

THE STATE OF
FOOD AND AGRICULTURE
1953

PART I - REVIEW AND OUTLOOK



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
ROME, ITALY

AUGUST, 1953

THE WORLD FOOD SITUATION AND AGRICULTURAL ECONOMICS AND STATISTICS

SECOND WORLD FOOD SURVEY, 1952 \$0.50, 2s. 6d.

A broad statistical survey of how the world's population is nourished. Against the unsatisfactory present situation are set desirable food consumption targets for 1960. In the introduction, the Director-General of FAO, Mr. Norris E. Dodd, writes: "The information gives no ground for complacency. The average food supply per person over large areas of the world, five years after the war was over, was still lower than before the war. The proportion of the world's population with inadequate food supplies has grown appreciably larger. World food production has indeed expanded since the end of the war, but much of this achievement represents merely a recovery from wartime devastation and dislocation... The situation which the survey discloses is a challenge..."

THE FARM AND THE CITY, by Lawrence Witt and Mordecai Ezekiel, 1953 \$1.00, 5s.

Facts from all over the world show that "incomes of farm and city people rise and fall together. If any group is depressed, other groups and the nation feel the effects. Likewise the economic activities of the nations of the world change together."

It looks like a very simple statement of the obvious, yet, as the authors of this short pamphlet point out, "in making day-to-day policy people and nations often act as if it were not true."

Of the two authors, Dr. Lawrence Witt is Professor of Agricultural Economics at the Michigan State College, USA, and Dr. Mordecai Ezekiel, Deputy Director of the Economics Division of FAO, served many years with the United States Department of Agriculture and is the author of many publications on economics, agriculture and statistics.

The many pictorialized diagrams with the varied data from all over the world, provide a lively and interesting demonstration of the facts and relationships discussed.

Apart from the general reader, this booklet would serve as an excellent introductory text on some of the basic economics of agriculture for students in secondary schools and in the first year of college. At the same time the vast amount of factual information in the charts provides background material for more intensive theoretical discussion.

PROGRESS AND ECONOMIC PROBLEMS OF FARM MECHANIZATION, 1950. \$1.00, 5s.

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for the first time information on the progress in the manufacture and utilization of farm machinery and equipment and on the world trade in these products.

MONTHLY BULLETIN OF AGRICULTURAL ECONOMICS AND STATISTICS Single copy.....\$0.50, 2s.6d. Annual subscription...\$5.00, 25s.

Published at the middle of each month, this bulletin gives crop statistics based on information available on the 25th of the preceding month. Each issue contains one or two articles on matters of current interest in the field of agricultural economics and an extensive section devoted to commodity notes. Sample copies of the bulletin will be sent on request to the Documents Service, FAO, Viale delle Terme di Caracalla, Rome. (Published in English, French & Spanish)

Yearbook of

FOOD AND AGRICULTURAL STATISTICS, 1952.

PART I - PRODUCTION ; PART II - TRADE

Per Volume \$3.50, 17s. 6d.

This two-volume yearbook continues the statistical series begun by the International Institute of Agriculture in 1910.

Both parts cover statistics of crops and livestock numbers, and new features are added every year covering population questions as they affect agriculture, and such questions as calorie intake, etc.

Yearbook of

FISHERIES STATISTICS, 1950-51

\$3.50, 17s. 6d.

The third yearbook continues and expands the data published in the 1947 and the 1948-49 editions, which were supplemented throughout the years by the statistics published in the FAO Fisheries Bulletin, and latterly in the FAO Monthly Bulletin of Agricultural Economics and Statistics. The statistical coverage begins with 1938 and ends with 1951.

Yearbook of

FOREST PRODUCTS STATISTICS, 1952.

\$2.50, 12s. 6d.

This yearbook of forest products statistics includes notes on the salient features of the current world situation and has appeared annually since 1947. The 1947 edition is almost out of print, as the demand for complete sets is steady, because the yearbooks are establishing themselves as standard reference works.

A SELECTION OF RECENT FAO PUBLICATIONS

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ROME, ITALY AUGUST 1953

NOTE

The statistical material in this publication has been prepared from such information as has been available to FAO not later than 30 July 1953

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FORWARD

In submitting the annual review of the world food and agricultural situation for 1952/53, I have adopted the procedure of dividing the report into two parts. The first part, presented in this document, deals with the progress and problems of agriculture, fisheries and forestry in the past year, and with the immediate outlook for the year ahead. The second part will be a review of governments' longer-term plans and programs of agricultural production, and an attempt to evaluate their probable effect on world agricultural production and trade, and on levels of food consumption during the next four or five years. This second part will be completed after the conclusion of the regional meetings which FAO is holding in the summer of 1953 in time for presentation to the Conference in November.

Since the war the differences in agricultural production between the more developed and less developed regions of the world have tended to increase. Production has expanded rapidly in the agriculturally more advanced countries. North American production in particular has outstripped the growth of population; food consumption levels have improved, agricultural exports have doubled, and even so, large stocks of some commodities have recently begun to accumulate, in some cases to a disquieting extent.

In the less developed regions a good deal of progress has been made, but productivity per man and per hectare remains low. Food production has not kept pace with their increasing needs, and they have been forced to curtail their exports and to import more food from abroad. Their food consumption levels remain inadequate, and in the Far East are even lower than before the war. Yet their earnings of foreign exchange do not permit them to import more than a limited quantity of food, in spite of the larger supplies now available. In the long run these problems of the under-developed countries can be solved only by raising their own food production and, to the extent that markets are available, their production of export crops with which to pay for imports

of more food and more capital goods for development.

In this contrast between the different regions of the world are to be found the two basic problems of agriculture; first, how to achieve stable outlets for the growing agricultural production, and in particular to find ways of distributing more of the increasing supplies of food in some areas to the under-nourished populations who have such great need of them; second, how most effectively to raise agricultural productivity in the less developed countries in order to provide more adequate supplies of food to their people and a reasonable standard of life for their farmers.

In some respects the year 1952/53 marks a new phase in the postwar food and agricultural situation. For the first time since 1939, though as yet insecurely, world production, on a global basis, caught up with the growth in world population. Moreover, the large stocks of wheat and other basic foods which have been built up in some regions should enable any future scarcities or potential famines which may develop in particular areas to be countered with much less difficulty than before.

At the same time, the recent accumulation of stocks of foodstuffs in the dollar area and of raw materials in some other countries, together with the downward trend of farm prices, inevitably give rise to fears of burdensome surpluses. If these fears retard future expansion, the results could be serious. The world's population will not stay still, but for some time to come is likely to grow at an accelerating pace as better medical services, and in some cases, better nutrition, continue to lengthen the life span in the less developed countries.

The unstable markets of the last few years for agricultural products, particularly raw materials, have brought few benefits and many disadvantages to producers and consumers alike. In some exporting countries equalization schemes have been adopted to iron out price fluctuations. But recent experience underlines also the value of moving towards international agreements, neces-

sarily flexible and with adequate safeguards, designed to stabilize production and prices at a level satisfactory to both producing and consuming countries. FAO will continue to give all the support it can to efforts by governments in this direction.

The more rapid growth of food requirements than of production in the less developed regions has reduced their net food exports to about one-third of the prewar level, and even so the excess of demand over supply has led to an inflationary rise in food prices in some countries. Moreover, the changes in their traditional pattern of trade have sometimes caused serious balance-of-payments difficulties, and by reducing the funds available for importing capital goods and equipment have tended to retard general economic development.

There is, of course, no suggestion that the food supplies of the deficit countries should not be increased by an expansion of international trade. Tropical countries may well find it profitable to rely largely on imports for supplies of grain or livestock products in exchange for the commodities, e.g., rubber, oilseeds, sugar, coffee, or tropical fruits, which they can produce more economically. Countries with mineral resources will wish to devote some of the proceeds from their mineral exports to the import of food. These are normal and healthy developments.

But two facts stand out. One is that until the productivity of agriculture, per man and per hectare, in the under-developed countries can be raised substantially there is no possible way of alleviating the grinding poverty of their rural populations.

The second is the sheer magnitude of the food

problem, which even today is perhaps not fully realized. If allowance is made for quality as well as calorie content, the average per caput diets of North America, Oceania and Western Europe are something like two or three times those of most under-developed regions, whether measured in money values, "original calories", or the agricultural resources needed to produce them. Nearly 70 percent of the world's population live in the less developed regions. To raise their average diet to the present average for the world as a whole (only about half the present North American level and by no means a high standard nutritionally) would require an additional supply of food equal to the total 1952/53 production of North America and Oceania combined. More than 90 percent of the additional supply would be needed in the Far East where, as FAO has always stressed, the hard core of the world's food problem lies.

The point is made solely to bring home how great is the challenge which the problem of food and adequate nutrition throws to the world. Compared with the real human needs of the deficit countries, as distinct from what they can afford to buy, the food stocks now accumulating shrink into insignificance. It is clear that whatever food supplies are shipped to these countries in the foreseeable future, whether in the normal way of commerce, or as gifts or loans to mitigate food shortages like those sent to Yugoslavia and Pakistan in 1952/53, they can do no more than alleviate their real needs. A basic improvement in their food supply must come primarily from a steady improvement in their own production. To help forward this improvement is the main task of FAO.



N. E. DODD
Director-General

Chapter I
S U M M A R Y

Chapter I - SUMMARY

Review of 1952/53

Since world production, increasing over 2 percent annually, has slightly exceeded the growth of population, both agricultural production and food production per caput in 1952/53 regained the prewar level. This improvement is due partly to generally good harvests last year. 1953/54 prospects are also favorable, but one or two years of bad weather could seriously alter the improved world food position.

The expansion of agricultural production has been most uneven. In North America it has greatly surpassed the growth of population. In the Far East, at the other extreme, total production has barely regained its prewar level and is still 15 to 20 percent below the insufficient prewar per caput level. The Far East, with nearly half the world's population, thus remains the crux of the world food problem.

Food consumption levels registered few major changes in 1952/53. The gradual improvement of diets continued in North America, Western Europe, the Near East, Africa and also in Latin America, where, however, some local food shortages occurred. Danubian drought led to food shortages in Eastern Europe and Yugoslavia. In the Far East food consumption levels showed no great change, since other grain imports were reduced as rice harvests improved. In Pakistan drought caused a serious food shortage and greatly increased import requirements.

World trade by volume in agricultural products dropped 5 percent in 1952/53 to slightly below the prewar level, reflecting improved harvests in importing countries, some running down of importers' stocks and import restrictions because of currency difficulties.

The pattern of world food trade has changed markedly since the war. With demands for higher standards of living, spreading industrialization and growing population, requirements of the less developed countries are growing. These countries are consuming more of their own food production,

importing more food from abroad and exporting less food. Their reduced food exports (largely to Europe) have been replaced mainly by larger exports from North America. While this has tended to increase dollar shortages, this effect has been partially offset by increased North American imports of coffee, rubber and wool, at prices relatively high compared to other farm products.

Industrial activity in 1952/53 was at a record height in North America, but showed only a slight gain in Western Europe. In the underdeveloped regions there were also some gains in industrial production and in some cases inflationary pressures continued to be strong. The demand for foodstuffs and some raw materials therefore continued at high levels in most countries.

Farm prices fell during 1952/53, reflecting both improved supplies and the end of the Korean boom. Foodstuff prices fell sharply in North America and raw materials more markedly in many markets. In wheat, jute, cotton, rubber and sugar, production has considerably exceeded effective demand at prevailing prices and stocks accumulated. The downward trend of farm and commodity prices is so far only reflected to a limited extent in general wholesale prices and only slightly in living costs.

Price supports helped check the declining tendencies, especially in the United States. The United States Commodity Credit Corporation now holds greatly increased stocks of wheat, cotton, cottonseed oil, dairy products, wool and tobacco. In other countries substantial stocks of sugar, jute, cotton and rubber have accumulated. With exports of Near East wheat again moving more freely, the large stocks of foodstuffs are mainly in the dollar area.

Except for some decline in North America, net farm incomes in the more developed countries showed little change in 1952/53, larger output offsetting lower prices. Little is known for other regions. In the under-developed regions agricul-

tural expansion continues to be hindered by a general scarcity of capital and by a tendency to concentrate the inadequate resources on industrial development. There have been some recent tendencies, however, for governments especially in Latin America and the Far East to give more attention to investment in agriculture. With unpromising prospects for a greatly increased flow of foreign capital to under-developed countries, capital for agricultural expansion must come largely from domestic resources.

Outlook for Future Development

Industrial activity in most countries is expected to remain generally high through 1953 with continued active demand for many agricultural products. The accumulation of large stocks of some crops and raw materials is, however, causing concern in some countries. Although non-dollar countries, principally in Western Europe, still contribute the largest part of world trade, the world economic situation varies markedly with that in the United States. The main problem for 1954 is whether, if defense expenditures were materially reduced, other activities would expand enough to maintain industrial activity and provide markets for the expanding volume of primary commodities, especially food and agricultural raw materials. The future trend will be influenced largely by economic policies and developments in the United States and the course of world political events. In view of these uncertainties no attempt is made here to forecast the likely economic trend in 1954/55.

REGIONAL SUMMARY

Europe

Agricultural production in North Western Europe rose 2 percent in 1952/53, continuing its upward trend and keeping pace with population growth. In Mediterranean Europe agricultural production declined slightly below the previous year, and crop yields per hectare continued below prewar. Eastern Europe's recovery in agriculture continues slowly, with per caput production considerably below prewar.

Food imports, particularly of grains, into North Western and Mediterranean Europe were somewhat lower, due to better domestic food supplies and to sharp import restrictions. Even so, total dollar imports of farm products were

maintained because of rising activity in textile industries.

Due to reduced demand and marketing difficulties, fish landings fell in 1952 in most principal European fishing countries, except in the United Kingdom which had a 4 percent increase. Forest industries, especially in the northern exporting countries, were adversely affected by reduced demand in 1952 and prospects for improvement in 1953 are uncertain.

Little change is expected in the volume or pattern of agricultural and industrial production in 1953/54 due to stable demand. Farm prices will probably continue relatively stable, although the downward trend of meat prices may continue with the increasing supplies and lower prices of imported feeds.

North America

The domestic demand during 1952/53 for the record output of farm products continued to be strong but greatly increased supplies and declines in export outlets resulted in a sharp downward movement in farm prices. Farm costs dropped less and net farm incomes fell below the record height of 1951/52. In the United States, as a result of the price support program, the Commodity Credit Corporation accumulated large stocks.

For forestry products, the increase in United States domestic demand did not entirely offset reduced exports from the region. Fish landings dropped slightly below those of 1951/52.

In the United States, early estimates for 1953/54 indicate the third largest crop on record. Early Canadian crop prospects are also good. With a larger carryover of wheat, corn, tobacco and cotton, and likely heavy marketings of livestock, total agricultural supplies in 1953/54 will be considerably above those in 1952/53.

The large stocks in the United States cast a shadow of uncertainty over future prices and production. Wheat acreage in the United States is to be reduced in 1954 and marketing quotas will be introduced.

Demand for agricultural products in 1953/54 is not expected to change appreciably from 1952/53 and the reduced export demand of early 1953 will probably continue except for special export disposal programs. Demand for imported farm products may, however, be affected by any slackening of industrial activity resulting from armament reductions.

Latin America

Agricultural output in 1952/53 increased by about 9 percent over the previous year (3 percent excluding Argentina). In 1952, because of reduced Argentine export availabilities, falling world demand and overpricing of some Brazilian commodities on falling world markets, there had been a drop in agricultural foreign trade, but in early 1953 there were signs of an improvement, with greater quantities available for export and more settled foreign market conditions.

Internal prices were generally steadier than in 1951/52 and in a few countries the cost of living declined.

Except for cotton, production prospects for 1953/54 are good, especially for foodstuffs. Internal demand for food and other farm products will probably remain high as industry also is likely to continue expanding.

Fishery and forestry production increased, but foreign trade decreased with declining imports and exports, reflecting slackening foreign demand.

Africa

Agricultural production increased moderately in 1952/53, but gross per capita food supplies were not appreciably different from those in 1951/52 because of larger food exports. Higher agricultural production seems likely in 1953/54 despite unfavorable weather conditions in certain territories. The implementation of long-range agricultural development programs in most of the territories has been less rapid than anticipated, although previous shortages of personnel and equipment are being overcome and public investment expenditures are increasing.

Near East

For the first time since the end of the war, in 1952/53, per capita agricultural production appreciably exceeded the prewar average. This expansion, however, tended to be concentrated in the food surplus countries. The volume of exports increased, particularly of grains, and the region was returning to its prewar position as a net grain exporter. A further expansion in food is indicated for 1953/54 despite droughts in Israel and Jordan. Economic development programs are being actively implemented, mainly in the

oil producing areas, but in other countries inadequacy of investment funds may slow down appreciably future economic growth.

Far East

A record rice crop, a reduced wheat crop and a continuing decline in the value of raw materials exports highlights the agricultural situation in the Far East in 1952/53. Demand for cereal imports from outside the region is still high because of a wheat crop failure in Pakistan, but supplies of rice within the region appear equal to effective demand. Production of other foodcrops, except pulses, continues the postwar rise. Most export crops show a slight decline, although they are still far above prewar levels. Food crop production per capita is 15 to 20 percent below the very low prewar standard. Both forestry and fisheries industries in the region's principal producer, Japan, expanded between 1951 and 1952.

Terms of trade declined between 1951 and 1952 making it increasingly difficult to pay for essential imports of food and development equipment. The prices of raw materials and other exports are levelling off, however, after their sharp declines from the Korean war peak. Both farm and retail prices of cereals produced for domestic consumption have remained stable in most countries. The prices of government traded rice continue their gradual rise, but free market prices steadied.

In line with stated national objectives and in response to various development projects, it appears likely that food production will continue to increase in 1953/54, but per capita levels will remain far below prewar.

Oceania

Agricultural output was about 10 percent higher in 1952/53 than in 1951/52, mainly due to substantial increases in Australian production. The biggest regional advances were in wheat, meat and milk, and wool also increased over the relatively high levels of the previous year. These increases released a greater volume for export, at prices above those of 1951/52, thus contributing to the reappearance of surpluses on current account in overseas trade.

Present indications are that the physical conditions are satisfactory for a further increase in agricultural output in 1953/54. However, since the region is dependent on agricultural exports, anxiety is felt about cost/price relationships, particularly in Australia, in view of possible future changes in overseas demand.

SUMMARY BY COMMODITIES

Wheat

World wheat production was at very high levels in 1952/53, crops being particularly large in the major exporting countries. As larger crops were harvested also in most of Western Europe and in India, import requirements were lower. Exports of wheat and wheat flour accordingly fell, the decrease being particularly marked for the United States. Stocks of wheat in exporting countries rose and the carryover on July 1 1953 reached an all-time high. Prices were mainly steady, but fell sharply in some markets at the end of the crop year. Supplies will be ample in 1953/54, but production in 1954/55 will be affected by production restriction in the United States. The International Wheat Agreement was renewed at a somewhat higher price range.

Coarse Grains

World production in 1952/53 was slightly higher than in 1951/52, a welcome feature being the recovery in the Argentine crops. Total exports showed little change. Price movements were irregular, but with a general downward tendency, which was particularly marked for United States maize and Iraq barley. The outlook for supplies in 1953/54 is promising.

Rice

A notable increase in world rice production, after a period of stagnation, occurred in 1952/53, but international rice trade is not expanding since much of the increase occurred in the rice deficit countries. Though the upward trend in the price of "free" market rice in international trade has stopped, the prices of some rice sold under government to government contracts have risen further toward free prices. The replacement of considerable amounts of rice by other grains in many Asian countries appears to have become permanent, although the extent of such replacement will continue to depend on the price relationship of rice to other grains. At recent price levels, exportable supplies appear to be more than adequate to meet anticipated import requirements.

Sugar

World production of centrifugal sugar in 1952/53 declined about 7 percent below the previous year's record, owing to crop restrictions in Cuba and

unfavorable weather for European beets, and international trade did not reach the high level of the previous year. Due to Cuba's marketing control of carryover stocks, sugar prices receded only gradually to pre-Korean levels. The lower prices made possible the removal of practically all consumption controls. In preparation for derationing the United Kingdom made a large purchase of dollar sugar from Cuba, checking the fall in prices.

Exports are likely to increase in 1953, especially from non-dollar sources. Only a gradual expansion of production, trade and consumption is to be expected for the next few years. A reduction of Cuban stocks by the end of the current sugar year is anticipated. However, this reduction may not be sufficient to allow the sugar market to find and maintain its equilibrium.

Livestock Production

Meat production in 1952 exceeded the previous year's level in all major producing regions except South America. Milk production remained virtually unchanged in 1952, but increased substantially during the first half of 1953. In consequence of the expansion of meat production, prices of meat animals started to decline during 1952 in many parts of the Northern Hemisphere and continued downward in the first half of 1953, except for swine prices in North America. With demand remaining high or even increasing, the decline in meat prices was the consequence of steadily growing supplies. Prices of milk products had been firm, except in North America at the close of 1952 and for some dairy products in Western Europe in the spring of 1953.

The decline in world meat trade was reversed in 1952, with a slight increase in export volume. Trade in butter, by contrast with 1952, increased during 1953.

Further expansion in meat as well as milk production may occur in 1953/54, but meat production may grow at a slower rate than in the previous year, and with a reduced proportion of pigmeat. The position of butter in relation to margarine will not change to any great extent. With increasing production, the price level of livestock products in 1953/54 will probably be lower than in recent years. International trade in meat is likely to expand, but exporting countries may have difficulties in disposing of their growing exportable surpluses of cheese and preserved milk.

Fisheries

The world catch of fish, crustaceans and mollusks in 1952 remained at about the 1951 level. Slight drops in the output of many of the larger producers were counterbalanced by increases elsewhere, especially in Japan. In under-developed countries new techniques are beginning to increase output. With increasing supplies of meat the demand for fish for human food eased and prices were inclined to fluctuate around the 1951 levels. Costs tended to rise and some idle fishing capacity manifested itself in industrialized countries.

The production of frozen fish and salted cod increased. Salted herring output levelled off and, except for tuna, canned output from most species dropped.

Aquatic animal oils and fats production was maintained at the 1951 level, while that of meals continued the postwar trend of increased production.

Fats, Oils and Oilseeds

World production of fats and oils in 1952 rose moderately, but international trade declined about 10 percent. This decline was due mainly to a widespread tendency in importing countries to reduce stocks. Production plus net imports into Western Europe, the world's greatest importing area for fats and oils, declined about 5 percent, apparently reflecting a reduction in stocks rather than in actual consumption. The general level of prices of fats and oils in international markets, which had declined about 45 percent from spring 1951 to spring 1952, rose about 20 percent during the following 12 months. There was a considerable divergence among items, however, ranging from a rise of 50 percent in the price of cocoanut oil to a decline of 25 percent in linseed oil.

Despite a slight reduction in world production of fats and oils in 1953, exportable supplies are about as large as last year because of increases in stocks held in exporting countries.

Fresh Fruit

There has been in recent years a considerable expansion of trade in citrus fruit and some increase for bananas. While the United Kingdom imports of citrus fruit were reduced in 1952, imports into France and Western Germany reached a record high level. Apple exports in 1952 were 15 percent below 1951, as some importing countries in Europe had a very high domestic output and

the United Kingdom reduced its imports for balance of payments reasons.

As a whole, Europe, the largest importer of fresh fruit other than bananas, is becoming more self-sufficient and total fresh fruit supplies in this region substantially exceed the prewar level except in the United Kingdom.

The very rapid expansion of orange production in the Mediterranean region and in the United States and the still expanding production of deciduous fruit in Europe is causing some concern about future marketing, in particular as new plantings of citrus fruit continue on a large scale.

Wine and Raisins

Total wine production, after reaching the prewar level in the previous year, showed a decline in 1952 of some 5 percent. The decrease was largely in Europe and Algeria. Production in other regions, excepting the United States, expanded. Consumption in such principal producing countries as France and Italy has been decreasing since prewar.

Production of dried vine fruit increased in 1951 and 1952 and exports in 1952 expanded substantially above the low level of 1951. The United States more than doubled exports under the subsidy program and Greece and Turkey also increased exports in 1952.

Coffee

Despite a further rise in world coffee production in 1952, total output was still 2 percent below prewar. The principal increase was in the Western Hemisphere. Sustained demand throughout the year resulted in a continuation of stable prices at the high level reached in 1951. The 3 percent expansion in world imports went largely to Europe, while the United States imports remained slightly below the 1951 volume.

In 1953/54 production is likely to exceed, for the first time, the prewar figure, unless frost in Brazil substantially reduces supplies. With a continued favorable outlook on the demand side, no major price changes are envisaged and over the long term an increase of supplies can be anticipated.

Tea

Although 1952 imports into the United Kingdom and the United States were higher than in 1951, world trade declined by about 4 percent, mainly

in low quality teas. By the end of 1952, adverse weather in some producing countries and voluntary crop restrictions in India had reduced total production by about 2 percent as compared with the previous year and prices recovered markedly. With the continuation of finer plucking methods in 1953, no appreciable rise in supplies is to be expected and prices are likely to remain comparatively firm.

