bolivia, Brazil, Colombia, Venezuela, Iraq, Japan, Ryukyu Islands, Thailand, American Samoa, Guam, Hawaii and ten British dependencies. Ecuador, Uruguay and Burma enumerated area sown as well as area harvested.

Although in general there is no strong preference one way or the other, in certain groups of countries such a preference can be clearly distinguished. It may be a result of common instructions or mutual agreement. Of 22 American countries and territories, 15 enumerated area harvested, four area sown, two used both; 20 out of 30 British dependencies used the area sown or planted. Another clearly distinguished group in the enumeration of crop area was formed by the European countries. These countries practiced the system of enumeration of the actual physical crop area at a certain date, which implies the use of the concept of "area under crops" at the census date. This practice was followed in Belgium, Denmark, Finland, Ireland, Luxembourg, Netherlands, Norway, United Kingdom. In Austria, Czechoslovakia, the Federal Republic of Germany, Saar, and Switzerland, the area under the principal crops

was enumerated, but as the census took place during the predominant crop season, this means the same as the enumeration of the area under crops at the census date if a few exceptions of minor importance are disregarded.

In Nigeria the "area under crops" concept had also to be adopted in consequence of the method of enumeration used. Although in general enumerating the area harvested, some countries enumerated also the area planted or cultivated in respect of rotation crops staying in the field more than one year. This was for instance the case with soybeans, peanuts, cowpeas and velvet beans in certain parts of the United States, with pineapples in Puerto Rico, with sugar cane in Guatemala, Colombia, Bolivia, and Hawaii, in Bolivia also with cotton, manioc and alfalfa. In connection with the difficulties of enumerating the many harvests of vegetables, some countries otherwise enumerating area harvested gave instructions to enumerate the area cultivated at the census date for these crops only. This is the case in the United States, Puerto Rico and Iraq.

Some special cases of enumeration of crop areas may further be mentioned. In Haiti the area which had been cultivated during the last twelve months had to be reported. By inference this is assumed to mean the area sown or planted. In New Zealand, the "area" enumerated for grain, rootcrops, etc., is probably the area sown.

Since many cultivators in Turkey were not able to express the area of their fields in a fixed unit, the number of fields used for each crop and the amount of seed planted was required in the questionnaires for most crops.

Associated or mixed crops. The national practices concerning the treatment of associated crops have already been reviewed in Section B - Land Utilization, and only the treatment of interplanted or mixed crops, i.e., crops belonging to the same class of land utilization grown together at the same time in the same field, is being considered here.

Of the countries which have given special instructions concerning the enumeration of mixed crops, Switzerland, Jamaica, Panama, Ceylon, Iraq, Israel, Thailand, Algeria, Nigeria and Australia have followed the FAO proposal that the area should be given separately wherever it could be determined. The Program assumed that at least an estimate could be made in all cases. In some countries instructions were given for the cases where this was not possible. Thus Switzerland, Jamaica and Ceylon entered the area against the principal or most important crop. In Thailand and Hawaii the full area for both had to be reported. In the Dominican Republic and

Belgian Congo, the area had to be enumerated under mixed crops if the division was impossible.

Among the other countries which gave instructions on this topic there is a tendency to enumerate all mixtures of crops as such, either by including a special item or rubric for these crops, or by having the fact that they were grown mixed reported in the questionnaire. One or more special items or rubrics for mixed crops were included in the censuses of Austria, Federal Republic of Germany, Netherlands, Saar, United Kingdom, United States, Chile, Colombia, Burma, India and Tanganyika. Mixed crops had to be reported by making notes on the questionnaires in the Dominican Republic, El Salvador, Argentina, Bolivia, Ecuador, Southern Rhodesia. The full area for each crop had to be reported in Honduras, Brazil and Turkey (*mukhtar* questionnaire).