Cocoa

Favorable weather conditions in practically all producing countries, except Brazil, resulted in a 10 percent increase in world production in 1952/53. World trade in 1952 declined by about 7 percent, due mainly to lower supplies from the 1951/52 crop and reduced imports into the United States and continental Europe. Prices settled on an average at about the high 1951 level, after a temporary rise at the beginning of 1952 when supplies appeared scarce.

Since no major increase in supplies is to be anticipated for 1953/54, prices are not likely to undergo substantial changes. The long-term rising trend in consumption appears to have been checked temporarily by high prices.

Tobacco

The tobacco crop in 1952 was slightly lower than the previous year due to declines in North America and Greece. The cut in United Kingdom dollar allocations for tobacco imports caused considerable contraction in trade. A larger percentage of United Kingdom and German imports came from Commonwealth countries, Greece and Turkey. During the 1952/53 season stocks in the United States increased, whereas stocks in importing countries, mainly the United Kingdom, were much reduced. Tobacco prices in 1952 were slightly lower in the United States and in Canada but oriental leaf maintained its price and Southern Rhodesian prices rose.

The United States reduced plantings in 1953 as a result of the large carryover. Available supplies for export from all principal exporting countries may, however, be as large as in 1952, with the exception of cigar leaf from Brazil. If, as is anticipated, the United Kingdom increases its dollar allocations for 1953/54, the quantities moving into world trade will exceed those of the previous season. Cigar production increased in

several countries in 1952, in spite of the declining long-term trends, and the increase in production of cigarettes is expected to continue in 1953/54.

Cotton

In each of the past two seasons the world cotton crop exceeded consumption by more than three million bales and for the second time in the post-war period stocks rose to a relatively high level. Prices are being largely upheld by price support operations in the United States, the premia on non-dollar cottons having virtually disappeared. Production outside the United States has, in recent years, increased significantly, but some governments have introduced acreage restrictions. These, combined with the fall in cotton prices, both absolute and relative to other crop prices, are reflected in reduced estimates of acreage for the 1953/54 crop. The United States crop is also expected to be reduced on the recommendations of the government. New supplies of cotton next season are therefore likely to be more in line with the current level of consumption of around 32 million bales. The long-term decline in world trade in cotton, due to the development of textile industries in cotton producing countries as well as competition from rayon, continues, but there may be some improvement in 1953/54 above the low volume in 1952/53.

Wool

An exceptionally heavy clip in Australia was responsible for a record clean weight of world wool production in the 1952/53 season. In spite of heavier offerings from current production and the clearance of previous stocks in South America, the market remained very firm. The strength of the wool market resulted from the recovery in mill consumption after mid-1952, when wool textile stocks in manufacturing and distribution channels had been worked down to manageable proportions. At the same time there was a swing back to a higher proportion of virgin wool in wool textile manufacture. Consequently, wool consumption increased generally during the season, with the exception of the United States woollen and worsted industry, where military orders were reduced. World consumption is currently roughly in balance with production and on a higher level than in the last two years.

Jute

With production in Pakistan and India in 1952/53 at the highest level since 1940, jute supplies were again adequate, although not of the best quality. There was no increase, however, in Pakistani exports, since the recovery in overseas purchases was offset by reduced Indian takings. The newly established local industry only absorbed a small fraction of the crop and further stocks were added to the previous carryover.

Indian mill consumption was at the somewhat improved rate of the previous season, but sales lagged behind output and stocks, particularly of sacking, accumulated. There appears to have been some slackening in activity in continental mills, but the British industry worked at full capacity in the latter half of 1952/53. A notable development has been the recovery in United States hessian consumption in 1952, reflecting the lower prices.

In view of the incomplete disposal of the last two crops, Pakistan decided on a drastic reduction in acreage for 1953/54 and the crop may only be half as large as in 1952/53. Lower prices also have discouraged production in India. Total supplies may, however, be sufficient to meet mill requirements. Prospects for more active buying by jute goods users are meanwhile improving. Prospects of a decisively smaller crop in 1953/54 gave a moderate boost to prices towards the end of the 1952/53 season.

Rubber

Over the past few years natural rubber production has been consistently above consumption, the excess being mainly reflected in governmental stockpiles. While consumption of natural and synthetic rubber together continued to expand in conformity with the long-term upward trend, natural rubber was increasingly displaced by synthetic in the United States. In 1952 the decline in strategic purchases of natural rubber coincided with the full impact on consumption of this displacement and the downward trend in prices continued. By mid-1952, however, the United States government lifted its rubber controls and, as prices of natural rubber are now competitive with those of synthetic, natural rubber is expected to capture a greater share of the market. The surplus, therefore, is expected to be reduced in 1953 and to disappear within a few years. Much depends, however, on the trend of investment

in the United States synthetic industry and the prices ruling after its transfer to private hands.

Hard Fibers

Production was maintained at record levels in 1952, with a further rise in sisal output offsetting the reduction in Philippine abaca occasioned by the typhoons. With demand still rather weak, there was some accumulation of stocks, particularly in Brazil and Mexico. Production appears to be adjusting itself fairly rapidly to the changes in the market situation that have taken place over the last two years. Hard fiber prices fell by 50 percent in the course of 1952 and there was some further decline in 1953. Drastic cut backs in production are expected among high cost producers, particularly in Latin American sизal. Demand meanwhile may improve as cordage stocks are being reduced.

Forest Products

The first postwar decline in the trade of most forest products except newsprint occurred in 1952. In North America, however, there was more stability than in Europe. By mid-1953, general confidence in forest product markets was restored and prices appear to have reached levels acceptable to both buyers and sellers.

Production in 1952/53 generally has followed price trends with some time lag. Production of industrial roundwood was maintained, but sawn-wood declined slightly and wood pulp was slightly below the record level of 1951. The great instability in the industry in recent years has, however, caused serious economic difficulties to some producing countries because of rigid cost structures.

The long-term outlook for demand for forest products continues to be favorable in the light of progress in industrialization in many areas and improved living standards.

Fertilizers and Pesticides

The trend towards greater use of fertilizers and pesticides in all parts of the world continued in 1952/53. Production and consumption of plant nutrients in the form of commercial fertilizers is estimated to have increased about 10 percent with the largest percentage gains occurring in countries where commercial fertilizers have been used relatively little hitherto. The supply of pesticides was satisfactory and their use is

steadily increasing. The immediate outlook is that consumption of both fertilizers and pesticides will continue to increase at rates close to those shown in recent years.

Farm Machinery

World production and exports of tractors in 1952 fell considerably short of the record level

in 1951. Expansion of production in some European countries was more than offset by the decline in the United States and United Kingdom. The number of tractors imported into the underdeveloped areas fell markedly compared with 1951, but agricultural tractor numbers continued to increase in all regions, though at a slower rate than in 1951.

Chapter II

WORLD REVIEW AND OUTLOOK

Chapter II - WORLD REVIEW AND OUTLOOK

AGRICULTURAL PRODUCTION

In 1952/53 for the first time since the war, world agricultural production is estimated to have regained the prewar level per head of the population. This applies both to total agricultural production and to the production of foodstuffs only. The relation of production to population is not greatly changed if the U.S.S.R., China and the countries of Eastern Europe, for which data are less complete than for other regions, are included or excluded from the total.

World production averaged about 9 percent more than before the war in the three years 1948/1949 to 1950/51, and rose to 13 percent above that level in 1951/52 and to 17 percent in 1952/53. Excluding the U.S.S.R., Eastern Europe and China the corresponding figures are 14 percent, 18 percent and 23 percent respectively (Table 1 and Figure 1). Thus, in the last few years, agricultural production has increased by rather over 2 percent annually, and slightly exceeded the growth of world population, generally estimated at 1.4 percent per annum, or 1.2 percent if China and some other countries for which there are no recent statistics are excluded.

This expansion of production owes much to good weather and harvests in most regions in 1952/53. Prospects for 1953/54 are so far generally favorable but one or two years of bad weather would set back the world food position considerably. A factor which may slow down the rate of expansion in the next few years is the restriction of production for some commodities where supplies are outrunning effective demand. The production of sugar in Cuba and of rubber in the Far East were reduced in 1952, a smaller production of cotton in the United States and of jute in Pakistan have been recommended for 1953, a wheat acreage allotment has been set and a referendum of growers was held to determine marketing quotas in the United States in 1954. Although efforts to increase food production are being generally maintained, especially in food deficit countries and in food

exporting countries in soft currency areas, it is by no means sure that the recent rate of expansion in the world as a whole will be maintained, or that it will continue to exceed the growth of population.

TABLE 1. INDEX NUMBERS OF VOLUME OF AGRICULTURAL AND FOOD PRODUCTION

REGION	1948/49- 1950/51	1951/52	1952/53
..... 1934-38 = 100			
<i>Total Agricultural Production</i>			
North Western and South- ern Europe	104	114	113
North America	136	136	143
Latin America	122	120	130
Oceania	112	108	119
Far East (excluding China)	98	101	102
Near East	115	125	134
Africa	124	134	137
All above regions . . .	114	118	123
World ¹	109	113	117
<i>Food Production</i>			
North Western and South- ern Europe	104	114	114
North America	139	138	146
Latin America	127	124	134
Oceania	112	106	118
Far East (excluding China)	99	100	103
Near East	115	124	133
Africa	123	132	134
All above regions . . .	115	119	123
World ¹	110	113	117
<i>Population</i>			
World (excluding U.S.S.R., Eastern Europe and Chi- na)	118	121	123
World ¹	112	115	117

NOTE: In this table and elsewhere in this chapter all figures for 1952/53 are provisional. The method of calculating these indices varies somewhat from those in earlier volumes of the State of Food and Agriculture in that more commodities have been included, and more complete allowances made for quantities used for seed or animal feeding. A note on the methods of calculation adopted appears in Annex 1. The countries included in each region are given in Chapter III.

¹ Including estimates for U.S.S.R., Eastern Europe and China.

FIGURE 1 - TOTAL AND PER CAPUT FOOD PRODUCTION AND POPULATION, PREWAR AND POSTWAR

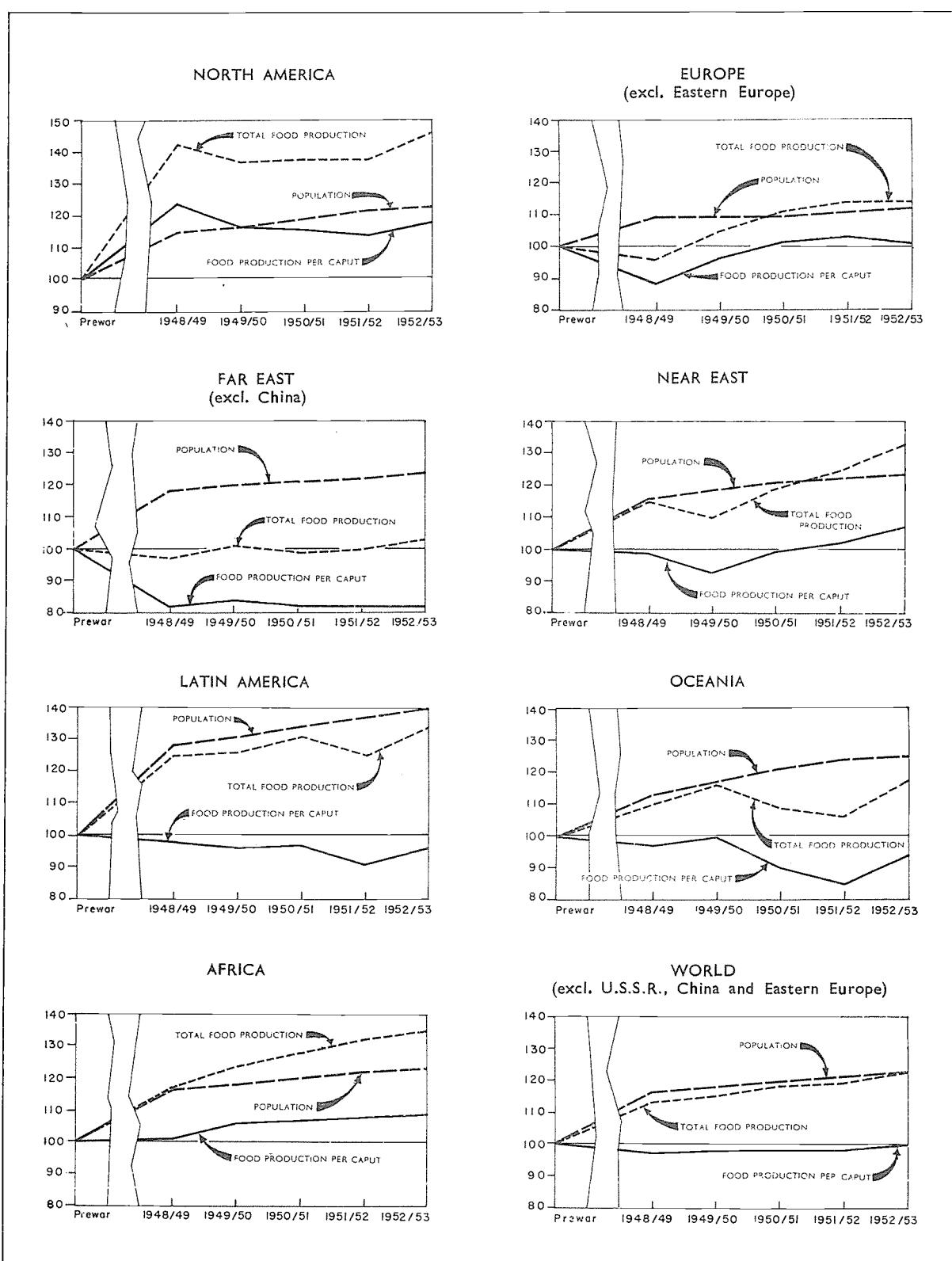
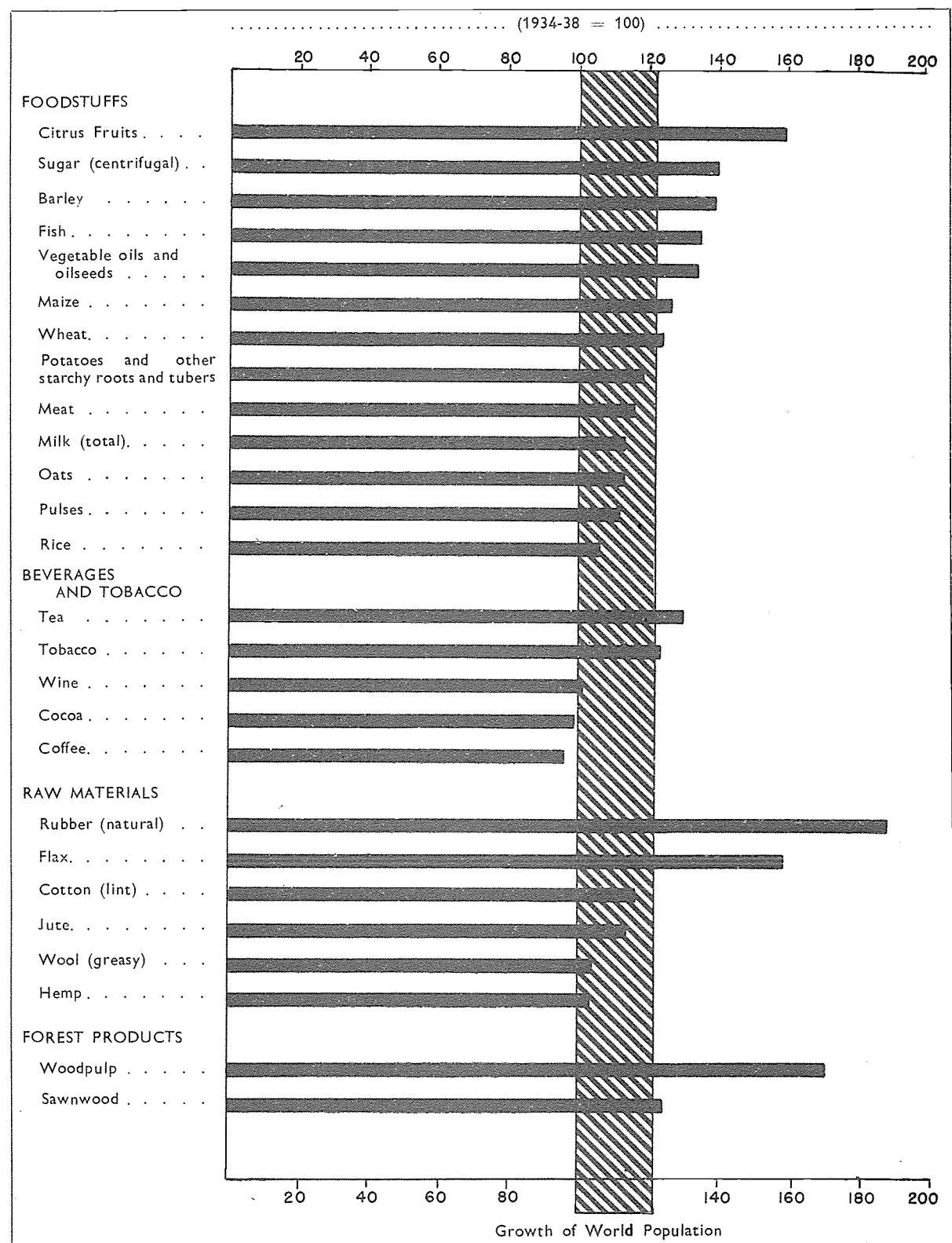


FIGURE 2 - WORLD¹ PRODUCTION OF SELECTED AGRICULTURAL COMMODITIES
1951/52 - 1952/53 AVERAGE



¹ Excluding U.S.S.R., China and Eastern Europe.

Between 1934-38 and 1952/53 the world population increased by 17 percent, or by 23 percent if Eastern Europe and China are excluded. Thanks to the gains of the last years, the growth of population over this period, both in the world as a whole and the more limited region, has now been equalled or exceeded by the production of all cereals combined and of most individual cereals, with the notable exception of rice, edible vegetable oils and oilseeds, sugar and certain fruits. But the production of protein foods, including meat, milk and pulses, still falls somewhat short of the growth of population, and also the production of vegetable, marine and animal fats and oils combined. Compared with prewar there has thus been a certain decline in the per caput supply of some of the more valuable protective foods. The output of the main natural fibers, except wool, has almost kept pace with the growth of population, and that of natural rubber and wood pulp has exceeded it by a considerable margin.

The largest increases in production in 1952/53 compared with 1951/52 occurred in wheat and maize, mainly in the exporting countries. Rice increased less, gains being made principally in India and other deficit areas. Gains were also made in livestock products, potatoes and other edible roots and tubers, bananas, coffee and cacao. Apart from the restriction on sugar production, there was some decline in the output of vegetable oils, mainly in Indonesia and the Philippines, and of tobacco. Fish production in 1952 was higher than in 1950-51, but to an increasing extent fishing capacity remained idle, especially in Europe, because of marketing difficulties. Turning to raw materials, the production of most fibers including wool and jute increased, but natural rubber production declined considerably as a result of falling demand and prices. The world output of sawnwood and wood pulp was also rather lower than last year because of the decline in demand.

Estimates for the world as a whole give a useful over-all view but also tend to give too favorable an impression of the real situation because of the great difference between regions and countries. In the first place the expansion of production has been very uneven. Nearly half the increase in world agricultural production since 1934-1938 occurred in North America alone, and this region with only 7 percent of the world's population now accounts for rather more than 20 percent of its agricultural production. At the other extreme, production has barely regained its prewar level in the Far East, which, with about half the world's population, provides little more than one-

quarter of its agricultural output. But although the expansion of production in North America has been outstanding, other regions have also made much progress. Latin America, the Near East and Africa are all producing about one-third more than prewar, while Europe and Oceania have increased their production by between 10 and 20 percent.

Not only production but also population and therefore basic food requirements are increasing at a very uneven rate in different parts of the world. In Europe and the U.S.S.R. the increase in population since 1934-38 has been of the order of 10 percent. In China the increase is estimated at less than 5 percent. On the other hand, the Far East excluding China, North America, Oceania, Africa and the Near East have all increased their populations by something like 25 percent since 1934-38, and Latin America by no less than 40 percent. On the per caput basis it appears that food production is at or somewhat above the prewar level in Europe, Africa, and the Near East, and somewhat less than before the war in Latin America and Oceania. In two regions of the world, however, the changes from the prewar

TABLE 2. INDEX NUMBERS OF AGRICULTURAL AND FOOD PRODUCTION PER CAPUT

REGION	1948/49- 1950/51	1951/52	1952/53
..... 1934-38 = 100			
<i>Agricultural Production Per Caput</i>			
North Western and South- ern Europe.	95	103	101
North America	116	112	116
Latin America	93	88	93
Oceania	96	87	95
Far East (excluding China).	82	83	82
Near East	97	102	108
Africa.	107	110	111
All above regions.	97	98	99
World (incl. U.S.S.R., Eastern Europe and China).	97	98	101
<i>Food Production Per Caput</i>			
North Western and South- ern Europe.	95	103	101
North America	119	114	118
Latin America	97	91	96
Oceania	96	85	94
Far East (excluding China)	83	82	82
Near East	97	102	107
Africa	105	108	109
All above regions	98	98	100
World (incl. U.S.S.R., Eastern Europe and China).	97	98	100

period are much more striking. In North America per caput food production in the last few years has ranged between 15 and 20 percent more than before the war, while in the Far East it has been 15 to 20 percent less.

Similarly, in forest products almost all the increase since 1934-38 occurred in North America, which today accounts for almost two-thirds and half the total world production (excluding U.S.S.R.) of wood pulp and sawnwood respectively.

It goes without saying that the estimates for the different regions are not equally dependable. But even when full allowance is made for the shortcomings of the basic data and errors of detail, there is little doubt that the general picture which emerges for the different regions is substantially correct. It is consistent with developments in food consumption and with postwar changes in the pattern of world trade discussed later.

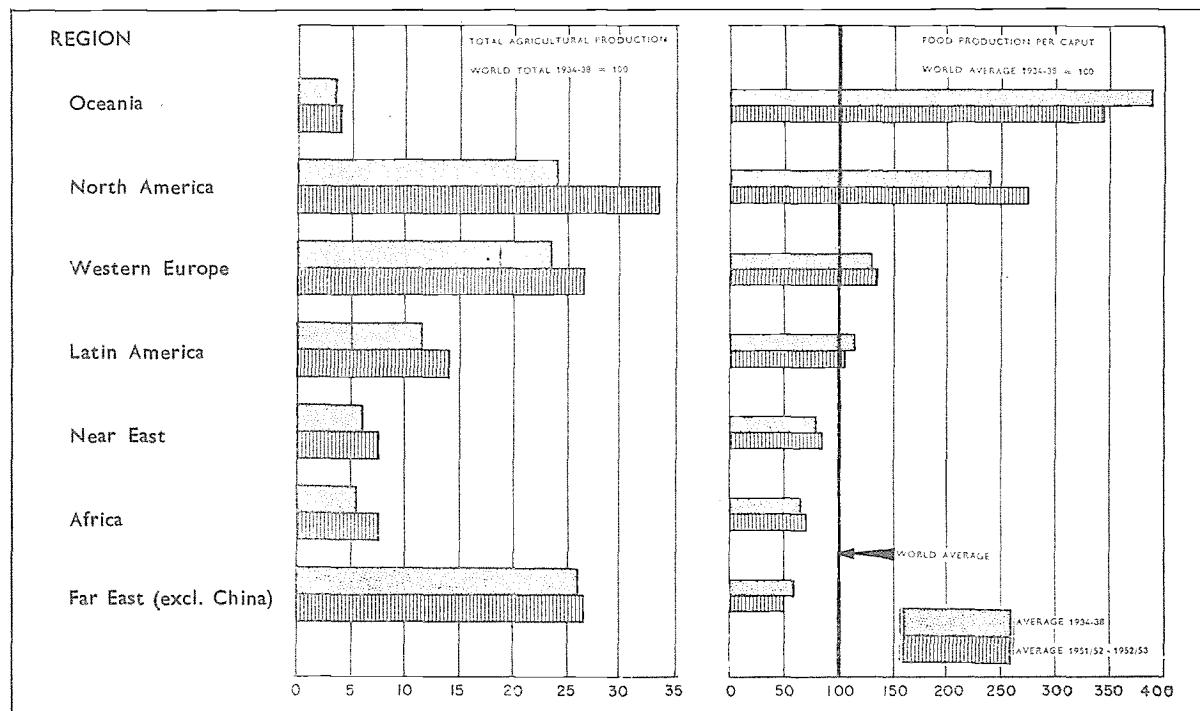
The indices in Tables 1 and 2 show the trends of agricultural production, but tell nothing of the quantity of food produced in each region or how much is produced per head of the population, which is even more important. In this respect the differences between the less developed and more developed regions are increasing. For exam-

ple, while food production per caput in 1952/53 showed little change from 1934-38 for the world as a whole, in the Far East it fell from about 60 percent of the world average before the war to barely 50 percent in 1952/53 (Figure 3). In the Near East and Africa too, production per caput remains well below the world average, and the same is true of large parts of Latin America, though not of the region as a whole. On the other hand, food production per caput in North America exceeds the world average to a far greater extent than before the war. Much of this increased per caput production has been used to raise domestic food consumption levels, but much also has gone to meet the shortages in other regions. Without this remarkable expansion in North America it would have been impossible to have avoided disastrous famines elsewhere in the postwar years.