Successive crops. The treatment of successive crops is closely connected with the general system of enumeration of crop areas outlined in the introductory part of this subsection. Countries which enumerated the area under crops at the census date mostly omitted from their census the secondary crops which were not in the field at the census date. Austria, the Federal Republic of Germany and the Saar even excluded the secondary crops when they were in the field at the census date and enumerated the principal crops which would be cultivated on that land. Countries following the system of "area under crops at the census date" in several cases had repeated enumerations for crops such as vegetables, which are harvested several times a year.

Most other countries have enumerated in their censuses, in accordance with the FAO Program, the whole cycle of crops grown during an agricultural or calendar year and have recorded the entire acreage for each crop grown during that period. Special instructions were given to this effect in Alaska, Canada, United States, Costa Rica, Dominican Republic, Mexico, Panama, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Venezuela, Burma, India, Iraq, Israel, Philippines, Ryukyu Islands, Thailand, Algeria, Belgian Congo, Nigeria, Australia, Hawaii and New Zealand. In doing this, several of these countries have followed the suggestion, made by the FAO Program, to mark the second and eventually the following crops as such, so as to distinguish them from the first crops grown, sometimes by providing a special space in the questionnaire for these crops. This was the case in Costa Rica, Dominican Republic, Mexico, Argentina, Bolivia, Chile, Colombia, Ecuador, Venezuela, India, Iraq, Belgian Congo, Nigeria and New Zealand.

In Nigeria a special difficulty arose which may also have occurred in other African territories. In some regions it is the practice for a late crop to be interplanted with an early one when the latter is approaching the time of the harvest. It was not clear in such cases whether the late crop should be regarded as a mixed crop or as a successive crop. During the survey each such instance had to be treated on its own merits, the underlying principle being that whenever the late crop did not affect the spacing and growth of the early crop, it should be treated as a successive crop; in all other circumstances it was regarded as a mixed crop, and the total area was apportioned accordingly.

AREA AND NUMBER OF TREES

Both area and number of trees were used in the national censuses for measuring the production units of tree crops. There were, however, considerable differences in this regard between the various groups of tree crops as distinguished in the FAO Program. In some groups the preference went to area, in others to number of trees. The choice made between these two concepts will therefore be considered separately for each group.

Grapes. Of the 33 countries which included grapes as a separate item in their censuses, only four countries enumerated the number of vines. Two of these, the United States (for California), and Argentina, enumerated in addition the area under grapes. The great majority of countries have followed the suggestion of the FAO Program to enumerate the area for grapes.

Olives. This crop was always enumerated by number of trees, except in Cyprus where the area under olives was reported.

Spices. Of 53 cases in which crops of this group were enumerated, 26 were enumerated by area, and 27 by number of trees or vines.

Citrus fruits. The enumeration of citrus fruits follows, to a large extent, the proposals of the FAO Program. Of the 56 countries which have included these fruits in their censuses, 39 enumerated the number of trees, two the area of compact plantations and the number for scattered trees, and 14, mostly British dependencies, the area under citrus trees. Only Israel enumerated both area and number of trees.

Non-citrus fruits. In non-citrus fruits the tendency to follow the concept of production unit, proposed in the Program, is also clear. Of 68 countries, 49 enumerated the number of trees, and 18 the area, while

one country enumerated the area for compact plantations and the number for scattered trees.

Nuts. In this group the preference for the number of trees is much stronger. Of 28 countries, 24 enumerated the number of trees and only four the area.

Small fruits. For this group a strong majority followed the FAO Program by enumerating the area under these fruits. Only five of the 23 countries reported the number of bushes for certain small fruits. Strawberries and raspberries were always enumerated by area, except in Belgium, where the latter were reported by the length of rows.

Miscellaneous cultivated trees. One or more items of this group were included in the censuses of 59 countries. Twenty-five countries enumerated the number of trees, 28 the area. Six countries enumerated certain crops according to the number of trees and others according to area.

Nurseries. These were always enumerated by area, except in Argentina where the total area of nurseries was enumerated by the number of fruit trees, nut trees, vines and olive trees, forest trees and flowers in nurseries.

Trees in production or not. Only about one third of the census countries have followed the suggestion of the Program to enumerate trees of bearing age. Twenty-three of these enumerated both the trees in production and those not in production. The majority of the countries did not make this distinction. Some of them, however, classified the tree crops in age groups. There are typical regional differences. The European countries, with the exception of Czechoslovakia and Luxembourg, did not make a distinction between bearing and nonbearing trees. Most of the American republics enumerated both. The British territories in America, on the other hand, did not make the distinction. Asia is about equally divided. India, Turkey, and most of the British territories did not make the distinction. Iraq, Israel, (Arab holdings), Japan, Malaya (tea and oil palm only), Thailand, and Ryukyu Islands enumerated trees in production. Burma, Israel (Jewish holdings), Jordan, and Philippines, enumerated separately trees in production and trees not in production. In Africa only Belgian Congo, Southern Rhodesia and Union of South Africa made this distinction. Oceania showed no great interest in this form of enumeration. Australia, Cook Islands and Hawaii enumerated the productive and nonproductive trees separately.

Only four countries defined "trees of bearing age". The countries and definitions were:

- Costa Rica : plants which had given at least one harvest.
- Panama : bearing fruit trees and productive plants included those which were in full production or had yielded products in the year 1950.
- Argentina : bearing plants were considered to be those which gave or had given fruits.
- Israel : fruit-bearing trees were trees which bore fruits in 1949/50.

SECTION F - LIVESTOCK AND POULTRY

1. Livestock and Poultry as Conceived in the Program

A census of livestock and poultry raises, to a certain extent, problems similar to those of a population census. In taking the census the individuals can be assigned either to the areas of their usual residence, or to the area in which they are physically found on the date of the census, regardless of their usual residence. In terms of a census by holdings this means that the animals are to be enumerated either on the holding where they are owned, or on the holding where they are found on the date of the census.

According to the FAO Program, the census should include all livestock on each holding, whether or not they belonged to the holder. However, animals owned by the holder which were temporarily away from the holding at the time of the enumeration, but not on other agricultural holdings (for instance, livestock that was grazing on common pasture, unenclosed prairies or on cultivated land) should be included in the enumeration, because otherwise they would not be covered by the census.

The Program further suggested that the reporting of the number of animals take place on the day of the census. As a means of avoiding errors of memory, this proposal was more of a methodological than of a conceptual nature. The date of the census has, however, also considerable importance. In many countries livestock numbers and the composition of the herd show a strong seasonal movement. Young animals are mostly born in a certain part of the year, while at other times increased slaughterings or cattle movements take place. The result of this is that livestock numbers show alternately a maximum and a minimum which may differ considerably. The Program did not make any proposals, as previous world census programs did, as to whether the enumeration should take place at the maximum, at the minimum phase, or at another phase of the cycle.

Livestock and Poultry in the National Censuses

For several countries no information is available as to whether the livestock owned by the holder, or the animals present on the holding at the census date, regardless of ownership, were enumerated. Among the countries which gave specific instructions in this respect a relatively small number enumerated the animals owned by the holder. In the majority of countries the animals existing on the holding, whether owned by the holder or belonging to others, had to be reported.

Livestock owned by the holder were enumerated in the Federal Republic of Germany, Luxembourg, Netherlands, United Kingdom (Northern Ireland), Yugoslavia, Ecuador, India, Iraq, Israel, Egypt, Nigeria (opinion surveys), Southern Rhodesia, and Australia (except Victoria). The Federal Republic of Germany, although in principle enumerating livestock owned by the holder, made an exception for livestock belonging to others kept on the holding for a long time (horses of refugees, bulls kept jointly, boars kept jointly). These animals were to be enumerated on the holding where they were found.