FOOD CONSUMPTION AND NUTRITION

The levels of food production per head reflect in only a general way levels of food consumption, as these are considerably modified in most regions

FIGURE 3 - RELATIVE MAGNITUDE OF WORLD¹ AGRICULTURAL PRODUCTION AND OF FOOD PRODUCTION PER CAPUT BY PRINCIPAL REGIONS, 1934-38 AND 1951/52 - 1952/53 AVERAGES



¹ Excluding Eastern Europe, U.S.S.R. and China.

by methods of food utilization as well as by exports and imports. Changes in the pattern of trade in foodstuffs since the war have tended to a limited extent to offset the growing inequality of supplies between the different parts of the world, and for this and other reasons, changes from the prewar period in food consumption levels have been less marked than those in per caput food production. But in spite of this and of the recent gradual improvement in production, food consumption in many countries still remains seriously low, often lower than before the war, especially in the Far East. Nor is there much evidence of a decrease in the gap between countries at the lower and higher food consumption levels (Table 3). Many areas still remain very vulnerable to any crop failure; witness the serious food shortages in Yugoslavia and Pakistan in 1952/53.

In this connection, an important factor, often overlooked, needs to be stressed. Not only must food production be increased year by year to meet the needs of a steadily rising population, but stocks of food must also be enlarged even more than proportionately, because of the movement of rural population to the cities and as a result of industrialization, especially in underdeveloped areas. In a number of countries, storage facilities are insufficient for the stocks required.

Moreover, the nutritional quality of the diets in such areas continues to be unsatisfactory as indicated by the low protein consumption levels. This is of particular significance since it is becoming increasingly clear that the most serious nutritional deficiency now prevalent in many areas of the world is associated with low protein consumption.

In Western Europe, the relatively favorable food consumption levels achieved in the preceding year were maintained in 1952/53 with less dependence on food imports from the dollar area. Increasing use of whiter flour also reflects improved supplies. The end of all rationing in this region has now almost become an accomplished fact with its abolition in Austria and Spain, and its easing in the United Kingdom.

Unfavorable weather conditions, especially in the Danube Basin, seriously reduced food supplies in Eastern Europe in 1952/53. In some of these countries where rationing has been abandoned, higher food prices have caused difficulties; in others, e.g., Eastern Germany and Czechoslovakia, where rationing is still maintained, it has not always been possible to meet the rations. In the Soviet Union, the government has announced

reductions in retail food prices for the sixth year in succession.

In most countries in Latin America the steady increase in per caput food supplies since the war continued in 1952/53, but the rapid increase in population continues to absorb a larger proportion of the region's production. In Argentina, despite better crops, the level of meat exports could not be maintained without some reduction in per caput domestic meat consumption.

In North America, where food consumption is about 10 percent above prewar levels, high employment and incomes kept the demand for food at about the same or even somewhat above the level of 1951/52. Food intakes are once again close to record levels, and increasing stocks provide some hopes that food shortages of an emergency nature which may arise in other parts of the world can be met. In Oceania and South Africa food consumption levels have been maintained.

In the Near East and French North Africa, where food production on the whole rose markedly over the previous year, consumption levels have somewhat improved, but in Egypt small crops have necessitated larger food imports. Consumption levels in Israel remain low because of droughts and population increase, and this has necessitated a very severely controlled food economy.

In the Far East, with the main exception of Pakistan, food supplies per caput were generally higher than in the previous year because of the larger rice crop, especially in the food deficit countries. In Japan, the national nutrition survey indicates increasing levels of average nutrient intakes in the whole country. Foodstocks in India at the beginning of 1953 were higher than in the previous year and dependence on food imports has been reduced, although per caput supplies have not improved significantly. However, countries like Ceylon, dependent for food imports on specialized exports like rubber, have had difficulty in obtaining supplies to meet their ration commitments.

The price of rice is one of the deterrents to expanding food consumption levels in the importing countries of the Far East. In countries such as India, Ceylon, Pakistan and the Philippines, data collected for recent years by the ILO indicate that on the average the proportion spent on food by wage earners and their families is about 60 percent of their total expenditure; expenditure on food grains alone constituting a large part of this proportion. This is in marked contrast with many countries in Western Europe, North America and Oceania, where the propor-

tion of wage earners' expenditure on food ranges from about 30 to 40 percent. Where, as in the Far East, so large a proportion of wage earners' resources must be used to obtain a diet, often

inadequate for themselves and their families, it is clear that effective demand for foodstuffs cannot be raised substantially unless their real income is appreciably increased.

TABLE 3. ESTIMATED ENERGY AND PROTEIN CONTENT OF NATIONAL AVERAGE FOOD SUPPLIES PER CAPUT IN 1952/53 COMPARED WITH 1951/52, 1950/51 AND PREWAR

COUNTRY	Calories				Total protein				Animal protein			
	Prewar	1950/51	1951/52	1952/53 change from 1951/52	Prewar	1950/51	1951/52	1952/53 change from 1951/52	Prewar	1950/51	1951/52	1952/53 change from 1951/52
... Number per day ...												
... Percent												
NORTH AMERICA												
Canada	3,010	3,130	3,020	+ 4	84	93	91	+ 2	48	57	56	+ 2
United States	3,150	3,180	3,160	- —	89	91	91	+ 1	50	61	61	+ 1
SOUTH AMERICA¹												
Argentina	2,730	3,140	3,160	- 4	98	102	102	- —	62	68	67	- 1
Brazil	2,340	2,300	- 1	—	58	59	— 2	—	16	16	16	—
Chile	2,240	2,400	2,400	—	69	73	74	—	21	25	26	—
Colombia	1,860	2,300	2,400	—	47	55	56	—	20	28	32	—
Honduras	1,980	2,030	—	—	54	57	—	—	19	18	—	—
Mexico	2,210	—	—	—	—	61	—	—	—	16	—	—
Peru	2,220	—	—	—	—	63	—	—	—	14	—	—
Uruguay	2,900	3,070	—	—	91	101	—	—	59	65	—	—
Venezuela	2,150	2,200	—	—	64	67	—	—	28	29	—	—
EUROPE												
Austria	2,990	2,790	2,660	+ 4	88	81	78	+ 5	39	35	36	+ 6
Belgium-Luxembourg .	2,820	2,890	2,930	+ 1	84	84	86	—	34	40	40	—
Denmark	3,420	3,130	3,220	+ 3	91	97	91	+ 2	57	57	51	+ 4
Finland	3,000	3,210	3,330	—	95	100	104	—	44	48	52	—
France	2,830	2,790	2,750	+ 1	93	91	92	+ 2	39	41	41	+ 5
Germany, Western .	3,070	2,810	2,760	+ 2	84	76	76	+ 1	42	36	37	+ 2
Greece	2,600	2,510	2,490	+ 1	84	77	77	+ 1	23	17	17	+ 10
Ireland	3,400	3,500	3,480	—	99	97	96	—	48	49	48	+ 2
Italy	2,520	2,430	2,480	—	82	77	78	- 1	20	21	21	—
Netherlands	2,920	3,090	2,890	—	87	82	80	+ 1	44	39	40	+ 2
Norway	3,200	3,180	3,060	+ 2	90	104	96	—	49	57	53	—
Sweden	3,120	3,230	3,090	—	95	95	93	- 1	59	60	59	—
Switzerland	3,140	3,250	3,180	—	96	97	96	—	54	51	52	—
United Kingdom	3,120	3,100	2,990	+ 1	83	88	85	+ 1	46	46	43	+ 3
Portugal	2,460	—	—	—	—	67	—	—	—	20	—	—
FAR EAST												
Ceylon	2,140	2,140	2,010	—	48	55	53	—	9	12	12	—
India	² 1,970	1,570	1,620	+ 2	² 56	42	43	+ 1	² 8	6	6	—
Japan	2,180	2,100	2,100	+ 2	64	53	53	+ 1	10	10	10	—
Pakistan	—	2,160	1,970	—	—	54	54	—	—	11	11	—
Philippines	1,920	2,050	2,060	+ 2	45	42	42	+ 2	11	11	11	—
NEAR EAST												
Egypt	2,450	2,340	2,350	- 1	74	69	69	- 1	9	13	13	—
Israel	—	2,520	—	—	—	81	—	—	—	30	—	—
Turkey	2,450	2,510	2,560	+ 1	79	81	82	+ 1	13	14	15	+ 3
AFRICA												
Union of S. Africa .	2,300	2,640	—	—	68	73	—	—	23	26	—	—
S. Rhodesia	—	2,170	2,280	—	—	69	69	—	—	16	17	—
OCEANIA												
Australia	3,310	3,290	—	—	103	98	—	—	67	66	—	—
New Zealand	3,260	3,470	3,380	—	96	104	103	—	64	70	69	—

... Not available.

— Negligible.

¹ Figures refer to calendar year of earlier year mentioned.

² Including Pakistan.

INTERNATIONAL TRADE IN AGRICULTURAL PRODUCTS

The volume of trade in agricultural products fell from 103 percent of the prewar level in 1951 to 98 percent in 1952, each of the three main categories, food and feeding stuffs, raw materials, and beverages and tobacco, declining by about 5 percent. The trade in raw materials and in beverages and tobacco had been running at a fairly high level and even after this decline remained at or slightly above the prewar average. Trade in food and feeding stuffs, on the other hand, regained its prewar level for the first time in 1951, and in 1952 was about 3 percent lower than in 1934-38 (Table 4).

TABLE 4. VOLUME AND COMPOSITION OF WORLD TRADE IN THE MAIN AGRICULTURAL PRODUCTS

ITEM	1934-38	1948	1949	1950	1951	1952
Total volume of trade	100	89	95	100	103	98
Food and feeding stuffs	58	50	53	53	58	56
Raw materials	30	28	29	35	32	30
Beverages and tobacco.	12	11	13	12	13	12

The total tonnage of fresh and frozen fishery products exported from the major fish exporting countries was virtually the same in 1952 as in 1951. World trade in cured fish and fish meals increased while there was a decline in canned fish exports.

International trade in forest products was lower in 1952 than in 1951. Trade in both sawnwood and wood pulp declined by 17 to 18 percent. Continued expansion in newsprint trade partly offset the decline in other kinds of paper and board. Europe (excluding Eastern Europe and U.S.S.R.) was most seriously affected by the decline in economic activity in 1952, gross European exports of sawnwood falling by 25 percent and of wood pulp by 20 percent compared with 1951.

The falling-off in the level of international trade in 1952 stemmed from three main causes:

- (i) increased domestic production in some importing countries, particularly in Europe, leading to reduced import require-

ments of, e.g., cereals, some livestock products and fish;

- (ii) some decline in the international demand for rubber, fibers and forest products, due partly to slackening industrial activity in some countries, but in large measure to a running down of stocks accumulated during the heavy buying of 1950 and 1951. This, together with the virtual completion of stock-piling programs in most countries, affected some less perishable foodstuffs as well as raw materials;
- (iii) import limitations necessitated by currency difficulties, which affected, e.g., intra-European trade in livestock products, fruit and vegetables, and exports of tobacco and cotton from North America.

Food and Animal Feeding Stuffs

The main decline in trade in 1952 compared with the previous year occurred in vegetable oils and oilseeds, livestock products, cereals and sugar. The smaller trade in vegetable oils reflected smaller supplies of some products, and a reduced demand for others; shipments declined from all main exporting regions except Africa. Exports of meat from South America, Australia and Canada were lower than in 1951, but were offset by considerably larger shipments from New Zealand. Exports of Danish and Swedish butter and of New Zealand cheese also declined. The heaviest fall in cereal exports in 1952 occurred in Latin America and reflected the Argentine drought and crop failure, but exports of wheat from Australia and of rice in the Far East were also lower than in 1951. Reduced supplies from these areas were partly replaced by large North American exports, but United States exports fell sharply in late 1952 and early 1953, mainly because of the improved crops in Europe and the Far East. The demand for sugar also declined and Latin American exports were lower by about 5 percent.

As a result of these changes, food exports from Latin America fell sharply in 1952, while the recovery in the European export trade was interrupted for the first time since the war. On the import side, the main decline was concentrated in Europe, but there was also some fall of food imports into the less developed regions reflecting the reduced purchasing power of exporters of primary products.

TABLE 5. INDEX NUMBERS OF THE VOLUME OF WORLD TRADE IN THE MAIN FOODSTUFFS

PRODUCT	1948-50	1951	1952
<i>1934-38 = 100</i>			
Cereals	96	112	110
Sugar	112	117	115
Vegetable Oils and Oilseeds	68	84	73
Fruit	86	99	100
Livestock Products	92	98	95

NOTE. The above indices, and all other estimates of exports in this section, include re-exports, and in some cases are not strictly comparable with figures quoted in Chapter IV.

Raw Materials

Trade in natural fibers and rubber in 1952 continued to decline from the unusually high level of 1950. The main falls occurred in exports of rubber and jute from the Far East and of cotton from North America, but against this there was a marked recovery in wool exports from Oceania and Latin America. On the importing side, there was a small decline in imports of rubber into North America, and a much sharper decline in imports into Europe and the smaller importing regions. Imports of cotton and jute declined nearly everywhere except the Far East. The revival of the wool trade scarcely affected the level of imports into North America, but imports into Europe rose sharply. The following indices of world trade show the violent fluctuations in the last few years in the volume of trade in some raw materials.

TABLE 6. INDEX NUMBERS OF THE VOLUME OF WORLD TRADE IN NATURAL FIBERS AND RUBBER

PRODUCT	1948-50	1951	1952
<i>1934-38 = 100</i>			
Rubber	160	200	165
Cotton	78	82	77
Wool	119	89	107
Jute	89	139	103

Beverages, Tobacco and Spices

In 1952 there was a sharp fall in North American exports of tobacco, mainly to Europe, to a lower level than for some years, and some decline in exports of tea from the Far East and of cacao from Africa. Imports of tea into Europe and North America were well maintained and the main reductions occurred in the smaller markets,

but both Europe and North America imported less cacao. The volume of trade in coffee slightly increased.

TABLE 7. INDEX NUMBERS OF THE VOLUME OF WORLD TRADE IN BEVERAGES AND TOBACCO

PRODUCT	1948-50	1951	1952
<i>1934-38 = 100</i>			
Coffee	116	116	118
Tea	95	106	102
Cacao	101	103	94
Wine	81	87	...
Tobacco	98	112	98

... Not available.

Regional Trends

The general decline in world trade in agricultural products in 1952 checked the rising trend of North American exports and the postwar recovery of European exports. The downward trend of exports from the Far East and Latin America was resumed. In Oceania, however, the revival of wool shipments and larger meat shipments from New Zealand led to a recovery of exports, and the gradual rise of exports from Africa and the Near East continued, aided by the good cereal crops in Turkey (Table 8).

On the import side there was a decline from the high level of 1951 in every region. In the primary producing areas this reflected their reduced earning power after the Korean boom, but in all these regions, except the Far East, agricultural imports remained far above the prewar level. In North America the decline reflected the slowing down of the stockpiling program and in some cases a reduction of the commercial stocks accumulated in the post-Korean buying wave. In Europe some reduction in stocks also occurred, which reinforced the effect of increased domestic production, balance of payments difficulties and import restrictions, and, in some countries, a slackening of industrial activity.

THE CHANGING PATTERN OF WORLD TRADE IN FOODSTUFFS

These recent developments, however, are less significant than the more basic change which has come about since the war in the pattern of international trade in agricultural products, par-

TABLE 8. INDEX NUMBERS OF THE VOLUME OF TRADE IN AGRICULTURAL PRODUCTS, TOTAL AND BY REGIONS

REGION	1948-50	1951	1952
..... 1934-38 = 100			
<i>Gross Exports</i>			
World	95	103	98
North America	176	208	201
Africa	119	122	128
Oceania	129	111	123
Near East	97	105	108
Europe.	63	80	79
Latin America	99	91	77
Far East.	65	79	68
<i>Gross Imports</i>			
World	95	103	98
Near East	188	235	218
Latin America	157	180	168
Africa	135	164	158
Oceania	157	191	153
North America	120	125	122
Far East.	74	103	92
Europe.	87	91	87
<i>Net Exports</i>			
Oceania	127	106	121
Africa	115	110	119
Near East	64	58	68
Latin America	91	77	63
Far East.	54	50	40
North America ¹	—	—	—
<i>Net Imports</i>			
Europe.	97	96	90

¹ Changed from a net importer in 1934-38 to a net exporter.

ticularly in the trade in foodstuffs as distinct from beverages, tobacco and raw materials. The change appears to result essentially from the expanding food requirements of the less developed regions of the world, due partly to the increasingly rapid growth of their populations and partly to the spread of industry, mining and other non-agricultural pursuits which bring with them a demand for higher standards of living. Food production in these regions has not kept pace with the growing demand, which has been partly met by reducing food exports and partly by larger food imports. The combined effect is that net exports of food from the less developed areas have fallen even more sharply than gross exports (Figure 4).

The counterpart of the fall in exports from the less developed regions has been a corresponding rise in food exports from North America. In the years immediately before the war, imports

of sugar and oilseeds into North America roughly balanced its exports of cereals, livestock products and other foods. Since the war, however, this region has become the world's largest exporter of food, accounting for roughly half the net inter-regional movements of foodstuffs. This development must have considerably increased the imbalance of payments between North America and the rest of the world. But as is shown later, its effect is masked first by the continuing growth of North American imports of coffee, rubber, wool and other non-food agricultural products, and second, by a marked change in the relative prices of the agricultural products imported into and those exported from North America.

The development of the food situation in the less developed regions has not everywhere followed precisely the same course, though the general causes and effects seem to be similar. For example, gross imports of food into the food importing countries of the Far East have scarcely increased, though they now come largely from North America and Australia rather than from other Far Eastern countries. Gross exports of foodstuffs from this region, however, have fallen sharply and averaged 60 percent less in the three years 1950-52 than before the war. Formerly a large net exporter of food, the Far East has now become a considerable net importer.

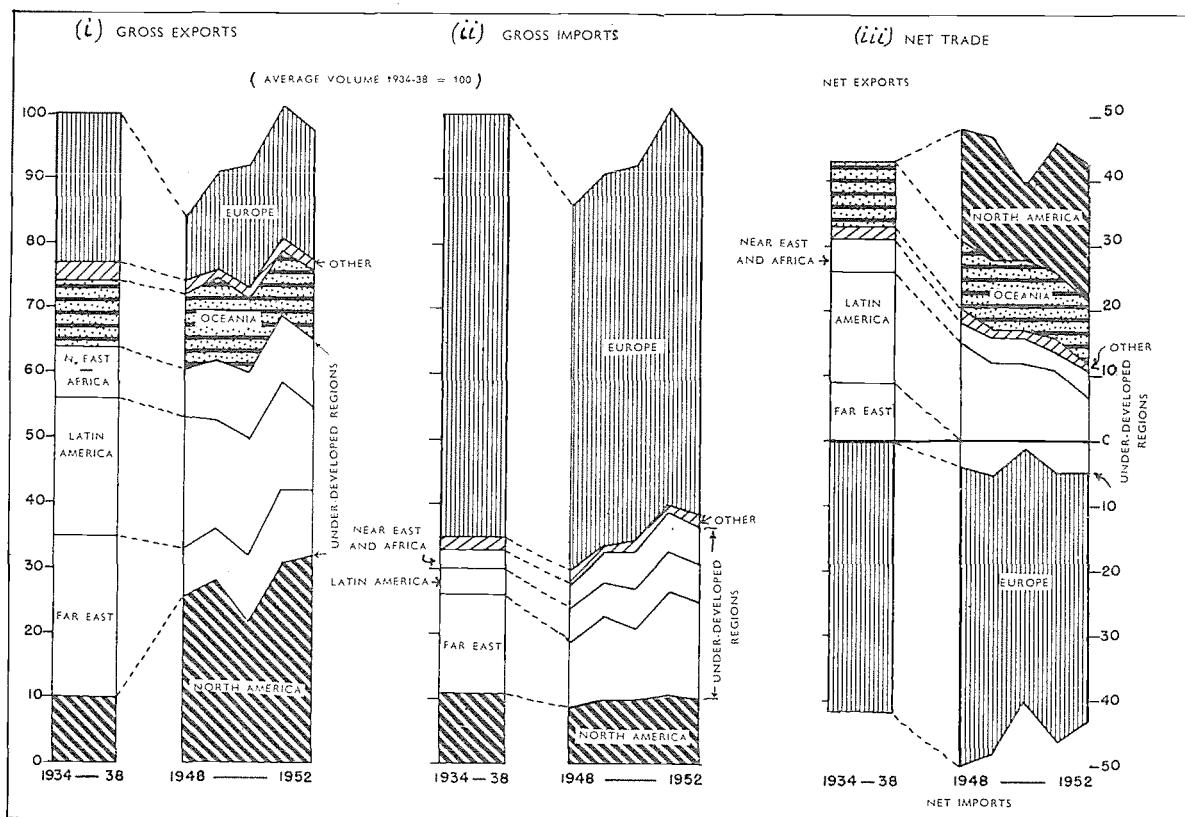
This change in the densely populated Far East is well known, but in some ways is less remarkable than the changes in Latin America, the Near East and Africa, where there is not the same pressure of population. There has been a rapid growth of food imports into these regions, checked in 1952 by the lower earnings of exporters of primary products, but unmistakable in general trend. Together their imports now account for about 12 percent of world trade in food against less than 7 percent before the war. The rise has not been confined to cereals, but has extended to foods such as sugar and livestock products, which suggests that it derives partly from improved living standards (Table 9).

TABLE 9. INDEX NUMBERS OF THE VOLUME OF FOOD IMPORTS INTO LATIN AMERICA, AFRICA AND THE NEAR EAST

REGION	1948-50	1951	1952
..... 1934-38 = 100			
Latin America	150	173	170
Africa	122	149	146
Near East	189	258	237

FIGURE 4 - THE CHANGING PATTERN OF WORLD TRADE IN AGRICULTURAL PRODUCTS

(a) FOODSTUFFS



[Net trade (diagrams iii) is the difference between gross exports (diagrams i) and gross imports (diagrams ii)]

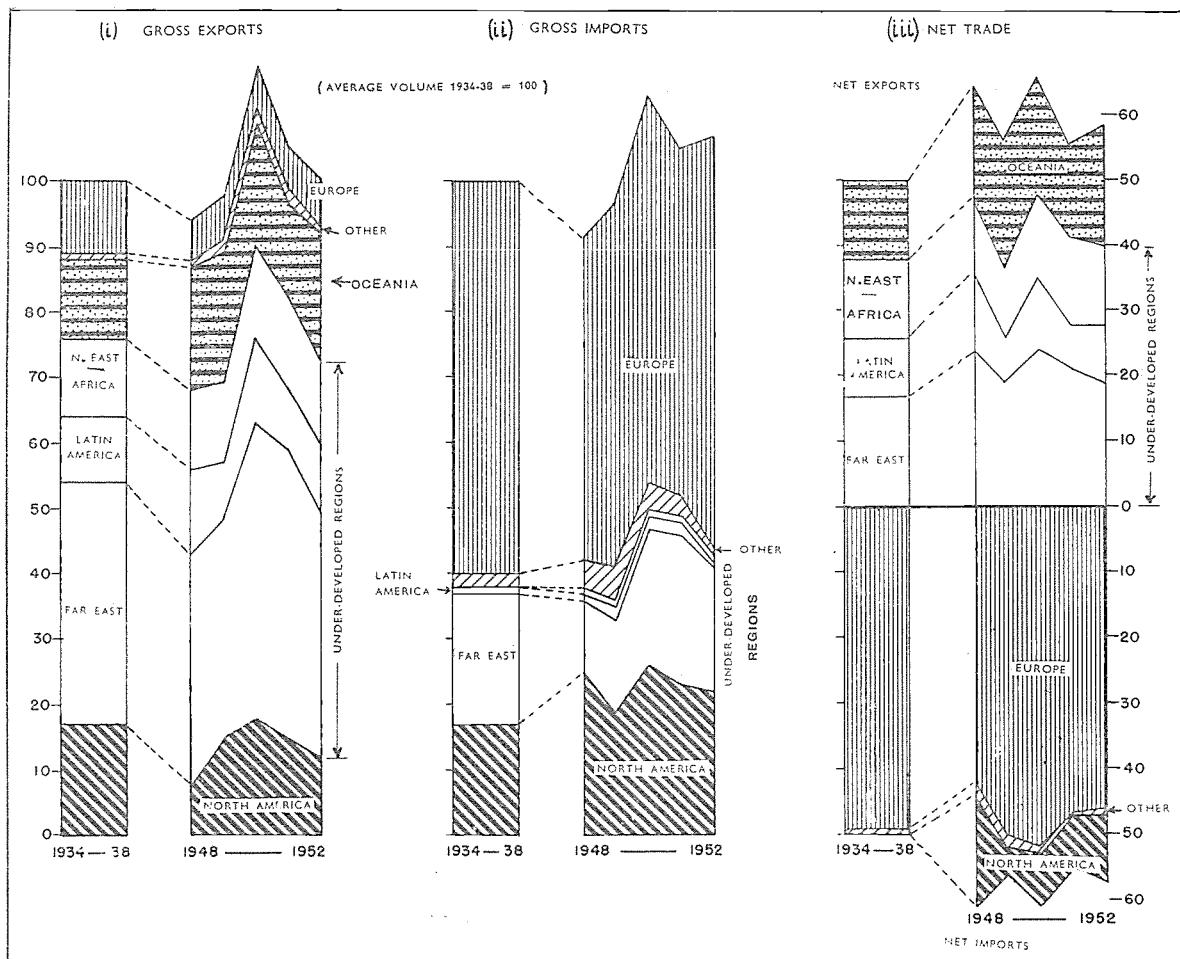
In Latin America the increase in food imports has been accompanied by a fall in food exports, apparent even before the sharp decline in 1952, which resulted from the Argentine crop failure. In Africa rising food imports have roughly balanced an increase in food exports, leaving the net position unchanged. In the Near East the expansion of imports has more than outweighed a recovery of food exports. Taking these three regions together, the fall in gross exports of food from 1934-38 to 1950-52 was only 13 percent, but because of the rise in imports the fall in net exports to other regions was about 40 percent.