Livestock present on the holding at the census date were reported in Austria, Belgium, Finland, Greece, Ireland, Norway, Portugal, Romania, Saar, Sweden, United Kingdom (England and Wales and Scotland), Alaska, Canada, United States, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Mexico, Panama, Puerto Rico, Jamaica, Virgin Islands (U.S.), Argentina, Bolivia, Brazil, Chile, Colombia, Uruguay, Venezuela, Burma, Ceylon, Japan, Philippines, Ryukyu Islands, Thailand, Turkey, Algeria, Mozambique, Nigeria (village surveys), Union of South Africa, American Samoa, Australia (Victoria), Guam, Hawaii and New Zealand. Several of these countries followed the proposal of the Program to include any animals owned by the holder which were temporarily away from the holding at the time of the enumeration, but were not on other agricultural holdings. India has enumerated the number of animals owned, asking at the same time whether any were hired in or hired out.

Some special deviations from the main principle of livestock enumeration may further be mentioned. In Canada, bees were related to the farm of the operator holding them, rather than to the farm on which they were located. The place where the cattle slept was the enumeration criterion in Mexico. In Argentina, cattle which were owned by the holder but were found in auction and other markets, cold storage plants and slaughterhouses were also included.

Brazil excluded herds of oxen or cattle on the move which belonged to other persons and were gathered temporarily in the fields or stable of the holder.

LIVESTOCK ON HOLDINGS AND TOTAL LIVESTOCK

Countries which took a census by holdings enumerated by definition the livestock on agricultural holdings or the livestock owned by the holders. In several cases however, because of the definition of an agricultural holding, or for other reasons, it was necessary to make special provisions to ensure that all, or practically all the livestock in the country were covered. This was, for instance, the case in Belgium, Ireland, Luxembourg, Netherlands, Portugal, United Kingdom (Northern Ireland), Yugoslavia, Costa Rica, Dominican Republic, Guatemala, Haiti, Mexico, Brazil, Iraq, and Egypt. For example in the case of Belgium the census included all keepers of one or more animals of the following kinds: horses, asses and mules, cattle, sheep, pigs, goats, poultry and bees.

In countries which did not take a census by holdings but either took a special livestock census, or made special estimates, all the livestock in the country may be assumed to be covered.

CENSUS DATE

In general the available census material does not permit an indication of the stage of the annual livestock cycle at which the animals were enumerated, but certain conclusions can be derived from the distribution of the livestock censuses over the various months of the year. The following table refers to countries which had fixed a certain date for the livestock enumeration. Cases when the enumeration was extended over a longer period have been excluded.

Month	Number of countries
January	3
February	2
March	2
April	15
May	8
June	9
July	4
August	5
September	—
October	4
November	3
December	18

The figures mentioned above show a concentration for the months of April, May, June and December. In fixing the date of the census several considerations

were taken into account in addition to those concerning the phase of the livestock cycle. The livestock data for many of the British colonial territories refer to December, probably because they were taken in conjunction with a population census. The United States and its territories took their census in April. If these dependencies, etc., are excluded, and a distinction is made between countries in the Northern and Southern Hemisphere, the distribution can be shown as follows:

Month	Number of countries	
	Northern Hemisphere	Southern Hemisphere
January	2	1
February	2	—
March	—	1
April	5	1
May	7	2
June	10	—
July	1	1
August	3	1
September	—	—
October	3	—
November	1	2
December	1	—

For the Northern Hemisphere there was a strong concentration of the censuses in the early summer when the livestock numbers are near their maximum. The censuses in the southern part of the world were distributed over the whole year and did not permit any conclusion as to the phase of the livestock cycle at which the enumeration took place.

SECTION G - AGRICULTURAL TECHNOLOGY

1. Agricultural Technology as Conceived in the Program

This section of the Program included three subsections:

- (1) the use of power;
- (2) the kind of power used;
- (3) specified equipment.

USE OF POWER

The Program pointed out that one of the very important measures of the level of living of agricultural people is the extent to which cultivation of the soil and other agricultural work are dependent upon human power alone. It proposed therefore that every

government should include in its census of agriculture at least the two following simple questions:

- (a) was animal power used on this holding last year?
- (b) was mechanical power used on this holding last year?