The changes in the pattern of international trade in foodstuffs are seen most clearly in the diagrams of net exports and net imports in Figure 4a, which exclude the intra-regional trade within Europe, the Far East and other regions. These net shipments between regions account for rather more than 40 percent of the international trade in foodstuffs. Before the war the under-

developed regions (Latin America, the Far East, the Near East and Africa) supplied about three-quarters of the net inter-regional shipments, the remaining quarter coming from Oceania, with a little from the U.S.S.R. Today the volume of the net inter-regional movement of food is about the same as before the war, and there has been no marked change in the share of Oceania and of U.S.S.R. But the under-developed regions, which formerly contributed three-quarters, now provide only one-quarter of the net inter-regional shipments. The remaining half comes from North America, which in 1934-38 was on balance neither a net importer nor a net exporter of food.

The trend of international trade in natural fibers and rubber (Figure 4b) differs from the trend for foodstuffs in two important respects. In the first place net exports from the less developed regions have been well maintained since the war. Although increasing industrialization has

FIGURE 4 (b) - NATURAL FIBERS AND RUBBER



[Net trade (diagrams iii) is the difference between gross exports (diagrams i) and gross imports (diagrams ii)]

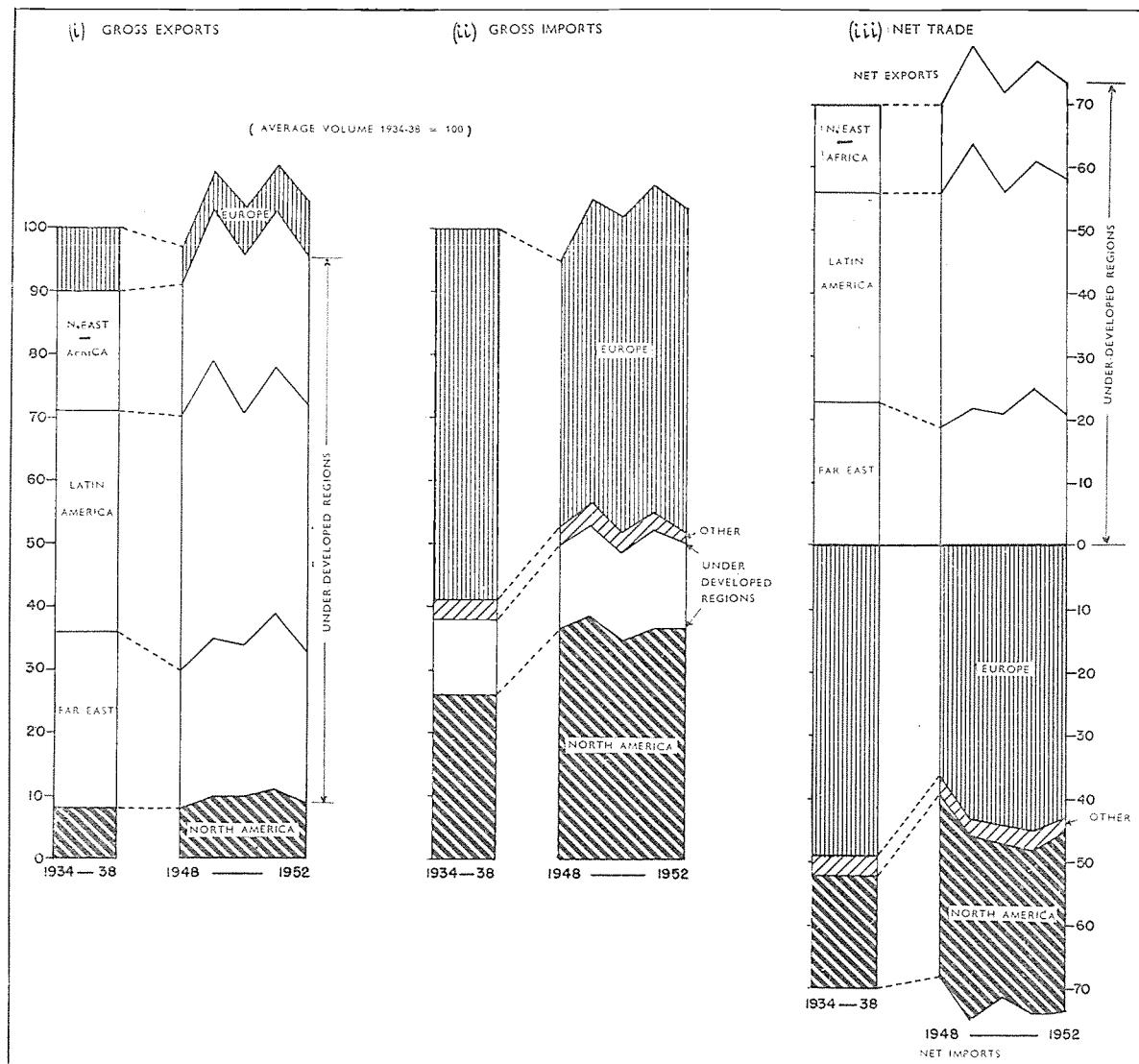
led to a larger consumption of cotton and rubber in these regions, this has not yet become a major influence in international trade, and their exports have responded to any increase in world demand. Some of these commodities have at times been in substantial over-supply. Moreover, North America has not, as in the case of foodstuffs, emerged as a net exporter of raw materials, but on the contrary has become a more important net importer, mainly of wool and rubber. This situation seems likely to continue, though the level of North American imports may be expected to decline somewhat with the end of stock-piling. To a certain extent, therefore, the trend in raw materials offsets the tendency of the changes in the pattern of trade in foodstuffs to aggravate the imbalance of payments between North America and the rest of the world.

As in the case of agricultural raw materials,

net exports of beverages and tobacco from the less developed regions have tended to increase rather than decline, while net imports into North America have been appreciably higher since the war than in 1934-38. Here too, therefore, the effect has been on the whole favorable to the world dollar balance (Figure 4c).

The development of the pattern of world trade for agricultural products as a whole (Figure 4d) is thus the net resultant of opposing trends in the trade in foodstuffs on the one hand, and beverages, tobacco and agricultural raw materials on the other. One effect has been that Europe's share in world imports has tended to decline, as imports of foodstuffs into the less developed regions and non-food products into North America have increased. Nevertheless Europe's gross imports still account for more than 40 percent of the volume of world trade in agricultural products.

FIGURE 4 (c) - BEVERAGES AND TOBACCO



[Net trade (diagrams iii) is the difference between gross exports (diagrams i) and gross imports (diagrams ii)]

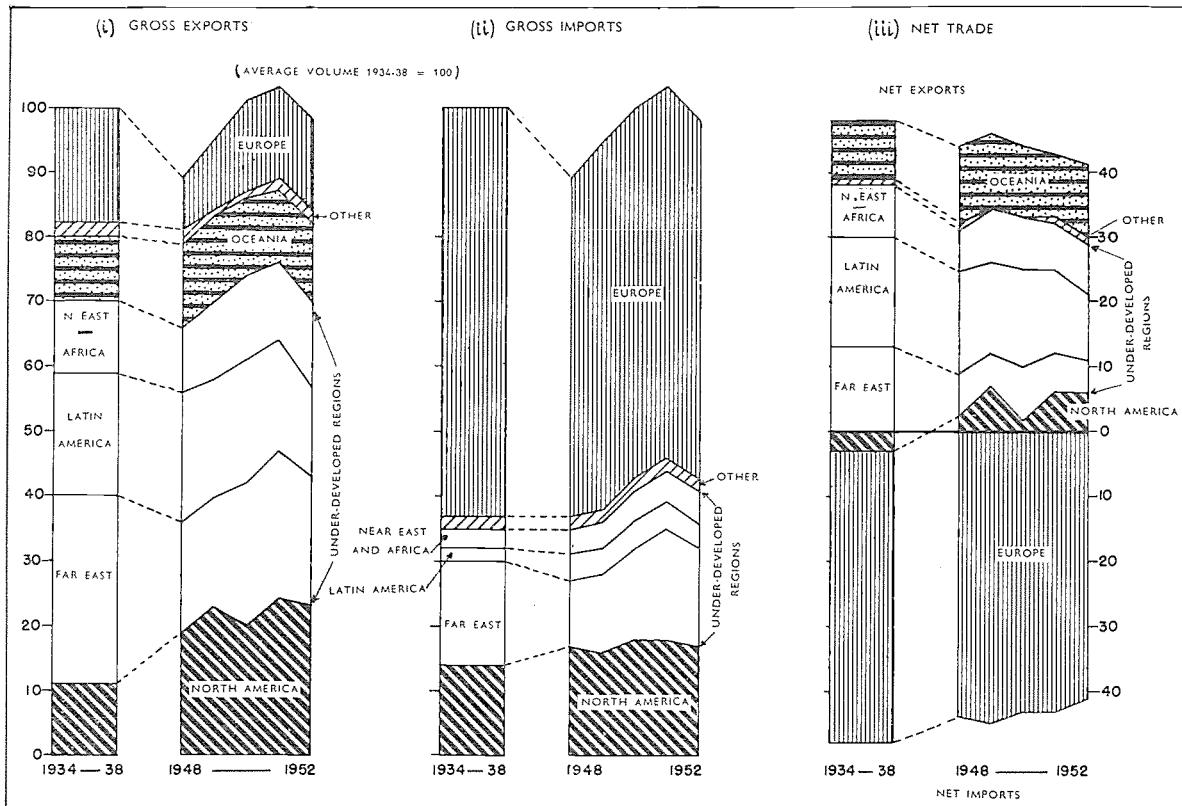
Comparing 1934-38 with the average of the three years 1950-52, the fall in net exports of agricultural products from the four under-developed regions is equivalent to about 12 percent of the total volume of world exports, which was roughly the same in both periods. The volume of agricultural exports from North America doubled in the same period, and this region's larger exports of food far more than outweighed the larger imports of beverages and raw materials. The net difference in the volume of North American trade is equivalent to about 8 percent of the total volume of world agricultural exports. The difference of 4 percent between these two

figures is accounted for partly by slightly larger net exports from Oceania, and partly by smaller net imports into Europe.

Terms of Trade

But these changes in the volume of North American exports and imports of agricultural products are obscured by the fact that since the war the prices of the agricultural commodities which North America imports have risen more steeply than the prices of those it exports. Table 10 relates to the United States, but would not be greatly different for North America as a whole.

FIGURE 4 (d) - ALL AGRICULTURAL PRODUCTS



[Net trade (diagrams iii) is the difference between gross exports (diagrams i) and gross imports (diagrams ii)]

TABLE 10. INDICES OF UNIT VALUES¹ OF U.S. AGRICULTURAL IMPORTS AND AGRICULTURAL EXPORTS

ITEM	1950	1951	1952
..... 1934-38 = 100			
A. Unit value of agricultural exports	244	289	275
B. Unit value of agricultural imports	312	418	356
Ratio B/A	128	145	129

¹ Index of value of trade divided by index of volume.

Thus in the last three years the terms of trade for agricultural products have moved to the extent of 30 to 40 percent in favor of North American imports compared with North American exports. This has so largely offset the opposite trend in the volume of trade that in terms of value North America has remained a small net importer of agricultural products. As long as this price relationship continues it will largely counterbalance the effect of North America's larger food exports on its total balance of current payments, although countries will be differently

affected depending on their position as suppliers to or importers from North America.

Another factor influencing the balance of payments is the terms of trade between agricultural products on the one hand and manufactured goods on the other. It was shown in a report by the United Nations¹ that the terms of trade for primary products against manufactured goods have moved consistently in favor of the latter from about 1880 until immediately before the Second World War. The sharp change in favor of primary products was shown to have carried the terms of trade for the United Kingdom, a typical exporting country for industrial goods, roughly to the level which obtained in 1913. For the United States the effect on the terms of trade was greater, as the commodities for which the rises in price were greatest form a larger proportion of her imports of primary products and as import values were less stabilized,

¹ U. N. DEPT. OF ECONOMIC AFFAIRS, *Relative Prices of Exports and Imports of Under-developed Countries*. Dec. 1949. New York. p. 22.

e.g., by long-term contracts. The terms of trade are now less favorable to primary producers than at the peak in 1951, but are still more favorable than before the war.

The trend in the terms of trade for foodstuffs has been similar to the trend for primary products as a whole¹. It is impossible to tell whether, after the postwar upswing, the long-term trend of the terms of trade in favor of manufactured goods will be resumed or whether there has been a more permanent change in the situation. But the growing food requirements and declining food exports of the under-developed areas would not be inconsistent with the latter alternative, at least for foodstuffs.

The whole relationship between the changing pattern of trade in agricultural products and the balance of payments of individual countries or regions is thus complicated and can be fully elucidated only by a much more detailed analysis than has yet been possible. Yet, irrespective of the counterbalancing effects of the opposite trend in the trade in non-food agricultural products, and of the shift in the terms of trade, it

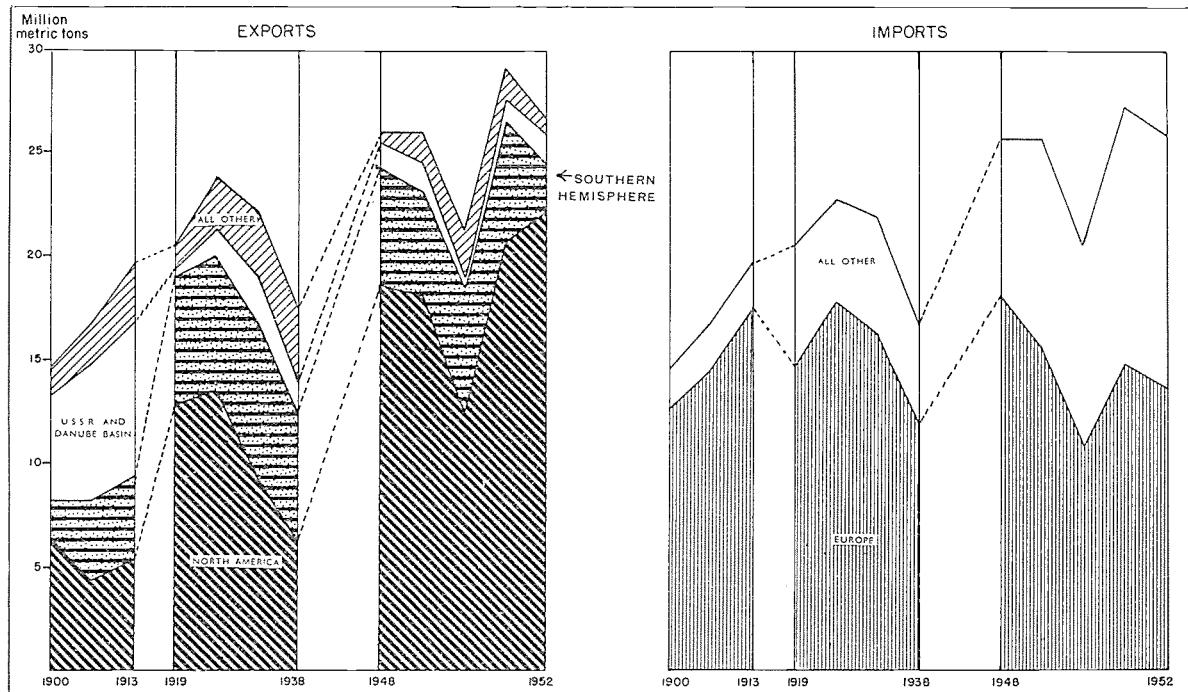
¹ See, for example, *World Production, Prices and Trade 1870-1960* by Prof. W. ARTHUR LEWIS in "The Manchester School of Economic and Social Studies", May 1952. Manchester.

is clear that the major shift towards greater dependence on North America for food must in itself have had a large influence on the international balance of payments of many countries. Foodstuffs alone account for 20 to 25 percent of total world trade, and agricultural products as a whole some 40 percent, so that a major change in this important sector of world trade is of general significance.

Comparison with World War I

It is interesting to draw a parallel between the changes in the pattern of international trade in foodstuffs discussed above and those which followed the First World War. Then, as now, there was a sharp increase in dependence on foodstuffs, particularly cereals, from North America because of the cessation of cereal shipments from the U.S.S.R. and the Danube Basin. There was also an increased dependence on sugar from the Caribbean area because of the virtual disappearance of exports from Eastern Europe. Although these traditional sources never regained more than a fraction of their former importance between the wars, shipment of cereals from the Southern Hemisphere and sugar from the Far East, together with increased European production, gradually supplanted Western Hemisphere ship-

FIGURE 5 - DEVELOPMENT OF INTERNATIONAL TRADE IN WHEAT



ments, and in 1934-38 these were at a lower level than at any time in the century. The series of droughts in North America in the mid-thirties intensified but cannot fully explain this trend.

The process of agricultural recovery in Europe has already reached the point when imports of, e.g., cereals have been reduced to the low 1934-38 level, in spite of a larger population. What is new in the present situation, however, is that Europe is no longer virtually the only importer of foodstuffs, and the growing demand from other regions has made up for the falling European demand. The need for supplies from North America has therefore remained high, though with sharp declines in 1949/50 and 1952/53. Moreover, the area over which net export supplies of food have declined or dried up, seems larger than after the First World War (Figure 5).

The growth of food imports and decline of net exports from the less developed regions result in some instances (e.g., Burma) largely from internal disturbance and the after effects of war. Primarily, however, the trend appears to stem from the normal course of development: the growth of population and the demand for improved standards of living, strengthened by the gradual spread of industry and other non-agricultural activities. Unless their increasing food requirements can be met by expanded production in the under-developed regions themselves, it seems likely that their general economic progress may be retarded, in that their earnings of foreign exchange will be reduced, or that their limited currency resources will continue to be devoted largely to food imports rather than capital goods for economic expansion. The balance of payments implications of a continuation of increased European dependence on food imports from North America are also far-reaching.

THE WORLD ECONOMIC SITUATION IN 1952/53 AND THE DEMAND FOR AGRICULTURAL PRODUCTS¹

The demand for foodstuffs and particularly for agricultural raw materials is determined to a considerable extent by the general level of eco-

¹ This review draws freely on the reports listed below, issued by the United Nations and its various Economic Commissions:

Review of Economic Conditions in the Middle East 1951-52.

Economic Survey of Asia and the Far East 1952.

Economic Survey of Latin America 1951/52.

World Economic Report 1951/52.

nomic activity. In 1952/53 world industrial production rose by about 4 percent and consumer purchasing power continued at a high level. The principal economic developments included the liquidation of the effects of the waves of panic buying which had occurred late in 1950 and early in 1951; the continued easing of inflationary pressures; the relaxation of many direct anti-inflationary measures, especially in North America and Western Europe; and increased competitiveness in international markets. More conventional anti-inflationary measures, through higher interest rates, appeared in many countries.

Economic Activity and Employment

In the United States the index of industrial production rose steadily from July 1952 to March 1953 and has remained at about this postwar record height through June. Unemployment remained exceptionally low. The gross national product and personal income also increased and in the second quarter of 1953 were about 7 percent higher than a year earlier. As prices remained stable this represents a corresponding gain in real income. The rising disposable income resulted in higher consumption expenditures and retail sales. The continuing boom in the United States is supported by higher defense expenditures, the continued high rate of building of private dwellings, and still increasing expenditures on new plant and equipment, automobiles and other consumers' durables.

In Canada business is even more buoyant. The gross national product in 1952 was 7 percent higher than a year earlier and is still rising. New postwar employment records, declining prices, higher real incomes and bigger retail sales, represent together a prosperity without inflation. Although defense expenditure contributes, this prosperity is based primarily on an extremely high rate of capital investment, rapid industrial and mining development, and high, though lately declining, exports of agricultural and industrial products.

Industrial production in Europe (except Eastern Europe) was slightly higher in 1952 than in 1951, but the increase was due solely to a higher output in France and Western Germany, and in most other countries, including the United Kingdom, there was a slight decline. The increase in Western Germany is but one indicator of a general economic recovery, also evident in foreign trade and in the balance of payments. In France the

position was more precarious and industrial production declined in the second half of 1952. In the first five months of 1953, however, some improvement was evident in the Western European economy and industrial production was 3.5 percent above the average of 1952, mainly because of a continuing rise in Western Germany and a more favorable turn in the United Kingdom.

Industrial expansion continued in the Soviet Union and Eastern Europe, but the rate of increase was the lowest since the war. The main emphasis in this area is still on heavy rather than light industry, though some modifications of this policy have been announced recently.

Over-all industrial production in the major Latin American republics, except Argentina, was somewhat higher in 1952 than in the preceding year, although there was some decline in the output of consumers' goods. Difficulties in the disposal of exportable agricultural surpluses and sharp declines in Argentina's agricultural output, which forced several Latin American countries to import dollar wheat, led to severe import restrictions and also to deflationary measures, as well as to changes in the system of exchange rates. The emphasis on rapid industrialization was toned down, and greater stress was put on agriculture. The better Argentine grain harvest in 1952/53 and the recovery of wool prices are not yet reflected in any marked improvement in the economic situation. Inflation has not yet been brought fully under control in Latin America, although in many of the republics serious attempts are being made to correct the critical financial situation. Thus Brazil removed exchange controls for a limited number of transactions in order to adjust the high prices which had restricted its exports of some commodities and at the same time negotiated a substantial loan from the United States Export-Import Bank to liquidate arrears in payments to some foreign suppliers. The sharp increase in the cost of living in some Latin American countries seems to have resulted to a large extent from the increased demand for foodstuffs in relation to available supplies.

Economic conditions deteriorated in 1952/53 in the Far Eastern countries which depend largely on exports of primary products, except rice, because of falling prices and the unfavorable turn in the terms of trade. Industrial production continued to expand in the Far East and has led to a strengthened demand for foodstuffs, but inflationary pressures have been effectively controlled in most countries in the region. Although

Japan has experienced a lower export demand for textiles, American purchases of Japanese goods and services at the annual rate of U.S.\$800 millions in connection with the Korean war have helped to balance external payments. India too had lower export earnings from cotton and jute manufactures, but increased domestic production of raw fibers has to some extent reduced its import requirements.

The year 1952/53 showed a marked improvement in the economic situation of Australia and the government has been able to ease some of the severe import restrictions introduced early in 1952. The production of basic manufactured, mining and most agricultural products has increased. Similarly in New Zealand, higher wool prices and increasing exports, particularly of dairy products, led to an improved balance of trade. The balance of trade of the Union of South Africa also improved. In the less developed parts of Africa the main expansion is now in mining, though the metropolitan governments are also continuing development programs in other sectors. In most Near Eastern countries there have been no marked changes in economic conditions. They are rather favorable in Turkey, but have deteriorated in Iran and Israel.

International Balance of Payments

There was an improvement in the dollar position of the world outside North America during 1952/53, as shown by a reversal of gold movements since the last quarter of 1952. This development was partly due to the restrictions placed on dollar imports in the first half of 1952. The value of United States exports declined from the first to the second half of 1952 by about \$900 million or some 11 percent and was about 2.5 percent lower in the first four months of 1953 than in the same period in 1952. United States imports also declined in the second half of 1952, but later recovered and in the first four months of 1953 were 3 percent higher than in the same months of 1952. The excess of United States exports over United States imports fell from \$4,700 million in 1951/52 to an annual rate of \$3,900 million in the first ten months of 1952/53, which was more than covered by government credit, other transfers and grants in aid, so that there was a net out-flow of gold and dollars.

This out-flow was rather unevenly distributed. Western Europe, and within Western Europe, Germany and the Netherlands, showed the largest increases in gold and dollar reserves. Those of

France declined, however, especially since the last quarter of 1952. The United Kingdom and the sterling area gradually improved its position in 1952/53 after the very heavy gold losses of 1951/52. Canada and some Latin American and Asian countries also increased their dollar holdings. Many exporters of primary products in the less developed regions, however, again had serious difficulties in their foreign balance of payments.

PRICES OF AGRICULTURAL PRODUCTS

Although the continuing high level of economic activity in 1952/53 tended to maintain the demand for agricultural products, the actual movement of prices was largely affected by the earlier inflationary rise in 1950/51 and by changes in the supply position. The sequence of price changes which began with the outbreak of war in Korea had largely worked itself out by the first half of 1953. The initial boom was primarily in raw materials for industry and in forest products, prices of which had sometimes doubled, and in the case of rubber trebled, by the peak period in early 1951. Consequently the most dramatic falls in prices occurred in the same group of commodities. Prices of foodstuffs and beverages were steadier, though some showed price rises of 20 to 30 percent and occasionally more at the height of the boom in early 1951. (Figure 6.) In general the downward trend of agricultural prices seems likely to continue in 1953/54.

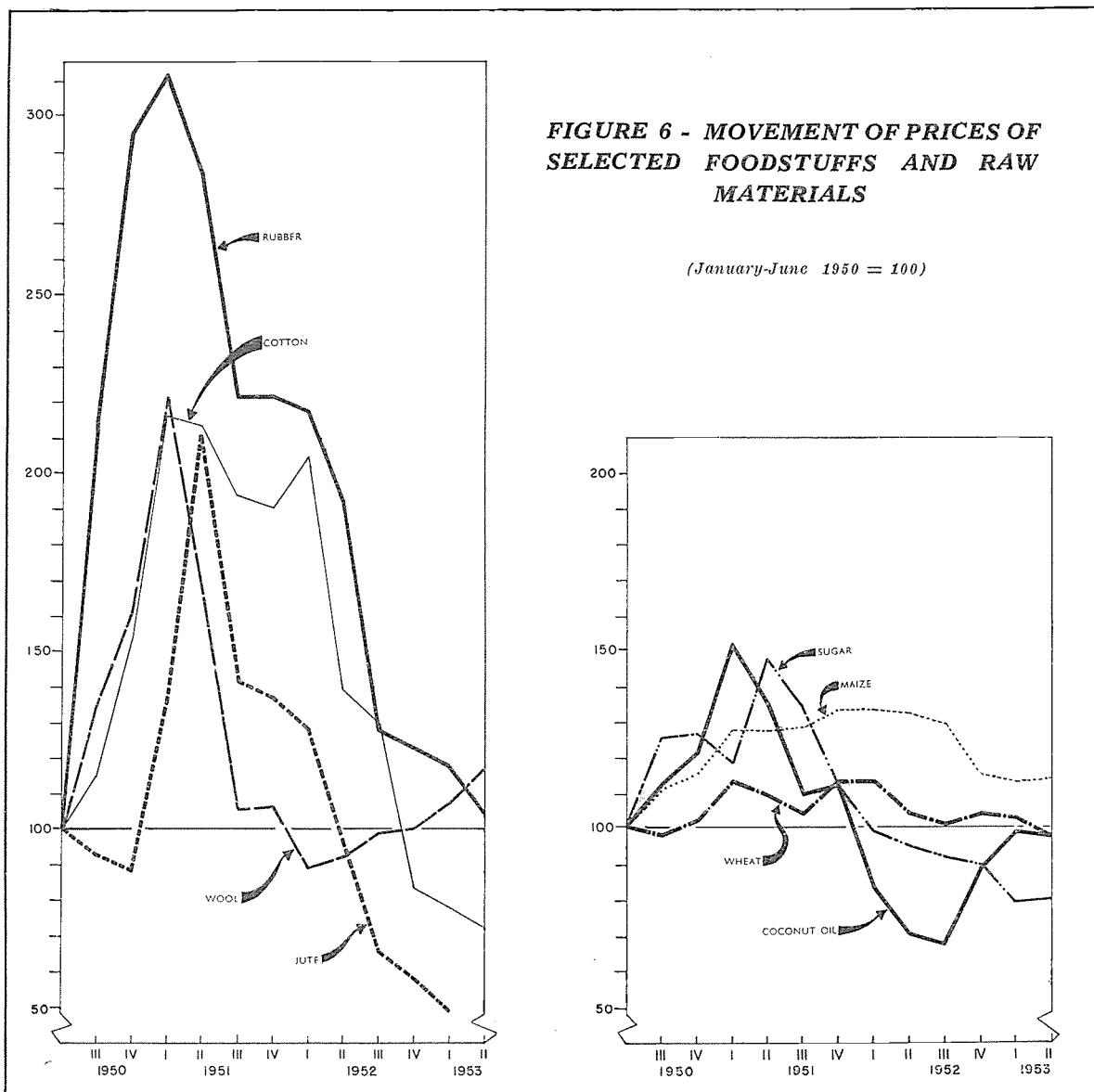
The general downward trend of prices during the past year has thus been primarily a readjustment from the earlier inflationary rise. With the major exception of the temporary recession in textiles, there has been no important decline in demand for consumption, as distinct from stockpiling. A running down of stocks accumulated earlier contributed, however, to the fall in prices. For some commodities increasing supplies have also contributed to the result and in a few cases, notably jute, rubber and sugar, production has considerably exceeded the demand. The sharp fall in United States cattle prices showed that supplies had risen above the quantities which could be absorbed at the high prices of the last few years. Without the operation of price supports in North America there would probably have been a bigger decline in some other commodities as well, e.g., wheat, cotton, cottonseed oil, dairy products, wool and tobacco; large additions were made to the stocks of these commodities held by

the United States Commodity Credit Corporation during the past year. Holdings of some of these products, including wheat, cottonseed oil and tobacco, now amount to some 25 to 40 percent of average annual production. For the world as a whole, stocks of wheat, sugar, jute and cotton were substantially higher at the end of 1952/53 than a year earlier, or at the end of any season since the war and world stocks of rubber were also maintained at the high level of recent years.

By mid-1953 many agricultural commodity prices were back fairly close to the pre-Korean levels. A few major commodities, including livestock products, coffee and cocoa, were still priced 15 percent or more above those prevailing in the first half of 1950. On the other hand, by mid-1953 prices of cotton, jute, sugar and tea were below the corresponding 1950 prices. Prices of some commodities, however, e.g., wool and oilseeds, have shown a marked recovery from the lowest point reached in 1952. Fish prices continued to move above the pre-Korean level, although there has been little increase since 1951. Prices of forest products, especially of European origin, fluctuated violently in 1951-52. The decline of 1952 was checked towards the end of the year and prices remained fairly steady in the first half of 1953, and at mid-year were well above the corresponding mid-1950 prices. Even so, prices are in some cases out of line with current production costs.

The dislocations caused by the violent price movements since 1950 led to a renewal of interest in international commodity agreements as a means of stabilizing prices. International discussions have been held for sugar, cotton and rubber, while the so called Green Pool discussions in Paris explored the possibility of developing a unified market for certain agricultural products in Western Europe. After long negotiations the International Wheat Agreement was renewed early in 1953 for a further three years, but without the adherence of the United Kingdom. Otherwise no tangible results have yet materialized from these discussions.

Indices of farm prices are not available for most countries in the less developed areas, where recent price fluctuations have been most marked. In many European countries, especially where price supports operate, farm prices as a whole were maintained or slightly increased during 1952/53, but they fell somewhat in Norway, Belgium, Western Germany and the Netherlands. In Japan, where there is also an extensive price support system, they increased slightly and in South Africa they



Notes: Rubber: U.S., wholesale, smoked sheets, N. Y.
 Wool: U. K., 64's Dominion clean, cost delivered in the U.K.
 Cotton: Egypt, Karnak good, Alexandria
 Jute: Pakistan, middle quality, Mymensingh

Notes: Coconut oil: 3 1/2 %, afloat, c.i.f. European port.
 Sugar: Cuba f.o.b. export price to destinations other than U.S. (No. 4 contract).
 Maize: U.S., No. 3 Yellow, cash price at Chicago.
 Wheat: U.S., No. 2 Red Winter, cash price at Chicago.

showed a sharp rise. In the United States farm price indices fell by 11 percent in 1952/53 and in Canada by 10 percent in spite of the widespread price support schemes, especially in the United States. In the latter country the sharpest decline was in the livestock sector and reflected mainly the fall in prices of beef cattle.

The falling prices on the commodity markets and at the farm gate are not fully reflected in the general level of wholesale prices. Against the fall in farm prices, general wholesale prices in

North America fell by only 2 to 3 percent during 1952/53, although wholesale prices of agricultural products fell by about 10 percent in the United States and 16 percent in Canada. In Western Europe the decline in both general and agricultural wholesale prices was generally of the order of 5 percent. An exception was Sweden, where general wholesale prices fell but those for agricultural products increased because of the higher level of support prices. In the Near East and Far East wholesale prices have remained

rather stable. Thus in India there was a slight fall in the latter half of 1952 which has since been regained, while in Indonesia the earlier inflationary rise in food prices has been checked. Exceptions include Pakistan, Iran and Israel, where prices continue to rise. The same is true in a number of Latin American countries, where inflationary pressures remain strong. In Australia, however, wholesale prices have remained stable in the past year, though at nearly 50 percent above the pre-Korean level. In many countries indices of wholesale prices of agricultural products are now lower than general indices of wholesale prices compared with their relationship in the first half of 1950, and the divergence is sometimes rather wide, for example, in Western Germany, France, Canada and Australia.

The limited decline in wholesale prices has so far penetrated hardly at all to the retail level, even for food prices (Figure 7). Any fall in wholesale prices has been generally offset by other factors, such as the end of controls on rents, prices and wages, the abolition or reduction of food subsidies and increased interest rates for credit. Hence the cost of living has remained stable or increased slightly in most industrial countries thus tending to prevent prices of finished manufactures from declining on the domestic and export markets. In many less industrialized countries, retail prices have declined somewhat, except where inflation has not yet been brought under control.

Exceptions occurred in such diverse countries as Canada and Egypt, where retail food prices declined by about 10 and 14 percent respectively since early 1952; these reflect lower wholesale prices for food and, in the case of Egypt, the drastic measures taken by the government to-

ward the end of 1952 to lower food costs. On the other hand, increases occurred in such countries as India and the United Kingdom because of a reduction of food subsidies. In Pakistan retail food prices have risen by more than 10 percent during the past year because of shortages due to drought. Temporary food shortages, at least in relation to the volume of demand, have also contributed to the rising prices in some Latin American countries, e.g., Brazil and Argentina, where retail food prices rose even more rapidly than the general cost of living.

Recent developments have thus tended to operate to the disadvantage of the farmer. He is affected, though less than urban consumers, by the general level of retail and wholesale prices, and the relative stability of these indices in most countries in contrast to the downward trend of farm prices worsens his general position. Still more significant in its effect on net farm income is the relation of the prices of the products he sells and of the farm requisites he must buy to carry on his business. Few countries publish comparative indices of prices received and prices paid by farmers, but in most of the countries that do so a marked fall is evident in the ratios in the last year, though in some cases they remain more favorable to farmers than before the war (Table 11).

FARM INCOME AND INVESTMENT

In the more developed countries the economic situation of farmers remained generally advantageous in 1952/53, as the unfavorable change in price relations noted in the previous section tended to be offset by higher production. Compared with 1951/52 there were no major changes either in their net money incomes or in the cost of liv-

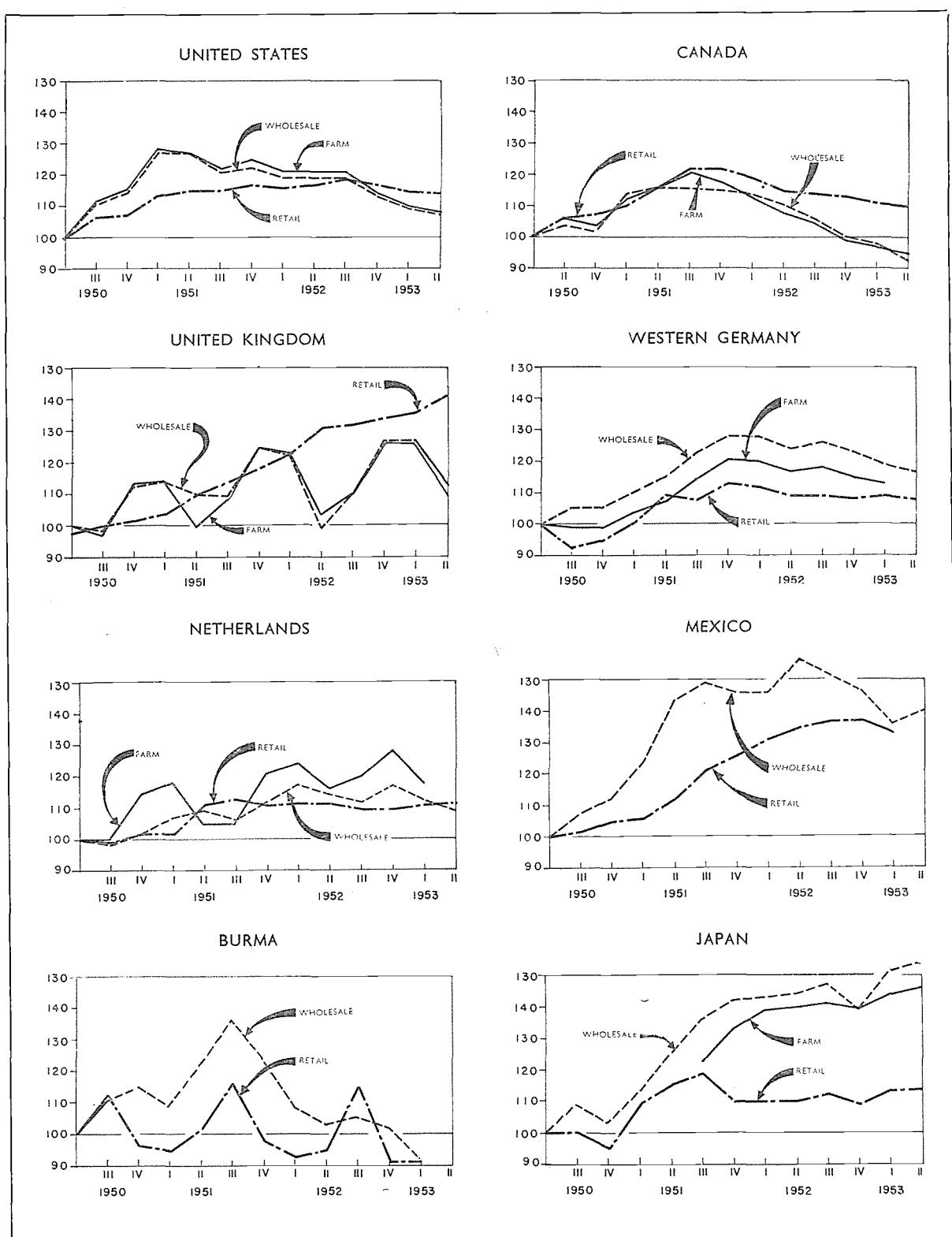
TABLE 11. RATIO OF PRICES RECEIVED TO PRICES PAID
BY FARMERS FOR SELECTED COUNTRIES BY QUARTERLY PERIODS

COUNTRY	1950		1951				1952				1953	
	III	IV	I	II	III	IV	I	II	III	IV	I	II
<i>January-June 1950 = 100</i>												
Canada	105	...	105	104	105	...	101	94	91	...	90	84
United States	107	109	115	112	107	109	105	104	106	101	97	96
Belgium	93	96	98	95	94	97	102	102	95	92	86	90
Germany, Western	98	94	92	91	93	93	93	90	91	88	86	...
Netherlands	98	108	105	91	89	102	98	92	96	99	93	...
Norway	91	91	91	88	88	90	94	89	94	90	88	81
Switzerland	102	103	98	97	96	96	94	95	95	95	95	95
India (Assam) . . . . .	...	...	...	...	122	112	92	91	90	...	...	...
Japan . . . . .	...	...	...	...	97	101	104	105	108	107	109	110

... Not available.

FIGURE 7 - PRICES OF AGRICULTURAL PRODUCTS AT FARM AND WHOLESALE AND FOOD PRICES AT RETAIL

(January-June 1950 = 100)



ing. In comparison both with the prewar and immediate postwar period, farmers are operating more efficiently, have increased their capital investments, and are generally in a stronger economic position.

At about \$14,700 million net United States farm incomes in 1952 were six percent lower than in 1951 and may fall by another 6 to 7 percent in 1953, as the fall in prices received by farmers is not fully offset by lower costs. In that case it has been estimated that the purchasing power of farm incomes in 1953 would fall to the level of 1950, the lowest since the war, but nevertheless about 30 percent above the prewar level.

In Canada the position is similar. The net farm income reached a record level of Can. \$2,118 million in 1951 and declined by 11 percent in 1952, but was still 35 percent higher than in 1950. The purchasing power of the farm income also declined from 1951, but was substantially higher than in 1941.

In terms of capital investment, farmers in the United States in 1951 and 1952 spent almost \$6,000 million each year for farm equipment and construction. This represents almost 10 percent of all capital outlays in the United States.

In both countries, but mainly in the United States, price support measures were more fully utilized as prices tended downward. The parity ratio in the United States declined steadily during the past year, and at the end of June 1953 was 94 as compared with 103 a year earlier.

In Oceania net farm incomes showed a substantial increase in 1952/53 as compared with 1951/52, resulting mainly from greater production at enhanced prices. Although prices to farmers have risen somewhat, it is unlikely that over the year as a whole the cost/price ratio moved significantly in favor of farmers, mainly because of adjustments in labor costs. Nevertheless the extra output at higher prices was sufficient to result in net income higher than in any other year except 1950/51, when it was raised by the high wool prices due to the Korean boom.

In Western Europe there has been recently a considerable degree of stability in agriculture. Although 1952/53 is unlikely to have proved a highly profitable year for farmers, the real value of incomes generally suffered no sharp set-back. Thus in Western Germany, although prices of livestock have tended downwards and costs of labor, fertilizers and machinery are somewhat higher (the price index for farm requisites was about 3 percent higher at the end of 1952 than a year earlier), the rise in the volume of production

at least partly offset this unfavorable development in price relations. Furthermore, as the cost of living declined, the real value of farm incomes was sustained. In France, Italy and Switzerland, too, the balance of production, farm prices and costs is likely to leave the real income of the farmer largely unchanged. In the Netherlands, Denmark and Norway farmers' costs seem to be running a little ahead of prices; in Sweden the reverse seems to have been the case. Investment in agriculture in Western Europe has been maintained at a fairly high level, and in particular there has been a sharp increase in mechanization. Between 1950 and 1952 the number of tractors increased by 15 percent in Sweden (already highly mechanized), by 20 to 30 percent in the Netherlands and Switzerland, by about 40 percent in France, Belgium and Western Germany and by no less than 90 percent in Denmark.

In the United Kingdom the economic position of the farmer has improved considerably. Net incomes, in part reflecting increased production, between 1938 and 1952 nearly doubled after allowing for the general rise in the price level. Net income in 1952/53 is likely to have been about the same or slightly lower than in 1951/52. There has been a considerable investment in agriculture, particularly in mechanization, and in 1952 the number of tractors reached 387,000, compared with 348,000 in 1950 and 55,000 before the war.

In Japan the large gains in farm income in 1951/52 were not continued into 1952/53. Rises in current farm expenses and in the general cost of living more than offset the increase in total farm receipts. Farmers' income from non-agricultural sources increased, however, leaving a slight net gain in their over-all economic position. Rural living standards, which improved between 1950/51 and 1951/52, were maintained in 1952/53. The large prewar difference between urban and rural living standards has now largely disappeared, as farm living standards have improved, while urban consumption levels remain about 30 percent lower than before the war.

In other areas of the world information on agricultural incomes is scanty, and indeed the concept of net farm incomes as used when the main production is for the market applies to a limited extent only where farmers are largely on a subsistence basis. The small proportion of their production and consumption which goes through the market has been affected by the downward trend of most commodity prices and the relatively higher prices of many manufactured articles.

This is true also of fishermen producing on a

subsistence basis. To some extent their economic position has improved through the development of mechanization and other technical innovations and also the creation of market opportunities following on industrialization.

A major difficulty in the expansion of agriculture in the less developed regions is the scarcity of capital, intensified by their recent concentration on industrialization. For example, the *Economic Survey of Latin America 1951/52* reports that "generally speaking little capital has been applied to agriculture.... Its growth has been slow compared with industry, creating difficulties both for exports... and for domestic consumption."¹ In fact, manufacturing production in Latin America rose at an annual rate of 7.7 percent between 1946 and 1952, compared with 2.5 percent for agriculture. Agricultural products make up nearly half of Latin American exports, which according to the same report are closely correlated with the rate of investment. Thus a vicious circle is developed; insufficient investment in agriculture reduces exports and lowers the capacity for external payments and for total investment, which, in turn, prevents further adequate investment in agriculture. This diagnosis holds good not only for Latin America, but also for other underdeveloped regions.

Lately, however, a reversal of this trend has become apparent. Mexico and Argentina are notable examples of Latin American countries which are now laying increasing emphasis on agriculture. In the Near East, Turkey has provided a remarkable example of agricultural development now beginning to come to fruition. The Far East provides some of the most striking examples of the growing attention to agriculture and the development programs of, e.g., India, Pakistan and Ceylon allocate a large part of available funds to agriculture. In the latter region, in particular, public funds are being used to an increasing extent to supplement the lack of private funds for investment in agriculture, partly due to the general shortage of capital and partly to more profitable opportunities for investment in other fields. On the one hand, public funds are being used for large-scale schemes, including irrigation and the importation of farm machinery for land reclamation. On the other, they are being used to help forward small-scale projects, e.g., to encourage schemes of self-help and community development, or by setting

up or enlarging public financing institutions intended to alleviate the small farmer's traditional difficulty in obtaining credit.

There is little statistical data available on agricultural credit in most countries. FAO, as requested by the Sixth Session of the Conference, sent out a mail questionnaire in 1952 seeking information on credit granted and outstanding, and on types of credit institutions. The replies to date are not yet sufficient to allow tabular presentation. However, the available data do support the view that, although progress is being made, credit facilities and the supply of long-term credit are inadequate in many countries, particularly for small farmers.

In addition to direct state investment, a number of countries have attempted to increase the flow of private funds into agriculture. Mexico, for example, has released blocked commercial bank funds for investment in agriculture.

The acute shortage of domestic capital in the less developed countries has naturally led to considerable attention being given to securing funds from abroad for investment, both in agriculture and in other sectors of the economy. So far, however, the flow of foreign capital for direct investment in agriculture has been rather meagre, though larger amounts have been forthcoming, for example, for transport and power developments which aid agriculture indirectly.

Private Foreign Investment

In the private sector, new United States direct investment and re-investment in foreign agriculture in 1951, the latest year for which data are available, amounted to \$40 million. Total United States private investment in foreign agriculture outstanding at the end of that year amounted to \$694 million. These funds were placed in very limited sectors. More than 80 percent was invested in Latin America, mainly in sugar and fruit undertakings; about 45 percent was in Cuban sugar alone. In comparison, it may be noted that at present new net domestic investment in United States agriculture, i.e., less amortization and maintenance cost, is of the order of \$1,500 million annually.

As is well known, United Kingdom overseas private investments have declined steadily since the prewar period and in 1950, the latest year for which official data are available, they were some 40 percent lower than in 1938. It is impossible to separate the part of agriculture, but a breakdown of a total share and loan capital of

¹ *Economic Survey of Latin America 1951/52*. ECOSOC Document E/CN.12/291, March 1953.

£1,235 million in United Kingdom registered companies and British companies registered abroad, lists £77.8 million for rubber and £40.9 million for tea and coffee as the only recognizably agricultural undertakings. The Commonwealth Development Finance Company, established after the Commonwealth Economic Conference of December 1952, is intended to mobilize private capital for primary production, but lending for all purposes has been limited to a maximum of £30 million so that no large-scale financing can be expected for agriculture.

Other countries exporting private capital, except to dependent territories, include Canada (mainly to the United States) and Switzerland; the latter country in 1952 provided nothing directly for agriculture out of foreign loans of about \$60 million. It seems clear therefore that the total flow of foreign private capital for investment in agriculture from all sources has been almost negligible in comparison with total needs.

Public Foreign Investment

Since the war the bulk of foreign investment has come from public sources of which the International Bank for Reconstruction and Develop-

ment and the United States Import-Export Bank are among the most important.

Although the total loan authorizations were lower in the second period covered by the above table, the percentage for direct aid to agriculture was somewhat larger. Of these loans, by far the greatest part went to India, which received \$19.5 million for irrigation and flood control and \$31.5 million for agricultural processing industries. The others were \$3.5 million to Finland for forestry equipment and \$0.9 million to Iceland for processing industry. A noteworthy development recently has been the increasing share of non-dollar currencies in the loans granted by the International Bank, reflecting the increasing availability of capital goods in non-dollar countries. The decision of the United Kingdom government to permit the use of up to £60 million of its subscription for loans may be expected to strengthen this trend.