The answer to these questions should refer to the agricultural work done on the holdings, which however was not further defined. It was not considered necessary for the purpose of the Program to ascertain whether the holder owned draft animals or mechanical power but, rather, whether he had them available for his own use. Mechanical power should include engines, electricity, wind and water power used in agricultural work. The answer to these two simple questions was expected to give the basic information on the use of power. These questions were therefore included in both the A and B lists.

KIND OF POWER USED

The Expanded List further proposed inquiry into the kinds of power which were used on the holding. In this case also the information should be given regardless of whether the source of power was owned by the holder, rented, co-operatively owned or secured through some other arrangement. Only the kinds of power used for agricultural work should be reported, including power used for the production of agricultural commodities and for first processing ordinarily done on agricultural holdings. Power used for milling, weaving, sawing lumber, etc. should be omitted.

The use made of electricity was also regarded as an important indication of the degree of mechanization of the agricultural holdings. The Expanded List included therefore three questions on this subject and proposed to ask whether electricity was used for: (a) lighting on the holding, (b) for other purposes on the holding, and (c) whether there was an electric distribution line near the holding. The first two questions should include power generated on the holding.

SPECIFIED EQUIPMENT

This subsection of the Program included questions on a few kinds of machines only. There were machines indicating a certain level of mechanization of the agricultural work such as tractors, reapers and binders, harvesters-threshers, threshers, trucks and automobiles. Two kinds of questions were proposed: (a) whether the machines were used on the holding in the year preceding the census, and (b) the number of each of these machines on the holding at the date of enumeration.

2. Agricultural Technology in the National Censuses

USE OF POWER

As already pointed out in Chapter 3, the use of animal or mechanical power mainly interested underdeveloped countries. The questions which were asked in those countries were practically always those proposed by the Program. In a number of cases, however, the questions were further defined.

Costa Rica, Panama, Colombia, Ecuador and Japan defined agricultural work in the power context. Colombia's concept involved the inclusion of work necessary for production, but not that for transport to the market or domestic work. Guatemala excluded animal and mechanical power for sugar-mills, coffee factories, and sawmills. Brazil excluded motorized vehicles from mechanical power. Ecuador also excluded transport to the market and further industrial processing of agricultural products such as dairy products, sugar cane derivatives and rice and coffee. Japan excluded the power used for milling and that for the manufacture of textiles and timber.

Some countries have further clarified the meaning of the term "mechanical power". The United Kingdom (England and Wales) defined it as any machine propelled or operated by petrol, oil, gas, electricity, wind or water. Panama and Ecuador used a similar definition. In other cases examples were given to indicate the type of machines to be included, thus: Costa Rica: tractors, reapers, sowing machines; Honduras: tractors; Panama: mechanical plows, tractors, sowing machines; Brazil: tractors, jeeps, etc.; Chile: tractors; Jordan: tractors; Israel: tractors, other mechanical power.

KIND OF POWER

Very few countries asked any questions included in this subsection of the Program except as regards the use of tractors (six countries) and electricity (16 countries). The enumeration of tractors will be considered with those of other machines in the next subsection. Of the 16 countries which included questions on the existence of electricity on the holding, the following ten made inquiries as to whether the electricity was purchased, generated on the holding, or obtained from both sources: Ireland, Alaska, Canada, United States of America, Costa Rica, Guatemala, Honduras, Chile, Ceylon (estates) and Hawaii, and thus explicitly included electricity generated on the holding.

SPECIFIED EQUIPMENT

As already stated in Chapter 3, many countries, instead of asking the limited questions proposed in

the Program, included a more or less complete list of agricultural machines in their census, sometimes comprising more than 100 different kinds of machines.

Few countries asked questions only on the use of these machines. Austria, Dominican Republic, El Salvador, Iraq and the Union of South Africa (questionnaire for "whites") asked the number of machines used during the previous year. Much more frequent was the inclusion of a more or less complete inventory of various machines at the census date. Such an inventory appeared in the censuses of the following countries: Belgium, Finland, Ireland, Yugoslavia, Alaska, Canada, Costa Rica, Honduras, Panama, Puerto Rico, United States, Virgin Islands, Argentina, Bolivia, Brazil, Venezuela, Ceylon (estates), Philippines, Ryukyu Islands, Turkey, Southern Rhodesia, Tunisia, Union of South Africa (questionnaire for "natives"), Hawaii and New Zealand. Venezuela asked the number of machines used during the agricultural year as well as an inventory at the moment of the enumeration.

Thirteen countries made some provision for a separate count of machines owned and machines belonging to others. This was the case in Belgium, Czechoslovakia, Finland, Federal Republic of Germany, Netherlands, Norway, Saar, Dominican Republic, El Salvador, India, Israel (Jewish farms), Jordan and Turkey (*mukhtar* questionnaire).

The questionnaire for the enumeration of machines belonging to others showed a very great variety. A form of enumeration found in more than one case was a classification according to the type of ownership of the machines, i.e., whether owned by a combination, by co-operatives, by contractors, etc. In Czechoslovakia and Mexico the number of working days was asked for machines not owned by the holder. The number of machines was counted only for machines owned, while for machines belonging to others the only question asked was whether they were used in the previous year. Eleven countries counted only the number of machines owned by the holder: Luxembourg, Switzerland, United Kingdom, Yugoslavia, Chile, Ecuador, Guatemala, Mexico, Egypt, Northern Rhodesia, Israel (Arab sector), Australia (Queensland). Several countries explicitly excluded machines which were no longer serviceable.

SECTION H - FERTILIZERS AND SOIL DRESSINGS

1. Fertilizers and Soil Dressings as Conceived in the Program

Figures on the use of fertilizers and soil dressings were not regarded by the Program as part of the structural data suitable for collection in an agricul-

were taken into account in addition to those concerning the phase of the livestock cycle. The livestock data for many of the British colonial territories refer to December, probably because they were taken in conjunction with a population census. The United States and its territories took their census in April. If these dependencies, etc., are excluded, and a distinction is made between countries in the Northern and Southern Hemisphere, the distribution can be shown as follows:

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The answer to these questions should refer to the agricultural work done on the holdings, which however was not further defined. It was not considered necessary for the purpose of the Program to ascertain whether the holder owned draft animals or mechanical power but, rather, whether he had them available for his own use. Mechanical power should include engines, electricity, wind and water power used in agricultural work. The answer to these two simple questions was expected to give the basic information on the use of power. These questions were therefore included in both the A and B lists.

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1. Fertilizers and Soil Dressings as Conceived in the Program

Figures on the use of fertilizers and soil dressings were not regarded by the Program as part of the structural data suitable for collection in an agricul-

tural census; only the area to which they were applied, was so considered. The Program therefore proposed that the total area to which organic or chemical fertilizers were applied should be reported in the census. Furthermore specific questions were suggested concerning the area to which (1) animal manure, (2) green manure, (3) chemical fertilizers, and (4) other fertilizers, such as guano, bonemeal, oilcake, seaweed, etc., were applied respectively. A question was also proposed as to the area to which lime and other soil dressings were applied. Although the Program did not mention this, it was intended that all questions in this section should refer to the year preceding the census.