Direct aid to agriculture accounts for a rather minor part of the United States Export-Import Bank loans and so far has been limited to the import of agricultural machinery. The whole of the authorization of \$18 million for agricultural development in the second period went to Brazil (Table 13).

The amounts specified in the two preceding tables are authorizations for loans, and actual disbursements run somewhat lower. In 1952 they amounted to \$704 million against authorizations in the same period of \$889 million; pro rata, disbursements for agricultural development may have been of the order of \$70 million.

In addition, fairly large investments from public funds are made by metropolitan countries for economic development in their dependent territories. No recent estimates are available of

TABLE 12. INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT: AUTHORIZED LOANS TO MAY 1953

ITEM	NOV. 1951 TO JULY 1952	JULY 1952 TO MAY 1953	TOTAL
... Million U. S. dollars...			
TOTAL loans authorized . .	240.1	173.4	413.5
<i>Directly aiding agriculture</i> . .	63.3	55.4	118.7
Machinery and spare parts	9.6	—	9.6
Irrigation and flood control	25.2	19.5	44.7
Timber equipment	1.0	3.5	4.5
Processing industries	9.5	32.4	41.9
Multi-purpose loans	18.0	—	18.0
<i>Indirectly aiding agriculture</i> . .			
Transport	42.2	88.0	130.2
Power development	94.6	—	94.6
Other	40.0	130.0	70.0
..... Percent			
Percentage directly aiding agriculture	26.4	31.9	28.7

¹ To Yugoslavia; partly for utilization of forest resources and production of superphosphates.

SOURCE: IBRD *Seventh Annual Report 1951-52*, Washington, September 1952, and Press Releases.

TABLE 13. U. S. EXPORT-IMPORT BANK: AUTHORIZED LOANS TO MAY 1953

ITEM	JULY 1951- JULY 1952	JULY 1952- MAY 1953	TOTAL
... Million U. S. dollars...			
TOTAL loans authorized . .	543.1	529.4	1,072.5
Directly aiding agriculture . .	7.6	18.0	25.6
Indirectly aiding agriculture . .	87.9	37.7	125.6
Other	447.6	473.7	921.3
..... Percent			
Percentage directly aiding agriculture	1.4	3.4	2.4

SOURCE: Export-Import Bank, *15th Semi-Annual Report to Congress*, Washington, 1953, and Press Releases.

the amounts¹ or of the proportion for agricultural development, but they may be of the same order of magnitude or rather larger than the combined annual disbursements of the two banks. If this is correct, the total foreign capital made available from public and private funds for all types of economic development in the under-developed countries may be tentatively estimated as in the neighborhood of \$1,500 million annually².

This may be compared with an estimate of about \$10,000 million as the annual investment required to raise the per capita national income of the under-developed regions by 2 percent. The aggregate national income of these regions may be of the order of magnitude of \$100,000 million and at an annual savings rate of say 5 percent, domestic investment would cover half this requirement, leaving some \$5,000 million to come from abroad. The margin of error in all these estimates must be large, but they indicate a requirement of foreign capital far beyond anything which has been forthcoming in the last few years or which can be foreseen in the near future.

For agriculture the deficit is probably proportionately greater. The total investment needs of agriculture in the under-developed areas have been estimated as of the order of \$4,000 million³ or 40 percent of the total investment. The percentage of domestic investment in agriculture is unlikely to be higher than this and it appears from the earlier paragraphs that the proportion of foreign investment is considerably lower.

A larger flow of investment funds from abroad may be possible. The resources of the International Bank might be drawn upon to a greater extent for well conceived schemes of agricultural development. A proposal for a Special United

¹ The Bank for International Settlements estimates that capital amounting to as much as \$3,000 million was made available by Western Europe to overseas countries in the five year period 1948-1952 (*23rd Annual Report*, Basel, June 1953, p. 42).

² No account has been taken of United States and international grants and aid, since it is rather difficult to allocate specific sums to investment and still more difficult to agricultural investment. However, it should be kept in mind that Western Europe—the main recipient of United States grants and aid—is not included in the estimates throughout the text. The greater part of such grants and aid going to under-developed countries in 1952 was for military purposes and the share of capital goods shipped under MSA is relatively small. Under the Far East program, e.g., for the period 1 July 1951 to 31 December 1952, out of a total of \$ 203.6 million of paid shipments \$25.2 million was for machinery and motor vehicles.

³ UNITED NATIONS, *Measures for the Economic Development of Underdeveloped Countries* New York, May 1951, p. 79.

Nations Fund for Economic Development⁴, has been under consideration by the Economic and Social Council and by the General Assembly and in these discussions projects to increase food production have been singled out for priority. Other sources may also be found. But on the whole the inescapable conclusion appears to be that much the greater part of the investment funds needed for agricultural expansion in the less developed areas must come from their domestic resources.

THE ECONOMIC OUTLOOK FOR 1953 AND 1954

No major changes in the economic situation are anticipated for the rest of 1953. In the United States gross national product will reach a record level. Planned expenditures by private business for new plant and equipment in 1953 are about 5 percent above those in 1952. Some defense industries have begun to show declines while some non-defense industries are showing increases after curtailing expenditures during the defense build-up. Consumers' expenditures are likely to increase with rising incomes and particularly if the rate of savings should recede closer to prewar levels. Every major industry expects greater sales in 1953 than in 1952. In Canada estimated gross national product in 1953 will increase by 4 percent over that in 1952, with public and private investment constituting 23 percent of the gross national product. With high employment, rising income and reduced income taxes, it is anticipated that consumer expenditures will also increase substantially.

In Western Europe the level of industrial production in 1953 is unlikely to be very different from that of 1952, declines in a number of countries being offset by a small increase in the United Kingdom and a somewhat bigger increase in Western Germany. Industrial production in 1952 was largely affected by the recession in the consumer goods industries, mainly textiles. These industries recovered in early 1953, but at the same time a downward tendency has appeared in engineering industries and there are signs that this is beginning to affect output in the basic industries. The stagnation or decline in activity does not yet appear to have reduced total consumption. Western European countries are finding increasing difficulties in overseas markets for exporting man-

⁴ UNITED NATIONS, *Report on Special United Nations Fund for Economic Development* (E/1381), March 1953.

ufactures. However, the downward trend in exports has so far been outweighed by a decline in the value of imports, and the balances of payments of Western European countries are therefore likely to be at least as favorable in 1953 as in 1952, both in total and with the dollar area.

In the under-developed countries, the economic outlook is largely dependent on the level of exports and foreign earnings and investment. Current national plans and programs call for an increase in both industrial and agricultural production, but to a large extent foreign earnings accumulated between June 1950 and December 1951 have now been used up. The coffee, cocoa and petroleum exporting countries should continue to benefit from a sustained demand for their products, especially in the United States. Other countries may gain from a continued revival of the demand for hides, wool, jute and cotton. Foreign investment, however, still continues to be inadequate in relation to development programs desired by these countries.

The level of world trade is, of course, heavily influenced by economic conditions in the United States. For 1953 it is anticipated that the volume of United States merchandise imports may continue somewhat above 1952, but exports may decline because of the reduced need for United States coal and wheat and of continuing restrictions of dollar imports in soft currency countries. This likely development, combined with an expected higher United States outlay for military expenditures abroad, should partly compensate for the declining non-military aid and "foreign countries should be able to raise their gold and dollar assets in 1953 although probably at a slower rate."¹

Before discussing possible developments in 1954 it is necessary to point out some of the economic uncertainties. In the immediate postwar period and again during the Korean boom years, the main concern in regard to agricultural products was that demand would outstrip supply because of the rapid expansion of industrial employment and consumer incomes, thereby causing price increases and inflationary pressures. Today the question is whether economic expansion and the consequent increase in income and demand in developed areas will be adequate to absorb the increasing supply of some agricultural products at prices sufficiently satisfying to producers to maintain increased production. Up to now, large stocks of foodstuffs have accumulated only in the dollar area, includ-

¹ U. S. DEPARTMENT OF COMMERCE, *Survey of Current Business*. March 1953, p. 12.

ing the dollar Caribbean countries, and the main fall in food prices has also occurred in this area. Outside the dollar area there have been sharp falls in the prices of agricultural raw materials from the high levels of 1951. There have also been accumulations of stocks or restrictions on production of raw materials and beverages such as jute, cotton, rubber and tea. But apart from temporary difficulties in marketing Near Eastern grain exports, there have been no major developments of this kind in the case of food. These facts seem to give a pointer to future courses of action.

Generally speaking, less favorable factors are specially the following. In 1952 and 1953 there has been a general decline in the rate of expansion of industrial production, especially in the more developed countries compared with 1950/51, except in North America. Doubt has been expressed about the continuation of the rate of investment set during the past two years, especially with a prospective reduction in investment for armament production. Under-developed countries do not have the resources in terms of foreign exchange that were available during the past two years. As the drive towards self-sufficiency in agriculture and industrialization gains momentum, there may be a short-run tendency towards a reduction in foreign trade. In the United States there is, however, some concern as to whether a continued record industrial output would be fully absorbed and whether the current level of prosperity will be continued through 1954; agricultural stocks in substantial volumes are accumulating in the hands of the government. Prices of farm products on free markets have shown weakness during the current period of record high economic activity. Many possible changes in the political climate may have economic consequences which are beyond the scope of this report.

The United States constitutes for many countries an appreciable part of the market for their total exports and is of special importance because many of their requirements can only be obtained from dollar sources. Any change in United States imports has, therefore, a marked effect on their economic position. In turn, the most important single factor determining the volume and value of imports into the United States is the level of industrial activity². Some slowing

² During the postwar period changes in the level of United States industrial production have been closely reflected in the current volume and value of imports, quarter by quarter. On the average, the volume of total imports and of agricultural imports

down in the rate of expansion in the United States, even at a high level of economic activity, would have considerable impact on many countries, including Western Europe, whose dollar earnings would be reduced and whose exports to other countries would be affected by their reduced import earnings.

Large and increasing expenditures on rearmament and investment for rearmament in the expansion of the United States economy in recent years has meant that there has been little danger, except in limited sectors, of production outrunning demand. During 1952/53, expenditure for national security remained fairly stable but it is likely to ease off in 1953/54 and 1954/55. It seems unlikely, however, for some time to come, that there will be any great fall in the present rate of expenditure. A large amount of past appropriations are still outstanding, but changes in the United States defense policy might reduce expenditures below the previously anticipated rate and such expenditures will be more largely devoted to weapons and will be accompanied by less private and public investment in expanding plant to produce them.

The crucial question which would arise is whether other forms of public expenditure, together with private expenditure for consumption or investment, would rise fast enough to fill the gap. If they should increase sufficiently to sustain something like the recent rate of growth of the United States economy, a continuing gradual expansion of United States demand and imports may be expected. If they did not, which would mean a pause in the rate of economic growth, or even a recession as in 1949, past experience suggests that this would be accompanied by a sharp decline in United States imports which would have serious repercussions on the economies of many other countries.

Some factors suggest that it will be difficult to maintain the recent rate of growth. While private expenditure on durable goods might continue to increase there is no longer the large backlog of demand of the immediate postwar years. Much recent buying of consumers' durable goods has been financed by credit which might soon reach an economically sound limit in relation to current income. In spite of increasing sales of new cars, the recent high level of automobile

has changed by about the same percentage as has the industrial production, but owing to concurrent changes in price levels, the *value* of total imports has changed by about $2\frac{1}{2}$ times as much.

production seems to be outrunning consumers' demand with stocks accumulating and prices declining for used cars in dealers' hands. A slower rate of family formation is now expected as a result of the low birth rates during the early thirties, which may weaken the demand for new residential building and household goods. Any marked increase in inventories is unlikely so long as price levels continue stable or decline. Although current intentions for expenditure on new industrial plants and equipment are higher than in 1952, they could be quickly curtailed if a halt in the expansion of demand began to appear and export markets narrow as the United States government reduces its external aid programs.

On the other side, there is the high volume of liquid savings in the hands of American consumers and recent savings rates have been exceptionally high. Furthermore, any tax relief in the United States would increase personal disposable income and might lead to increased private expenditure. Interest rates were increased sharply during the first half of 1953, but could be eased again if the rate of investment showed signs of slackening. There is a considerable backlog of non-defense public works which could be put in hand and other measures are available to the government for stimulating economic activity.

Although emphasis has been put on economic developments in the United States, it is important to note that non-dollar trade constitutes approximately 70 percent of world trade; Western European trade alone makes up 40 percent of world exports and imports. Its share of world exports has increased since 1948, but its proportion of total world imports decreased, although the value of imports rose substantially. The decline of United States aid funds and perhaps reduced military expenditures abroad may have some effect on levels of European economic activities. But to the extent that the non-dollar area may continue to maintain a high level of economic activity and trade, the effect of any weakening of economic conditions in the dollar area would be reduced.

In view of all the uncertainties, especially the unpredictable political developments, no attempt is made in this report to forecast the likely economic trend in 1954. This will clearly depend largely on economic developments in the United States, the course of world political events and other factors. But these conditions will largely influence the future demand for agricultural products, particularly agricultural raw materials, both in the United States and indirectly in many other countries.

Chapter III

REGIONAL REVIEW AND OUTLOOK

Chapter III - REGIONAL REVIEW AND OUTLOOK

EUROPE¹

Agricultural Production

The signs of a renewed expansion of economic progress in North Western and Mediterranean Europe during the first half of 1953 after the lull in 1952, the improved balance of trade and the general trend of prices have been discussed in the previous chapter where the situation in Eastern Europe was also briefly noted. On the agricultural side, production in North Western Europe has continued to increase by about 2 percent annually since 1950/51, and this rate of increase was maintained in 1952/53. Production has kept pace with the increase of population since 1934-38 (Table 14) and considerably exceeded it in the United Kingdom. This result has been obtained with lower imports of animal feeding stuffs and the index of production net of imported feeds exceeds the index of gross production by about 5 percent. In 1952/53 the production of cereals and sugar exceeded the average of the four previous years, but the production of potatoes was lower and the weather was not generally favorable for pasture and green fodder. Even with an excellent harvest, the production of bread grains in France and most other continental countries barely equalled and in a few cases exceeded the prewar average, but except in France the output of coarse grains was generally greater than before the war. Cattle and especially pig numbers continue to increase and the expansion

TABLE 14. — INDEX NUMBERS OF THE VOLUME OF EUROPEAN AGRICULTURAL PRODUCTION (Net of Imported Feeding Stuffs) AND OF POPULATION

REGION	Production			POPULATION End 1952
	1948/49 to 1950/51	1951/52	1952/53 (provisional)	
..... 1934-38 = 100				
North Western Europe .	107	114	116	112
Mediterranean Europe .	98	113	108	112
Whole region	97	107	107	108
Excl. Eastern Europe .	104	114	113	112

of livestock production has tended to exceed that of crops, except in the United Kingdom (Table 15).

In Mediterranean Europe the expansion of production has been slower and has not kept pace with population. Most progress has been achieved in the special products of the region such as fruit, vegetables, wine and industrial crops, most of which are largely grown for export. A decline in the cereal area has not been compensated by higher yields, and coarse grain production in particular is considerably less than before the war. Livestock production as a whole is not yet at the prewar level, but is approaching it for milk and eggs. The 1952 harvest, though lower than in 1951, was generally satisfactory except in Yugoslavia where for the third time since 1946 there was a serious crop failure. Spain shows signs of a more permanent recovery. After many years of stagnation at a low level of production, it has recently been producing grain and potatoes above its immediate requirements, and the output of sugar, rice and cotton has exceeded previous records. A larger production of rice and sugar has also been a feature of Italian agriculture in recent years.

In Eastern Europe the recovery of agricultural production has been a slow process owing to the

¹ For the purpose of this report, Europe has been subdivided as follows :

North Western Europe, includes

- (i) Western Europe : Belgium, France, Ireland, Luxembourg, Netherlands, Switzerland, United Kingdom.
- (ii) Northern Europe : Denmark, Finland, Iceland, Norway, Sweden.
- (iii) Central Europe : Austria, Western Germany.

Mediterranean and Southern Europe : Greece, Italy, Portugal, Spain, Yugoslavia.

Eastern Europe : Bulgaria, Czechoslovakia, Eastern Germany, Hungary, Poland, Romania.

TABLE 15. — EUROPE: INDEX NUMBERS OF PRODUCTION OF MAJOR CROPS AND LIVESTOCK PRODUCTS

REGION	Breadgrains		Coarsegrains		Raw Sugar		Potatoes		Meat		Milk		Eggs	
	1948-51	1952	1948-51	1952	1948-51	1952	1948-51	1952	1948-51	1952	1948-51	1952	1948-51	1952
<i>1934-38 = 100</i>														
France	92	99	86	89	117	113	83	59	114	122	104	113	125	127
United Kingdom	141	132	173	174	130	131	196	147	87	105	121	122	111	119
Other W. Europe	95	97	113	123	145	145	112	109	91	109	102	113	107	120
Northern Europe	92	94	100	114	127	122	128	137	100	115	99	101	117	124
Central Europe	95	109	84	99	125	141	117	118	80	105	89	104	80	112
Southern Europe	87	99	77	70	140	183	89	93	80	83	92	99	91	98

exceptionally severe destruction during the war, revolutionary changes in the agricultural structure and the heavy emphasis on industrialization. The share of total investment allocated to agriculture has been small, and agriculture's share in the national income of all countries is much lower than before the war. By 1952, however, all countries in the region except Poland were at, or only slightly below, the prewar level of agricultural production, and for the region as a whole production may be tentatively estimated at about 5 to 10 percent less than before the war. However, the population is also some 5 percent less than before the war. In general the pattern of production has not greatly changed, though there has been some increase in industrial crops. In 1952 crop production was not satisfactory except in Bulgaria. Hungary and parts of Romania suffered from frost and drought, while in Czechoslovakia, where sugar is an important export, the yield of sugar beets was one-third less than was expected. Industrialization has led to an increased demand for livestock products, and all countries

in this region except Poland have increased their livestock numbers. In Eastern Germany in particular the splitting up of large estates has contributed to this development; each of the small farms keeps pigs and total numbers in December 1952 were almost 45 percent greater than in 1938. Livestock numbers in the region have repeatedly risen above the fodder supply, and largely on this account productivity per animal has been reduced and the output of livestock products has increased less than the animal population.

The increase of agricultural production in North Western and Mediterranean Europe has been accompanied by a loss of 2 to 3 percent of its farm land. Output per hectare has increased by 16 to 17 percent since 1934-38. In North Western Europe this results partly from an increase of about 15 percent in the yield of arable crops (Table 16), closely connected with an increase of 50 percent in the use of fertilizers and the wider use of improved varieties, and partly from the better utilization of grassland and better livestock manage-

TABLE 16. — EUROPE: YIELD PER HECTARE OF VARIOUS CROPS 1948-52 AS PERCENT OF 1934-38

Crop	Western	Northern	Central	Mediterranean	All regions
<i>1934-38 = 100</i>					
Wheat	119	86	117	99	107
Rye	104	111	117	88	104
Oats	111	100	104	98	105
Barley	120	116	111	95	114
Maize	89	—	79	83	83
Rice	—	—	—	83	83
Potatoes	117	108	124	94	116
Sugar (raw)	102	97	96	88	96
Average 8 crops ¹ (wheat equivalent)	115	109	121	94	107

¹ The averages reflect not only the changes in the yields of the respective crops but also the shift in the relative importance of the crops in the total area, e.g., the substitution of potatoes and barley for oats and rye (which give less calories per hectare) and the extension of the sugar beet area. To some extent the change in the cropping pattern has been facilitated by the reduction in the feed requirements for horses.

ment. Thus milk yields per cow show a gradual upward trend in most countries, and in the Netherlands, Belgium and Denmark they exceed 3,000 kg. per cow per year (Figure 8). Although fertilizer applications have increased at about the same rate in the Mediterranean area, they are still very low, and their effect did not offset adverse factors, including drought. Yields of arable crops have been somewhat lower than before the war.

Rapid mechanization has also contributed to the increased productivity of agriculture in North Western Europe by permitting more timely cultivation. It has been accompanied by a marked decline in the number of horses in some countries, notably the United Kingdom and Sweden, and also by a reduction in the number of hired workers. Mechanization is still on a relatively small scale in Mediterranean Europe, where capital investment in agriculture is lower and rural manpower in excess of real requirements (Table 17).

Consumption

There were no major changes in food consumption levels in North Western or Mediterranean Europe in 1952/53. In North Western Europe food prices tended to rise during 1952 but the rise levelled out in 1953 and in some countries, prices, at least of meat, tended to decline. Where food subsidies were reduced, as in the United Kingdom and Ireland, retail prices increased correspondingly, but with relatively little effect on consumption. Thus an increase of 8 percent in the price of milk in the United Kingdom was

followed by only a slight fall in consumption. Meat consumption in the United Kingdom increased in 1952, mainly owing to larger home production, now covering 65 percent of consumption, but the consumption of cheese and butter fell because of import restrictions.

The traditionally low level of consumption in Mediterranean Europe has changed very little. In Spain, however, the two good crops of 1951 and 1952 have led to some improvement in the quantity of food consumed; in Italy a larger per caput consumption of milk and sugar suggests some increased consumption of the more expensive foods, though this does not appear to have extended to meat and eggs. Larger imports of grain did not fully compensate the crop failure in Yugoslavia; flour extraction rates for wheat and rye had to be increased to 90 percent and food prices, including the state controlled price of bread, increased considerably. Elsewhere in Mediterranean Europe the cost of food has remained remarkably stable since 1951 after years of rising food prices.

An appraisal of food consumption levels in Eastern Europe is more difficult. The area is producing nearly as much food per head of the population as before the war, and in countries which were formerly exporters of food, and where prewar consumption levels were low, per caput consumption is likely to have increased. In Hungary, however, the crop failure of 1952 brought about a bread shortage. It is in the more industrialized countries of Eastern Germany and Czechoslovakia, which had fairly high consumption levels before the war, that food difficulties have been greatest.

TABLE 17. — CHANGES IN THE NUMBERS OF HORSES, TRACTORS AND HIRED WORKERS IN CERTAIN EUROPEAN COUNTRIES

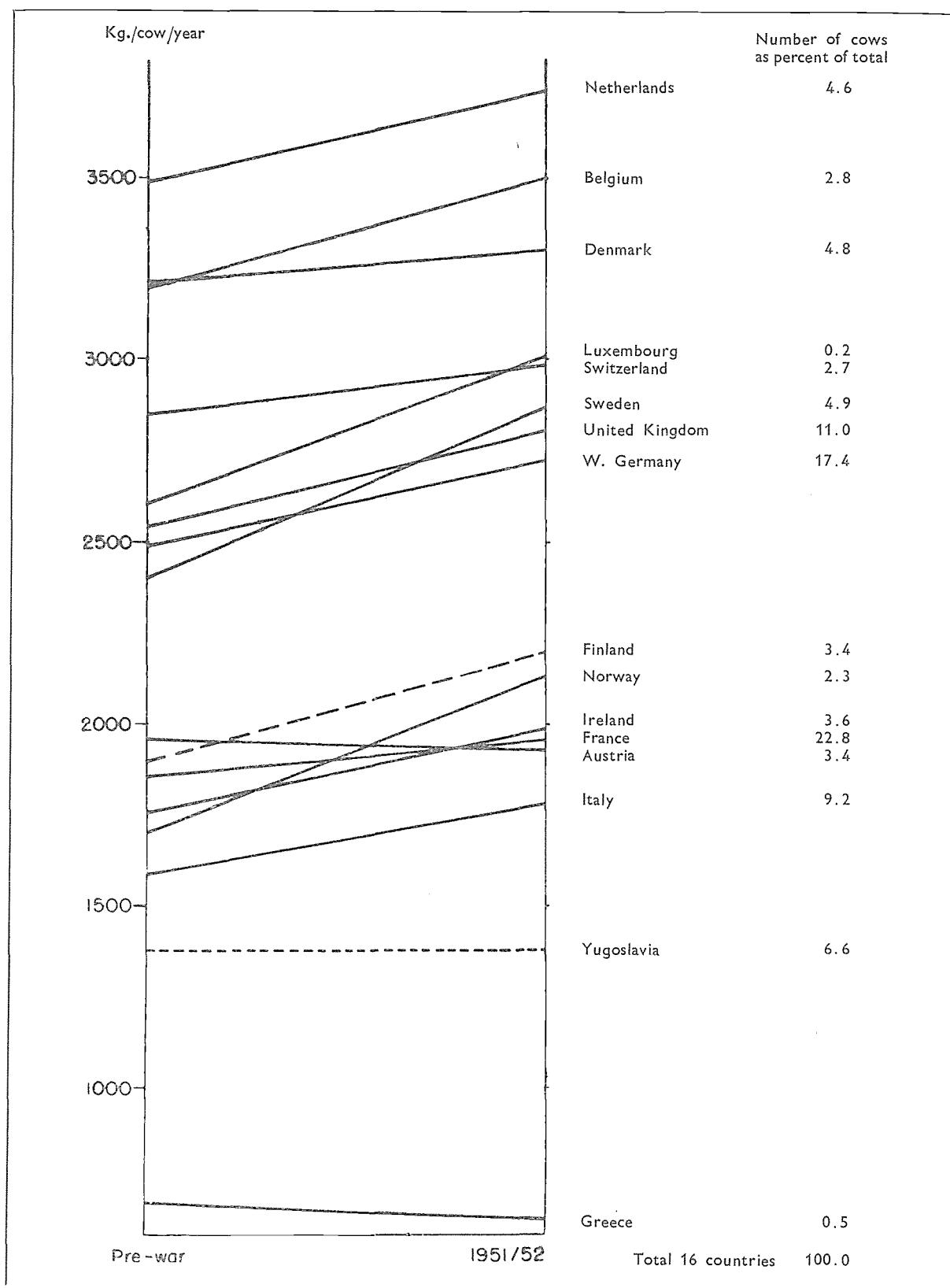
COUNTRY	Horses			Tractors			Hired workers
	Prewar	1950	1952	Prewar	1950	1952	
..... Thousand							
Belgium	245	267	223	1	11	16	...
Denmark	594	502	423	4	18	34	4-5
France	2,692	2,397	2,333	30	138	188	...
Germany, Western . . .	1,566	1,570	1,360	35	139	202	8-9 ¹
Netherlands	322	255	241	5	25	31	...
Sweden	633	440	386	18	66	76	7-9
Switzerland	140	134	131	8	18	23	...
United Kingdom	1,084	549	414	55	348	387	3
TOTAL (8 countries) . . .	7,276	6,114	5,511	156	763	957	...