2. Fertilizers and Soil Dressings in the National Censuses

Only 16 countries, Czechoslovakia, Greece, Costa Rica, El Salvador, Leeward Islands, Mexico, Chile, Colombia, Venezuela, Ceylon, India, Ryukyu Islands, Mozambique, Northern Rhodesia (European farms), Australia and New Zealand, asked any of the questions included in the Program. In a number of cases the questions were incomplete. Preference was shown for the collection of data on the quantities of fertilizers used. Nineteen countries included questions on this topic in their censuses, viz., Belgium, Czechoslovakia, Finland (sample holdings), Malta and Gozo, Costa Rica, Guatemala, Leeward Islands, Chile, Venezuela, India, Ryukyu Islands, Egypt, Belgian Congo, Mozambique, Northern Rhodesia, Southern Rhodesia, Union of South Africa, Australia, and New Zealand. Eleven of the countries mentioned above asked for information on area fertilized as well as on quantity of fertilizers used. Whenever any time reference is given, the particulars, in most cases, were to relate to the previous calendar years or crop year.

Belgium included a very extensive list of fertilizers. In most other countries only some selected fertilizers or groups of fertilizers were included, in which superphosphate, farmyard manure and compost were included in five or more countries.

SECTION I - IRRIGATION

1. Irrigation and Drainage as Conceived in the Program

IRRIGATION

In reporting the area under crops the FAO Program suggested for a number of crops that information should be collected concerning the area irrigated and the area not irrigated. These figures should relate to the area of the crops actually irrigated. As this

area could be different from the area in the holding equipped with irrigation facilities, the Program also proposed a question concerning the total area of the land irrigated, in which there should be included land which was supplied with water conducted through artificial canals, dikes or pipes from a higher level or raised from a lower level by means of pumps or other machines. Land equipped for irrigation was to be included, whether or not water was supplied during the year in which the census was taken.

DRAINAGE

The Program proposed the collection of information on the total area of land drained, as well as the method of draining, i.e., whether by pumping or by gravity flow. The area drained by pumping could be subdivided into area drained by (a) open drains, and (b) covered drains.

2. Irrigation and Drainage in the National Censuses

IRRIGATION

Although the Program proposed enumeration of the area provided with irrigation facilities, the majority of countries which included irrigation in their censuses preferred to enumerate the area actually irrigated during a certain period, mostly the previous year. This concept was used in the following 16 countries: U.S.A., Canada, Costa Rica, Puerto Rico, Virgin Islands, Bolivia, Ecuador, Uruguay, Venezuela, Israel, Algeria, Tunisia, Southern Rhodesia, Union of South Africa, Australia and Hawaii. Seven countries followed the system proposed by FAO: Guatemala, Mexico, Colombia, Chile, Ceylon, Philippines, and Thailand. India and New Zealand enumerated the area irrigated according to both concepts. For Czechoslovakia, Greece, Luxembourg, Dominican Republic, El Salvador, Iraq, and Northern Rhodesia, no clear indications are available as to the concepts used.

Some countries defined irrigation or irrigated land on the general lines suggested by the FAO Program. This was the case in Canada, U.S.A., Guatemala, Puerto Rico, Virgin Islands and Ceylon. Canada, for instance, defined irrigation as the application of water to the land, by a system of furrows, sprinklers, or similar works.

The definition used in U.S.A. included the expression "control of the water". In the irrigation sections of the censuses of Burma and Thailand, special attention was given not only to the supply of water, but also to the removal of excess water and of diverting excessive flows of water. Thailand defined irri-

gation "as implying the method of supplying water (including ordinary drainage) to agricultural land by installing equipment for the purpose of regulating water to a higher level or to a lower level".

Although no provision was made for this in the Program, 14 countries enumerated the source or the system of irrigation: Norway, Canada (three provinces), U.S.A., El Salvador, Venezuela, Burma, Ceylon, Iraq, Jordan, Algeria, Tunisia, Northern Rhodesia, the Union of South Africa and Australia. The kind of sources asked for in the questionnaires varied greatly from country to country, but there was a tendency to enumerate separately (a) irrigation by individual supply, and (b) irrigation by a common supply. Czechoslovakia, Federal Republic of Germany, Canada, and U.S.A. included a special question in the census concerning the area irrigated by sprinklers.

DRAINAGE

Apart from Burma and Thailand which have been mentioned before, only Finland, Luxembourg, Norway and Sweden asked any questions in their censuses on drainage, in which questions no common denominator can be found.