Source: OEEC and National Statistics.

¹ Permanent workers. There may have been a compensating increase in seasonal employment.

... Not available.

FIGURE 8 - MILK YIELDS PER COW IN SELECTED EUROPEAN COUNTRIES



Trade

The generally good harvest of 1952/53 reduced the import requirements of North Western and Mediterranean Europe, except Yugoslavia. Import restrictions due to balance of payments difficulties, especially by the United Kingdom, and in some cases the running down of stocks accumulated earlier, also contributed to the reduction. Prices of imported food, except for coffee, rice and United Kingdom meat imports, tended to decline¹ so that the cost of food imports fell by more than their volume. The United Kingdom was an exception, the volume of its imports declining by 11 percent and their value by only 6 percent. With larger non-dollar supplies of grain, as well as an increased domestic production, cereal imports from the dollar area declined, but there was no marked decline in total dollar imports. Thus the percentage of imports of food, feeding stuffs and tobacco from the dollar area into the United Kingdom and Western Germany, the two largest importers, fell by 5 percent from 1951, to 20 percent and 26 percent respectively.

The recovery of European food exports was checked in 1952 by import restrictions, though there was no very large decline. Exports of butter from Denmark fell, but otherwise exports of livestock products were maintained, and at somewhat higher prices. British import restrictions led to smaller imports of fruit and vegetables, but thanks to larger imports into Western Germany the total volume of trade was not greatly reduced. Exports of tobacco from Greece and of rice from Italy, Spain and Portugal showed a considerable increase over 1951.

In 1949-51 about 6 percent of the bread grains and 12 percent of the coarse grains imported into North Western (excluding Finland) and Southern Europe came from Eastern Europe and U.S.S.R. This compares with 25 percent and 18 percent respectively before the war if allowance is made for shipments from Eastern to Western Germany. In 1952/53 the proportion declined further. United Kingdom imports of grain from the Soviet Union fell to 200 thousand tons compared with one million tons the year before; Sweden obtained only a few thousand tons of maize compared with 100 thousand tons of wheat in 1951/52. Finland is the only country which has imported increasing supplies from Eastern Europe and the U.S.S.R., its imports rising from 315 thousand

¹ The OEEC price index for imported food fell from 101.9 in the second quarter of 1952 to 95.7 in the last quarter of 1952.

tons in 1951 to 513 thousand tons in 1952. In 1953 its whole cereal import of 400 to 500 thousand tons is expected to come from these sources. Appreciable shipments of wheat from the U.S.S.R. also went to Egypt, India and Pakistan in 1952 and 1953, and in addition Eastern Europe exported 110 thousand tons of sugar to Egypt in 1952.

Fisheries

Provisional figures indicate slightly smaller landings in 1952 in most of the main European fishing countries, except the United Kingdom where they increased by about 4 percent to 1,030 thousand metric tons. As a result of the depletion of the North Sea stocks of demersal fish, the preponderance of cod and also of herring on the European markets has increased. Moreover, the Arctic and Atlantic cod is often of poor quality because of the long distances over which it has been transported. Marketing difficulties have therefore arisen, particularly where the increased availability of alternative foods has made consumers more discriminating and where import restrictions have limited the markets for fisheries products. Attempts are being made to maintain and increase demand by better quality and more attractive products, especially in Denmark and Norway, and by sales promotion campaigns. In addition, the Over-fishing Convention of 1946 was finally ratified early in 1953 and a Permanent Commission has been appointed to consider measures for the conservation and building up of stocks in nearer waters, especially of the more popular varieties.

The continuing rise in production costs, together with uncertainties about both markets and fisheries resources, have seriously delayed the replacement of obsolescent craft, a problem now being considered by several governments including those of France, the Netherlands and the United Kingdom.

Forest Products

The lower demand in 1952 affected the forest industries of Europe more severely than those of other regions. In particular the Northern exporting countries experienced great difficulties and had to curtail production from the postwar record level of 1951. Because of the reduced demand for finished products, there was a corresponding fall in demand for roundwood, notably sawlogs and pulpwood. Coal mines, which in late 1951 had difficulty in obtaining pitprops

were therefore able to increase their purchases in 1952. Imports of pitprops rose sharply (Table 18) especially into the United Kingdom and stocks at the coal mines rose to a postwar record level at the end of 1952 (Table 19). Earlier supply difficulties, however, forced mines to economize in their use of pitprops. This trend has continued and resulted in a lower consumption in spite of an increase in coal production. The supply outlook for 1953 and 1954 is generally satisfactory.

TABLE 18. — EUROPEAN TRADE IN PITPROPS AND PULPWOOD

ITEM	Pitprops		Pulpwood	
	1951	1952	1951	1952
<i>.... Thousand cubic meters....</i>				
Total imports	2,490	4,919	5,441	5,052
of which from overseas.	262	1,128	689	757
Total exports	2,607	4,090	4,275	3,501
of which to overseas . .	184	282	17	66

The situation for pulpwood was somewhat different. Most pulpwood industries made large purchases in 1951 when prices were rising. With the market for pulp products falling, and new supplies of pulpwood arriving, stocks of pulpwood at the mills, already rather high at the end of 1951, continued to increase. Imports of pulpwood fell, though only to a slight extent.

In respect to sawnwood the common resistance of the importing countries to the high prices which developed in 1951 almost brought the market to a standstill in the first half of 1952. This falling trend continued throughout 1952 and stabilization of demand became noticeable only at the beginning of 1953. Thus United Kingdom purchases in the autumn of 1952 for 1953 delivery led to a slight rise in prices which continued into the new year.

The reaction of the European pulp and paper market to the post-Korean rise in prices was even sharper. When in 1951 prices rose to between two and three times their former level, importing countries imposed price ceilings or other restrictions on imported pulp. From the beginning of 1952, pulp prices fell sharply; declining industrial production reduced the demand for paper and board, and consumers chose to draw on their stocks and await events. The high prices also reduced exports to the United States and other countries outside Europe. In the northern exporting countries pulp output was restricted. Buying was resumed and the fall in prices halted only in the

last months of 1952 when the demand revived and consumers found it necessary to replenish stocks. Scandinavian pulp production again began to increase, but remained well below the peak rate. Newsprint was the only notable exception to the fall in European demand for pulp products. The market thus received a severe setback in 1952 and to the uncertainty for the future has been added the difficulty of adjusting production costs to the new level of prices, particularly in Finland.

TABLE 19. — EUROPEAN STOCKS¹ OF SAWNWOOD AND PITPROPS (at the end of the year)

ITEM	1950	1951	1952
Sawn softwood (000 stds)	895	1,490	1,395
Sawn hardwood (000 cu. m.)	1,197	1,220	1,316
Pitprops (000 cu. m. r.)	3,900	3,740	5,375

¹ Reporting countries only.

Outlook

There are as yet no indications of any sharp break in recent trends. Industrial and agricultural production in Europe are unlikely to increase greatly in 1953/54 over the 1952/53 level, and prices seem likely to remain relatively stable. The downward trend of livestock prices, particularly meat, may continue, however, with increasing supplies and lower prices of imported feeding stuffs.

There have been some changes in price policies. Thus the price review in the United Kingdom for 1953 puts additional emphasis on beef cattle and higher prices for potatoes and sugar beet, for which acreages have been declining. The marketing of eggs has been freed from control; rationing and price control of cereals and feeding stuffs ends on 1 August 1953, but support prices for these products remain. Although the new prices give a considerable recompence for rising costs, some margin is left to be covered by greater efficiency. Since the review, the award of increased wages to farm workers is expected to raise costs by a further £ 12 million annually.

Prices of bread grains, meat and eggs in Sweden will be lower in 1953/54 and the subsidies on milk will be reduced. The present subsidy has resulted in a steady increase in production to a level which exceeds domestic requirements. Price guarantees only cover the home market and any sur-

plus must be exported by the farmers' co-operative organization at the best prices obtainable.

With a stable demand, no major changes in the pattern of production are expected. Crop areas for the 1953 harvest appear to be about the same as last year. Autumn sowings of wheat have increased in the United Kingdom, but were somewhat lower in France, Western Germany and some other countries because of unfavorable weather at seeding time. There will, however, be more spring wheat. The shift from oats to barley or mixed grain will continue, and in Western Germany prices have been adjusted to hasten this shift. In Spain, last winter's drought will reduce wheat production, but in Italy there may be an increase over the previous year. Denmark and Spain aim at a lower area of sugar beet because of export difficulties, and a reduction of 5 to 10 percent is intended in France, where there is a surplus of alcohol from sugar beet.

Last winter's floods in the United Kingdom and especially in the Netherlands, though serious for individual farmers, are not likely to have major effect on the total agricultural output of these countries.

NORTH AMERICA

General Economic Conditions

Sustained high levels of economic activity characterized the United States and Canada in 1952/1953. For the year 1952/53 industrial production in the United States was about 7 percent above that of 1951/52, civilian employment averaged over 61.8 million, and unemployment was less than 2.5 percent of the total civilian labor force. Personal income surpassed \$284 thousand million (annual rate) in May 1953, more than \$20 thousand million higher than a year earlier. Canada's industrial production also rose about 7 percent for the first nine months of 1952/53 compared with the same period a year ago. Employment was 2 percent higher in March 1953 than in March 1952 and unemployment accounted for 3.3 percent of the labor force. National income in 1952 was 6 percent higher than a year earlier and kept on increasing in early 1953.

Rising government expenditures for goods and services, amounting to 22 percent of gross national product in the United States and to 18 percent in Canada in 1952 (19 and 15 percent respectively in 1951), contributed heavily to maintaining general prosperity and this upward trend continued

into 1953 although at a much reduced rate. The downward trend in expenditures on new plant and equipment at the beginning of 1952 was reversed by the end of that year and such expenditures increased through June 1953 reaching in the United States a record annual rate of \$28.4 thousand million in the second quarter of 1953. Personal consumption expenditures in the United States in the first quarter of 1953 were 6 percent higher than a year earlier with those for durable goods rising more than three times as fast as for nondurables. A substantial portion of these purchases, however, were bought on easy credit terms and the volume of outstanding consumer credit at the end of May 1953 was almost 25 percent higher than a year earlier.

Contrary to past experience the expansion in the economy was not accompanied by rising general prices and farm prices even receded appreciably in both the United States and Canada. Thus the higher national and personal incomes represented real increases of purchasing power.

Imports increased, but total exports of the region as a whole remained fairly stable. Agricultural exports declined heavily, especially from the United States, due to the improved supply situation abroad. While the region's export surplus was thus reduced, the value of imports in the first four months of 1953 accounted for only 72 percent of exports as against 64 percent in 1952, leaving a sizeable trade surplus which, however, consisted largely of United States grants-in-aid shipments of defense materials. Although the dollar gap thus became much less burdensome, discriminatory trade practices vis-à-vis the dollar countries contributed to the inability to sell dollar products freely.

Agricultural Production

Agricultural production in North America during the past year was at a record level, 43 percent above the prewar average and on a per caput basis 16 percent. Food production, total and per caput, made even greater gains (Table 20).

In the United States 1952 crops were harvested in nearly ideal weather, from nearly 138 million ha., an increase over 1951, but less than in any year between 1943 and 1949. However, the index of all crop production exceeded that of any other year except 1948. The total production of foodgrains, 37.8 million tons, has been exceeded only in 1947/48, although nearly equalled in 1948/49. About 109.5 million tons of feed grains were harvested, nearly 7 percent more than in

1951. A near record tonnage of oilseeds of 14.9 million tons almost equalled the 15.0 million tons of the previous year.

TABLE 20. INDEX NUMBERS OF VOLUME OF TOTAL AND PER CAPUT AGRICULTURAL AND FOOD PRODUCTION IN NORTH AMERICA, 1948-50 TO 1952/53

ITEM	1948-50	1951/52	1952/53
<i>1935-39 = 100</i>			
Total agricultural production	135.6	136.4	142.7
Total food production	139.3	138.4	145.9
Population	117.3	121.5	123.3
Per caput agricultural production	115.6	112.2	115.8
Per caput food production	118.7	113.9	118.4
<i>Production by Commodities</i>			
Wheat	146.0	143.7	185.4
Maize	164.6	141.7	161.7
Beef and veal	135.2	124.7	133.8
Pigmeat	141.8	156.8	159.6
Eggs	163.9	172.9	165.1
Milk	113.1	113.6	113.4
Cotton	104.1	115.2	114.3

Note: Owing to recent changes in the method of constructing the FAO production indices, the data are not comparable to those published in *The State of Food and Agriculture: Review and Outlook 1952*.

In Canada record wheat production at 18.7 million tons exceeded the previous year's by 24 percent and was more than double the postwar average. Increased production was also recorded for barley, potatoes, sugar beets and the oil crops. Some decrease in output occurred for fruits and vegetables.

Livestock and poultry on farms and ranches in the United States increased slightly during 1952. Cattle numbers on farms were at a record high of 93.7 million. Total meat production for 1952/1953 was about 5 percent above the 1951/52 level, with farm marketings of meat animals increasing, especially in late 1952 and the first half of 1953, over the level of a year earlier. Among meats, only pork production declined below the level of 1951/52. Poultry and egg output increased moderately. Milk production in 1952 at 52.7 million tons was virtually unchanged from 1951.

Cattle numbers on farms in Canada as of 1 December 1952 were 16 percent higher than a year earlier but hog numbers declined about 5 percent. Meat production was higher in 1952 than in 1951. Total milk output was 1.5 percent above 1951,

but cheese production was down 26.5 percent, mostly as a result of import restrictions in the United States and the United Kingdom.

Tobacco production in the United States was about 4 percent smaller than the 1951 record crop of 1,056 thousand metric tons. Canadian production declined by about 10 percent.

The 1952/53 United States cotton crop of 3.4 million tons, harvested from a reduced area, exceeded the previous year's production by nearly 5 percent.

Agricultural Trade

The total value of United States farm exports in 1952 fell 15 percent from the 1951 level. In the first three months of 1953 they declined to only 65 percent of the values of the same quarter a year earlier. The declines in total values were caused by lower prices as well as by smaller quantities. Cotton exports in 1952/53 are estimated at about half of 1951/52 exports, while grains moved well in export markets until the large crops of the Southern Hemisphere became available in early 1953. Tobacco exports were affected by the new United Kingdom import restrictions in the spring of 1952.

The total volume of agricultural imports into the United States remained at a very high level during 1952 and the first quarter of 1953. Most agricultural imports, with the major exception of coffee, however, were priced considerably lower than in 1951 and the slight increase in quantities imported was more than offset by price declines so that in 1952 total import values were down by 12 percent. The restrictions on dairy imports were partly alleviated in the summer of 1952, but restrictions on other dairy items were tightened in view of possible large government losses in price support activities for these commodities.

In contrast to the United States, the value of Canadian agricultural exports increased 16 percent in 1952 over 1951, due to the large grain exports. The volume of wheat exports was 35 percent higher in 1952 than in the previous year, and exports of barley more than doubled. Exports of animals and animal products, however, declined almost 32 percent in value and 24 percent in volume as a result of the foot and mouth disease and the United States embargo on imports from Canada, which was lifted early in 1953. However, during the first four months of 1953 exports of agricultural products dropped by nearly 7 percent below those of a year ago.

Prices and Income

Domestic demand for agricultural products in the United States during the entire year 1952/53 continued at levels above those of 1951/52, but the decline in foreign demand and increased supplies resulted in lower farm prices. Price declines were greatest for those products, e.g., cattle and sheep, which were not supported by the government, and for cotton domestically supported but very much dependent on export markets. Farm prices for meat animals in 1952/53 (July-May) fell about 16 percent and cotton prices by about 14 percent, reaching the price support minimum by January 1953.

Wheat prices by the end of the 1952/53 year dropped sharply, reaching a level about 15 percent below the previous year's and in many cases, below the price support level.

The level of farm prices by June 1953 was down 11 percent from the same month a year ago. Government price support activities for a number of products increased considerably in the first half of 1953 and helped stop further downward movements. The Commodity Credit Corporation was called on to supply a greatly increased volume of loans and also made outright purchases of large quantities of dairy and other products under provisions of the existing legislation. The value of commodities pledged for outstanding loans and commodities in price support inventory¹ as of 31 May 1953, totalled \$3,248 million compared with \$1,529 million a year ago. The inventory holdings made up 59 percent of the total investment. The main products affected were wheat, maize, tobacco and cotton.

Prices paid by farmers, except farm wages, also declined but much less than prices received. Net farm income, including inventory changes, during 1952/53 was estimated at 5 percent below 1951/52.

Prices received by farmers in Canada declined by 10 percent during 1952/53. Cattle prices fell to almost one-third below the 1951 level as foot and mouth disease resulted in a United

States import embargo. Price support measures covered beef, hogs, butter, cheese, and eggs. Despite the decline in prices received by farmers prices paid rose by 5 percent during 1952 and farmers' net income in 1952 fell 11 percent from the record high in 1951.

Fisheries

The total 1952 catch of fish, crustaceans and mollusks in the United States and Alaska was some 2,344,000 metric tons, a decrease of about 2 percent in the quantity and 3 percent in the total value. The decline was due primarily to the physical failure of the California pilchard fishery, where the landings dropped to barely 3,500 tons compared with 150,000 tons in 1951 and 500,000 tons in 1938. Tuna fish production in North America declined somewhat. The wholesale price index for all fish was slightly lower in December 1952 than a year earlier.

On both the Atlantic and Pacific coasts of Canada catches were a little lower than in 1951. On the Canadian Atlantic seaboard, stimulated by price increases, cod landings increased in 1952 and also the landings of plaice and flounder and halibut increased in 1952. The Canadian canneries slackened their demand for herring which was in plentiful supply, and the fishermen disposed of large quantities (some 30,000 tons) to the United States canneries. The average selling price in 1952 was \$1.34 per 100 lb., compared with \$2.08 in 1951.

On the Pacific side, salmon landed in British Columbia in 1952 decreased to 65,200 tons compared with 89,300 tons in 1951, as a result of lower prices and two strikes. The Canadian west coast herring fishery produced during 1952 84,800 tons, about half the 1951 production of 163,500 tons.

Forestry

The production and trade of forest products in North America depend almost entirely on the demand in the United States. The economic situation of the forest industries in Canada was not quite as favorable as in the previous year with lower output, a softening of prices and changes in overseas markets. Production of roundwood, which in other regions showed great changes, remained rather stable in North America. The demand for sawnwood in the United States declined somewhat in 1951 as a result of reduced building activity, but stepped up in 1952 as

¹ Price support has been extended on the 1952 crops to the amount of \$2,730 million through 31 May 1953. This total included loans made — \$2,060 million; purchase agreements — \$258 million; and non-agreement purchases — \$413 million. This volume is \$1,674 million greater than the total of price support which had been extended on 1951 crops through 31 May 1952. The greater activity is accounted for in large part by increases of \$450 million in the volume of wheat loans, an increase of \$422 million in the volume of corn loans, and an increase of \$184 million in cotton loans.

building increased and the output of sawnwood consequently rose. Demand for sawnwood from furniture industries also showed an increase. In Canada, however, the situation was different. The fall in United States demand in 1951 had been offset by increased domestic demand and by greater exports overseas, notably to Europe where the sawnwood market was very active and strong. Canadian output of sawnwood consequently rose in 1951. In 1952 the rise in the United States demand could not offset the fall in Canadian domestic demand and in exports overseas, and Canadian production of sawnwood fell. Total North American output of sawnwood, however, amounted to 106.9 million cu.m. in 1952 as against 105.4 million cu.m. in 1951.

The year 1952 was good on the whole for the North American pulp industries, even though the level of activity was slightly below that of 1951, due to the general slowing down of industrial activity. However, plant capacity in the United States continued to expand. Towards the end of 1952 the upswing in the industrial activity strengthened the demand for paper and board, and United States pulp output increased.

Canada manufactures pulp mainly for newsprint and was hardly affected by the decline in the paper and board industry. Production of pulp fell by less than 4 percent in 1952 to 7.95 million tons.

Outlook

General economic conditions in North America are likely to continue to be favorable through 1953. While government expenditures are expected to level off or to be slightly reduced, anticipated increases in private expenditures on new plant and equipment and a continued strong demand for consumers' goods are expected to maintain a high level of employment. Whether this trend will continue in 1954/55 depends on the degree to which possible reductions of public expenditures, particularly for defense purposes, will be offset by expansions in civilian industries. While the expansionary forces in the Canadian economy, which ranks third among the world's trading countries, seem to make such a development quite probable in that country, there is some possibility of difficulties in the United States when budget cuts begin to make themselves felt in reduced actual purchases of goods and services by the government. Such developments, however, might not affect appreciably the domestic demand for agricultural

products, but would probably show up more markedly in demands for raw material imports. The foreign demand for American agricultural exports is likely to decline in 1953/54 and further in 1954/55 as more supplies become available from non-dollar sources and as United States dollar contributions abroad are reduced.

The problem in North America is not one of insufficient food to supply each person with an amount necessary for good nutrition, but of finding suitable export markets for actually or potentially available surpluses. Crop prospects in the United States for 1953/54 as reported in July indicated the third largest crop on record. While severe drought in the central and southern great plains caused acreage losses of crops, greater concern is felt in connection with pastures and livestock. Wheat production for 1953 was provisionally estimated at about 9 percent below 1952; for all the other major crops except rice some increase was indicated over the preceding year. Tobacco output may be somewhat smaller. The cotton acreage is down by 9 percent from the previous year and early estimates show a possible drop of 14 percent in output. The estimated acreage is still well above that recommended by the Secretary of Agriculture. In Canada little change is anticipated in wheat acreage. There may be some increase in acreage of barley and mixed grains.

With likely increases in livestock marketings in the region as a whole, early indications point to total farm marketings that will probably approach the record 1952/53 volume.

Total available supplies will probably be even larger than last year, because of increased carry-overs of wheat in both countries, and maize and cotton in the United States. The problem that presents itself is thus one of finding an effective export demand that will absorb these large supplies at remunerative prices.

Both the United States and Canada start the year 1953/54 with an agricultural position unlike that of the past several years. Farm prices have declined considerably. Supplies on hand, especially of wheat, are at a record level. The outlook for 1953/54 production is good and it appears that the over-all domestic demand will continue to be relatively firm for most of the coming year, although for individual commodities there is a tendency to shift to less expensive substitutes, e.g. margarine for butter.

The accumulation of large stocks of wheat, maize and cotton by the Commodity Credit Corporation in the United States, however, has intro-

duced some uncertainty as to future price levels and production. The United States for the first time in 10 years had a mid-summer referendum in 1953 and decided to adopt wheat marketing quotas for the following year. This means that marketings will be limited (under penalty) to wheat grown on allotted acreage and the price support level will remain at 90 percent of parity. Cotton is another crop facing the possibility of future marketing quotas. Meat prices, already reduced, may be affected if the drought results in substantially increased marketing.

The major weakness is in the export demand, which has a specially great impact on the United States, as non-dollar areas continue to reduce imports of wheat, cotton, tobacco and some of the fats and oils. Canadian prices of livestock are also influenced by the United States price level. Although the Mexican border has again been closed owing to foot and mouth disease, it is not likely to influence seriously North American supply.

Farmers' cash receipts in 1953/54 for farm products are likely to decline below the level of 1952/1953 both in the United States and Canada and net farm income may also show some further reductions as farm prices continue to move at lower levels than in 1952/53 and costs remain relatively rigid.

LATIN AMERICA

Current Situation

More favorable agricultural policies and good weather resulted in agricultural production reaching a record level, 30 percent above the prewar level. This development contributed to the general improvement in the economic position of the region during 1952/53.