SECTION J - FRAGMENTATION

1. Fragmentation as Conceived in the Program

The information on this subject proposed by the Program was limited to some very simple questions. The Program suggested inquiry only as to whether all the holding was one piece of land and, if not, how many noncontiguous parcels of land were included in the holding. For this inquiry a parcel of land was defined as all land entirely surrounded by other holdings.

2. Fragmentation in the National Censuses

As already mentioned in the corresponding section of Chapter 3, the two complementing questions on fragmentation were asked by about 20 countries. Several of them asked only the latter of the two questions, which, however, implicitly covers the first.

In Belgium, Federal Republic of Germany, Greece, Luxembourg, and the Netherlands, the question on fragmentation referred to the agricultural area; in Yugoslavia to the area of arable land only; in Portugal, Costa Rica, Dominican Republic, Colombia, Ecuador, Guatemala, Honduras, India, Israel, Algeria, Egypt, and Tunisia, to the total area of the holding.

Most of the countries including this item in their censuses defined a parcel of land on the lines of the Program definition. Yugoslavia defined parcels as the tracts of land which were separated by the land areas of another owner or by roads, woods, sterile lands or other hindrances, causing their separate cultivation. Some Latin-American countries did not explicitly define the words *parcela* or *lote* used in their censuses, as these words implicitly included the Program concept of parcel.

Some countries gave instructions concerning the treatment of land intersected by a road or a canal, the Netherlands and Israel (Jewish farms) considering such land as consisting of two parcels, the Federal Republic of Germany and Honduras as one parcel only.

SECTION K - WOOD AND FISHERY PRODUCTS

1. Wood and Fishery Products as Conceived in the Program

Forestry and fisheries were not included in the Program definition of agriculture. In most countries, however, the collection of production data on wood and fishery commodities produced on holdings was considered to be virtually impossible except through census enumeration. In view of the almost complete absence of such data at present and the importance of the subjects, these commodities were included in the FAO Program. It was not expected however that the data obtained on such commodities would be as accurate as in the case of crop and livestock products.

WOOD PRODUCTS

The Program suggested the following classification for the quantity of wood products cut on the holding:

- a) Firewood
- b) Fence posts
- c) Sawlogs
- d) Pulpwood
- e) Pitprops
- f) Railway ties or sleepers
- g) Other wood products.

FISHERY PRODUCTS

The aquatic products should include the species commonly known as fish and also all other marine (salt-water) and fresh-water animal or plant products taken from seas, ponds, rivers, streams, dams, lakes,

etc., where such water areas were situated within the boundaries of the holding. The quantities of fish and of each of the other aquatic products taken from the waters of the holding during the census year should be reported and also the quantities sold.

2. Wood and Fishery Products in the National Censuses

WOOD PRODUCTS

As already indicated in Chapter 3, only a few countries asked questions on wood products in such a way that it is evident that the products were cut on the holding, or probably so. Other questions on forestry included in the agricultural censuses mostly refer to areas and/or numbers of certain kinds of trees. Such questions were asked in Belgium, Guatemala, Argentina, Chile, Egypt, Iraq, Northern Rhodesia, Southern Rhodesia and the Union of South Africa.

Firewood, fence posts and sawlogs were the only products included in the agricultural censuses of several countries. In general the production enumerated included the quantities cut on behalf of third persons; it further included quantities for home use as well as those for sale.

In the U.S.A., forest products sold by the holder as standing timber and cut by the buyer were to be reported only in dollar value. Forest products cut by the farmer were to be reported in physical measurements; if sold, the value also was to be reported.

Firewood is the only item for which a definition was given in Canada and Hawaii. Canada defined firewood as all wood cut on the place for heating purposes, for cooking and other use, whether for the person in charge or someone else, including that for home use as well as that for sale.

FISHERY PRODUCTS

Only one country, Czechoslovakia, enumerated fishery products taken only or mainly from the waters of the holding.

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