In Argentina, the fall in agricultural production during 1951/52, the reduction of exports and the decline in demand for consumption was accompanied by a sharp contraction in the level of investment and total output. By the end of 1952 and early 1953 conditions improved. In Brazil, however, slackening of foreign demand for certain commodities, exports of which declined considerably, and a rapid rise in import levels affected the balance of payments situation. The foreign exchange difficulties contributed to reduce the rate of expansion of output despite an increase in agricultural and in many lines of manufacturing production. Import restrictions were tightened and a limited free market for foreign exchange

was established in early 1953. This, together with the loan extended by the United States Export-Import Bank, resulted in a substantial improvement in trade conditions during the first part of 1953. Meanwhile, domestic demand in Brazil was sustained and consumer prices, particularly those for food, were still rising at the beginning of the second quarter of 1953 at rates similar to those of the previous months. Wholesale prices, however, started levelling off by the end of the first quarter.

A reduction in the rates of expansion of output was also noticeable during 1952 in some other countries, such as Mexico, Colombia, Uruguay and Guatemala, where, in addition to a general recession in the textile industries, investment declined as compared with the high levels of the year before. In Cuba and Peru, total output actually declined. In other countries, however, such as Chile, Venezuela, Ecuador, and some of the Central American countries, where exports generally expanded and investment was kept high, total output continued to increase at similar or even higher rates than the year before. Since late 1952 and during early 1953, with world prices for most products showing a tendency to stabilize, the external factors that greatly affect developments in the Latin American economies became more stable than a year earlier. Economic activity in the countries adversely affected by changes in foreign demand during 1952 generally showed signs of improvement.

Agricultural Production

Latin America's over-all agricultural production expanded by about 9 percent during 1952/53 over that of 1951/52. Good weather and the early announcement of higher official prices for important Argentine crops favored the sharp recovery from the low level of 1951/52 when agricultural production was at its lowest point in more than 20 years. In Argentina, 1952/53 production is estimated at about 30 percent above 1951/52. In other countries, excepting Cuba and Puerto Rico, area under crops and production continued their upward trend and levels of output were generally higher than the year before. In Brazil, Chile, Ecuador and the Central American countries, the increase in production surpassed current rates of population growth, but in others the expansion of production barely kept pace with the rate of population increase. In Cuba and Puerto Rico, mainly as a consequence of official

restrictions imposed on production of sugar, the 1952/53 agricultural production is estimated to have fallen by 17 and 11 percent respectively below the 1951/52 levels.

Food production in 1952/53 advanced 8 percent, slightly less than total agricultural production as compared with the previous year's level. However, if Argentine and Cuban production are excluded from the total, food production in the remainder of the region expanded only 3 percent, i.e., an improvement of not more than 1 percent in the per caput food production. Despite the substantial increase in the regional production of food, production per caput in 1952/53 is slightly below the average during the three years 1948/49 to 1950/51 and still about 4 percent below the average of the five years preceding World War II. However, the results in 1952/53 represent a substantial improvement from the low of 1951/52 when, due to the sharp drop in Argentine agricultural output, Latin America's per caput food production fell to about 9 percent below the prewar level (Table 21).

Major Commodity Changes

Production of cereals during 1952/53 was about 36.5 million tons against 26.7 million in 1951/52, and about 4.5 million tons above the former peak year 1950/51. The main contribution was made by Argentina, where production of cereals rose to nearly 14 million tons against the 5.1 million during the poor crop year 1951/52.

However, with the major exception of Uruguay, most wheat producers had better crops than last year and in many countries production was at record levels. The region produced 10.9 million metric tons, a record and more than 5 million tons over the poor 1951/52 crop. Maize production was about 17.7 million tons, a postwar record nearly equalling the record of 18 million tons for the 1934-38 period. Large advances in Argentina, Mexico and other minor producers more than offset reduced maize crops, mainly in Chile, Ecuador, Colombia and Costa Rica. Improved Argentine crops of rye, barley, and oats resulted in substantial increases in regional output. Compared with 1951/52, production of rye increased by 180 percent and that of barley and oats by 50 percent. Rice production continued to expand as in previous years and was 5 percent above the 1951/52 total.

Output of roots and tubers was up slightly, as manioc production increased by 6 percent. Increased area and good weather accounted for

TABLE 21. — INDEX NUMBERS OF VOLUME OF TOTAL AND PER CAPUT AGRICULTURAL AND FOOD PRODUCTION IN LATIN AMERICA, 1948-50 TO 1952/53.

ITEM	1948-50 average	1951/52	1952/53 (provisional)
<i>1934-38 = 100</i>			
ALL LATIN AMERICA			
Total agricultural production	122	120	130
Food production	127	124	134
Population	131	137	140
Per caput agricultural production	93	88	93
Per caput food production	97	91	96
LATIN AMERICA EXCLUDING ARGENTINA			
Total agricultural production	132	139	143
Food production	141	149	149
Population	131	137	140
Per caput agricultural production	101	102	102
Per caput food production	107	108	107
ALL LATIN AMERICA, Production of Major Commodities			
<i>Cereals</i>			
Maize	81	85	99
Wheat	94	57	122
Rice (rough)	224	233	245
Other cereals	118	85	136
<i>Roots</i>			
Cassava	215	208	220
Potatoes	166	160	170
Sweet potatoes	132	124	127
<i>Sugar (excluding panela)</i>			
<i>Edible oilseeds (oil equivalent)¹</i>			
<i>Other food crops</i>			
Dry beans	146	147	152
Bananas	134	143	155
Cacao	111	100	103
<i>Animal food</i>			
Meat	116	² 113	³ 111
Milk	137	² 137	³ 141
<i>Fibers</i>			
Cotton (lint)	126	148	171
Wool (clean basis)	115	118	119
Hard fibers	170	² 171	³ 164
<i>Other products</i>			
Tobacco	144	145	153
Inedible oilseeds (oil equivalent) ¹	57	44	57
Coffee	87	88	94

Note: Owing to recent changes in the methods of constructing the FAO production indices, data are not strictly comparable to those published in last year's *State of Food and Agriculture: Review and Outlook 1952*.

¹Not fully comparable with data published elsewhere, because of a somewhat different coverage.

²Data corresponding to calendar year 1951.

³Data corresponding to calendar year 1952.

an increase of about 5 percent in the production of pulses. In most countries production of dry beans was larger than the year before.

A reduction of 15 percent occurred in sugar production due entirely to official restrictions in Cuba and Puerto Rico. Production in most other countries increased, however, with the major exceptions of Argentina, Brazil and Paraguay, where, despite increased sugar cane production, bad weather during the crushing period resulted in output being slightly lower than in the previous year.

Production of oilseeds measured in oil equivalent recovered somewhat from the setback in 1951/52, though it was still about 80 thousand tons below the 1950/51 peak of 1.2 million tons. The 4 percent increase in volume during 1952/53 over 1951/52 was entirely due to a higher production of inedible oilseeds, mainly linseed.

Although production from new plantings of coffee will materialize at a later date, the better care given to old plantations has resulted in a steady increase in output during the last three years. Total yield in 1952/53 is estimated at nearly 2 million tons, about 7 percent above the volume of last year. Most of the increase originated in a larger Brazilian crop, though most producers, particularly the Central American countries, also had better crops than in 1951/52.

Production of bananas increased 9 percent above last year, when about 6.9 million tons were produced. Substantial increases occurred mainly in Brazil, Mexico and Ecuador. The gain in the latter has been impressive, production having more than doubled in two years and Ecuador is now next to Brazil among the principal Latin American producers. Production of tobacco and cacao also expanded with gains of about 5 and 3 percent respectively above last year. Cotton output was 16 percent above the 930,000 tons (ginned) produced in 1951/52. This gain was due to a 50 percent increase in the Brazilian crop, resulting from a larger planted area under the stimulus of official support price policies and higher yields per hectare than in the previous season. Among other major cotton producers, Peru had a record crop, but Mexico was affected by the severe infestations in the cotton areas. The wool clip, estimated at 180,000 tons (clean basis) remained almost unchanged from 1951/52. A slight decline in Argentina was nearly offset by gains made by other producers.

The meatless days and slaughtering controls in operation in Argentina since early 1952 are reflected in the estimated decline of 5 percent in

meat production in this country. Meat output for the region was about 2 percent below the 5.5 million tons estimated for the preceding year despite the slight gains in other countries. Output of milk, however, due to a good pasturage situation and increasing milk cattle numbers, showed a renewed trend of increase after two consecutive years of stagnation originating in a setback in some of the major producing countries, e.g., Argentina and Chile.

Agricultural Trade

Reduced export supplies and a decline in foreign demand resulted in a sharp contraction of 20 percent in the volume of agricultural exports in 1952 from that of 1951, due mainly to greatly reduced exports of wheat, oilseeds and oils, sugar and meat. Maize, wool, tobacco and coffee shipments exceeded those of 1951. Agricultural imports also declined by about 6 percent, although there was an increase of about 10 percent in wheat imports.

The contraction in agricultural trade during 1952 largely reflected declines in Argentina because of substantially reduced export availabilities, in Brazil because of over-pricing as compared with current world market quotations for certain commodities, and in Cuba largely as a result of the decline in foreign demand for sugar. With some exceptions, agricultural exports from other countries were generally larger than in 1951, but imports were smaller.

TABLE 22.—INDEX NUMBERS OF VOLUME OF LATIN AMERICAN AGRICULTURAL FOREIGN TRADE¹.

YEAR	Gross	Gross	Net
	Exports	Imports	Exports
..... 1937-38 = 100			
1949	93	148	85
1950	99	175	87
1951	91	180	77
1952 ²	74	168	60

¹Covering 72 agricultural commodities.

²Preliminary.

The demand for Latin American forest products dropped in 1952. Both intra-regional and inter-regional export trade declined, with Brazil being the most seriously affected exporter.

Outlook

Generally, prospects are good for expanding agricultural production during the next two

years. Grain production may be above the high level of 1952/53, though that of wheat is likely to be somewhat less, particularly during 1953/54. Some reduction may occur in the Argentine wheat output, unless, as in 1952/53, yields per hectare continue high as compared with normal years and the proportion of harvested area against sowings remains at a record level. The Brazilian wheat crop will continue to show further gains if the objective of one million metric tons of wheat by 1960 is kept unchanged. Mexico, Chile, Peru and some other countries where programs for expanding grain production are currently under way will probably continue to show further gains in output. It is likely that most of the gain in cereal production will come from an increase in maize, though wheat and rice may also be at higher levels than at present, particularly by 1954/55.

Area and production of domestic food crops such as pulses, oilseeds, fresh vegetables and potatoes may show further gains during the next two years, in line with the objectives of the various official programs. Official restrictions on sugar production are likely to be maintained in Cuba and Puerto Rico. This will keep output during the next two years below the record level of 14.4 million tons in 1951/52, though it may show some gains above the 12.1 million tons in 1952/53, as a result of continuing expansion in other countries, many of them producing solely for home consumption.

Any further expansion of cotton production during the next two years over the 1.1 million tons (ginned) in 1952/53 will be largely dependent on changes that may occur in Brazil, whose current share in regional output is about 50 percent. Reduced world prices and difficulties in disposing of the 1952 crop may be reflected in a drop in Brazilian output of 15 to 20 percent in 1953/54. Continued expansion in other countries and the recovery expected in Mexico's crop are not likely to offset the drop in Brazil. On balance, it appears that for 1953/54 production will be lower than in 1951/52, but in 1954/55 cotton output may increase again, but not exceed the peak of 1952/53 unless world demand and prices increase meanwhile.

The 1953/54 coffee crop may equal that of the previous year, some increases for most producers offsetting a slight decline estimated by Brazil on its next crop. The outlook is more promising for 1954/55 when the collection from new plantings may start to materialize in several countries. For that year output is likely to come for the

first time close to the 2.1 million tons averaged in 1934-38.

The sustained decline in Argentina's meat output during the past four years is expected to come to an end in 1953 and regional output may increase. This prospect is confirmed by the record level of livestock numbers estimated at the beginning of 1953. Even in Argentina, where cattle numbers were reduced in recent years because of persistent drought, livestock numbers are again at a record according to the November 1952 census. Increasing meat output during the next two years, especially in 1954, will also be greatly influenced by existing official programs and by generally better price relationships than those prevailing in previous years. The same generally favorable conditions apply to the possible further expansion of milk and other livestock production. Output of milk particularly is likely to expand more rapidly than population growth. This may not be the case for meat during 1953/54, though the rate of expansion may be accelerated by 1954/55.

Fisheries production over the next two years may continue to expand, though at lower rates than in recent years, unless present inadequate marketing organizations and existing transport deficiencies are improved. In many countries, low rates of productivity per fisherman will not improve unless there is some modernization. However, in Argentina, Brazil, Chile, Mexico, Peru and Venezuela, fishery industries are fairly developed and it is in these countries that prospects for sustained expansion of production are more promising.

Increasing domestic demand for forest products will stimulate a further expansion in this industry. Production for export may also be expanded by prospective improved balance of payments conditions in some of the importing countries. The Brazilian timber production particularly will benefit from the new currency laws and the new commercial treaty with Argentina. Existing plans for greater production of wood pulp, using hitherto unexploited raw materials, will also favor a further expansion of the forest industries.

Exportable supplies of agricultural products in 1953 will be larger than in 1952 due to increased output of nearly all major commodities. The export demand for coffee will likely remain strong. The fulfilment of the present United Kingdom/Argentine meat agreement will require a 30 percent increase over last year's meat exports. On the other hand, Uruguayan exports will be less.

Because of the new outbreak in Mexico of foot

and mouth disease announced in May 1953, the United States border, re-opened late in 1952 after several years, was closed again to imports of Mexican cattle. If this situation persists, earlier expectations of increasing Mexican cattle exports in the near future will not materialize. Argentine live animal exports, on the other hand, will be continued and probably in increasing numbers.

Sugar exports, which fell sharply during 1952, will show little change. Some of the minor exporters, however, may continue to show additional gains.

Food and agricultural imports may continue their trend of expansion, though a shift will occur to a significant extent in the origin of these imports. Mainly because of increased Argentine production, intra-regional imports will be larger over the next two years than in 1952, while those originating outside the region may be greatly reduced.

Manufacturing and other non-farm industries will continue to expand, possibly at higher rates than in 1952. Recovery in the rates of expansion of output may come from the expected further industrial expansion in certain countries such as Venezuela, Chile and several of the smaller Latin American republics. A renewed acceleration in the industrial activity of countries such as Argentina, Brazil, Mexico, Colombia, Uruguay and Peru, is likely to occur under the more favorable balance of payments conditions that are in prospect. Present industrial capacity in Latin America is larger than ever and expanded imports of capital goods will be stimulated by reduced inter-regional import requirements of food. Employment and incomes therefore may continue to expand.

Expanding industrial production will create an increasing demand for food and other agricultural products, but the market may be readily satisfied without further pressure on prices, as supply prospects either from domestic production or from intra-regional imports are generally good in view of the expected increases in the region's agricultural output.

AFRICA¹

During 1952/53, agricultural production both total and food, showed a slight rise of about 3 percent over that of 1951/52 (Table 23). The

¹ Excludes Egypt, Anglo-Egyptian Sudan, Eritrea, Ethiopia and Somaliland.

increase was somewhat higher than the rate of population growth, but per caput supplies were probably not appreciably different from those in the previous year because of the larger volume of food exports.

TABLE 23. — INDEX NUMBERS OF TOTAL AND PER CAPUT AGRICULTURAL PRODUCTION IN AFRICA 1948-50 TO 1952/53

ITEM	1948-50 average	1951/52	1952/53
..... 1934-38 = 100			
<i>Total Production</i>			
All commodities . . .	124	134	137
Food only.	123	132	135
<i>Total Population</i> . . .	118	122	123
<i>Per Caput Production</i>			
All commodities . . .	107	110	111
Food only.	105	108	109

NOTE: Owing to recent changes in the method of constructing FAO production indices, data are not comparable to those published in *The State of Food and Agriculture: Review and Outlook 1952*.

Production

Total grain production increased by 9 percent over the previous year's figure of 21.4 million tons (Table 24). The greater part of this increase was in French North Africa with a total harvest of more than 5.8 million tons, about 1.1 million tons over the preceding season. In Algeria, the grain crop was 45 percent higher and Tunisia produced over 1 million tons or close to three times as much as in 1951/52. In Morocco, however, in spite of a slight increase in the area sown, output was 10 percent lower, mainly because of a sharp reduction in barley. West Africa's crop remained about the same as in 1951/1952. In South Africa output of all grains reached 3.4 million tons, an increase of 20 percent chiefly due to the excellent maize crop. However, other cereals, especially wheat, were substantially lower due to unfavorable weather conditions in parts of the Union. East African production of maize and wheat increased.

Total production of oilseeds and oils, estimated at 2.2 million tons (in terms of oil) was slightly higher than that of the 1951/52 season, with marked variations in output of individual crops. While production of palm kernels remained unchanged, palm oil increased ten percent over the previous season. The

TABLE 24. — AGRICULTURAL PRODUCTION IN AFRICA

COMMODITY	1948-50 average	1951	1952
.... <i>Thousand metric tons</i>			
Total Grains ¹	21,700	21,400	23,200
Millet and sorghum	8,000	8,100	8,000
Maize	5,700	5,100	6,000
Wheat	2,800	3,000	3,600
Vegetable Oilseeds and Oils (in terms of oil)	2,100	2,100	2,200
Palm oil	530	680	730
Groundnuts	620	710	710
Palm kernels	380	360	360
Olive oil	94	93	70
Cotton (ginned)	200	240	240
Coffee	230	280	280
Tea	18	21	22
Cocoa	500	460	520
Sugar	1,320	1,340	1,450

¹ Including rye, barley, oats and rice.

excellent groundnut crop of 1951/52 was followed this season by another good harvest of about 2.4 million tons with a small increase in Nigeria and a small decrease in French West Africa. In French North Africa, olive oil production fell by almost one-fourth chiefly because of a decline in olive output in Morocco from the near record level of the previous year.

Total production of cotton at 240,000 tons was about the same as in 1951/52, expansion in the Belgian Congo and French Equatorial Africa being offset by decreases elsewhere, notably in Uganda, where the area sown to cotton declined by about 10 percent.

Cocoa production rose from 460,000 tons in 1951/52 to 520,000 tons in 1952/53. Climatic conditions in all the main producing areas were generally advantageous and on the Gold Coast the swollen shoot disease is gradually being brought under control. On the Ivory Coast, the crop was some 10,000 tons over last year's figure of 48,000 tons. However, quality was less satisfactory.

Production of coffee at 280,000 tons and of tea at 220,000 tons remained the same as the year before. As regards coffee, there was, however, marked change in the relative position of the different producers of the region. In the Belgian Congo, French Cameroons and Madagascar, production increased substantially, but in French West Africa, output declined by about 15 percent and in Kenya and Tanganyika production was

adversely affected by unfavorable weather conditions. Sugar production amounted to 1.4 million tons, 10 percent over last year's crop. South Africa with an all time record harvest of sugar cane accounts for most of the increase which is attributed to timely winter rains as well as to a more widespread use of improved varieties. In Mauritius, however, there was a slight reduction in output and unfavorable ripening conditions caused a lower sucrose content.

Trade and Prices

The volume of total exports of food and agricultural raw materials in 1952 was some 5 percent higher than that of the preceding year and about equal to the postwar record level of 1950. The expansion was attributable mainly to increased shipments of oilseeds and oils as well as fibers. Exports of grains declined.

Imports were slightly lower compared with 1951, but still appreciably above the 1950 volume with those of grains and livestock products being maintained at a relatively high level and those of sugar still increasing.

In general, export prices declined further from the high levels attained in 1950/51. The sharpest reductions in price in 1952 were recorded for palm oil and palm kernels, which were respectively 54 and 73 percent of their 1951 levels, with a gradual increase in the first quarter of 1953 in the case of palm kernels. Cotton and sisal prices, which in the second half of 1951 remained well above the pre-Korean level, fell in 1952, with sisal prices decreasing to less than 70 percent of their 1951 monthly average and continuing to decrease during the first quarter of 1953. On the other hand, cocoa and coffee prices, though fluctuating, on the whole maintained their 1951 level. South African wool prices fell to 60 percent of their 1951 average, but were rising again in the first quarter of 1953.

Prices of imports, while weakening in the first half of 1952, remained nevertheless substantially above 1950 levels. As a result, the terms of trade in most cases were, to a varying extent, less favorable in 1952 than in 1951.

Fisheries

Total fish production increased slightly over 1951. In French Morocco, the sardine catch declined slightly and in Angola output has not in-

creased appreciably over the past two years. On the other hand, the pilchard fisheries of the Union of South Africa and South West Africa continue their rapid postwar expansion; total output for 1952/53 is estimated at 650,000 tons compared with some 500,000 in the previous year. The South African output of fresh and chilled products for home consumption is slowly increasing and substantial surpluses of canned pilchards and fish-meal and oils are becoming available for export. Export of frozen and smoked fish to Australia and a few other countries has been facing difficulties as a result of restrictions in the Australian market.

Forestry

The falling market in 1952 for forest products was particularly severe in the region. African (notably Nigerian) exports of hardwood declined sharply as the United Kingdom, the largest single customer, reduced its purchases by over 45 percent from the level of 1951.

Trade in sawn softwood also dropped noticeably. In the Union of South Africa, because of currency restrictions which affected practically all sources of supply and of falling prices and uncertain markets, total imports of sawn softwood fell by some 35 percent from their 1951 level. The government is trying to raise the domestic production of sawnwood of which it is estimated that over 33 million cu. ft. of sawlogs were processed in 1951/52. In French North Africa import demand seems to have remained more stable than in other parts of Africa; the relatively smaller fall in imports in 1952 appears to have been due chiefly to the continuance of rather high economic and building activities in these countries. The African market of wood pulp and pulp products also showed a marked decline in 1952. Imports of these products fell considerably even in the case of newsprint.

Outlook

In Africa as a whole, production of food and agricultural raw materials may slightly exceed that of last year. Weather conditions were on the whole favorable except in French North Africa, where drought upset earlier hopes for a record production of wheat and barley. Late rains, however, have eased the situation and an average crop is expected. In East Africa, mainly in Kenya and Tanganyika, the rains arrived too late and in insufficient quantities to avert serious

food shortages, whereas in Southern Rhodesia and Portuguese East Africa heavy rains have caused floods and delayed farming operations in some areas.

The average grain crop in North Africa will be offset by an excellent maize crop especially in South Africa with an estimated 50 percent increase in volume and in Northern Nigeria. Nigeria's groundnut production is expected to equal last year's record crop; that of Southern Rhodesia may be some 50 percent higher. A slight increase is also anticipated in French West Africa, especially in Senegal. Sugar production may show an increase in Mauritius and in South Africa, and exceptionally large cane crops should make it possible to resume overseas exports. Livestock conditions throughout the region are encouraging because of adequate grazing conditions and a good maize crop.

THE NEAR EAST¹

Current Situation

The steady expansion in Near East food and agricultural production over the past three years was accentuated during 1952/53. Total production reached record levels and, on a per capita basis, regained and exceeded the prewar average by an appreciable margin for the first time since the end of the war. Although expansion of production tended to be concentrated in the food surplus rather than the deficit countries, the latter were, on the whole, able to improve or at least maintain their over-all supply position because of the continuance of large-scale imports. Conditions of widespread severe food scarcity, which had been a recurrent feature of the immediate postwar years, did not arise. Such shortages as did develop in Tripolitania and Cyrenaica in 1952 were met by emergency imports.

In the achievement of the high production levels in 1952/53 favorable weather conditions were an important factor, but the expansion of production also reflects the effects of long range programs and measures for food and agricultural improvement, which have been in operation in a number of countries of the region during the last few years. In several instances, a promising start has been

¹ This term is taken to include the countries from Turkey in the North to Ethiopia and the Somaliland in the South, from Libya in the West to Afghanistan in the East.

made to overcome the traditional obstacles to agricultural development by such measures as the introduction of a land reform program in Egypt, improvement of tenure conditions in Iraq and distribution of state domains in Syria. Training programs have been speeded up and there is at present a growing influx of technical and administrative skills as students from the Near East complete their training abroad and as the work of technical assistance experts begins to take effect. However, as development activities in the Near East are intensified, disparities in available investment resources, notably between the oil producing areas and some other countries of the region, are becoming more marked, and the absence of adequate funds in the latter, may appreciably hamper their future economic growth.

General Economic Conditions

As the post-Korean boom receded further in early 1952, the incentive to greater economic activity provided by higher export prices, which had generated a strong internal demand for both domestic and imported goods, tended to disappear. Repercussions were most noticeable in countries whose chief exports registered the greatest price fluctuations, such as cotton in Egypt and the Sudan and in others like Lebanon, whose economy is particularly sensitive to changes in world economic conditions. During 1952 several other countries experienced trade deficits which had to be financed from the high export earnings of the preceding year and from foreign exchange reserves. On the other hand, oil producing areas, with the exception of Iran, continued through 1952 to add to their holdings of foreign exchange.

Within the Near East, the pressures on prices stemming from international trends were largely offset by the favorable developments in the food supply position of most countries in the region. Price fluctuations were within a relatively narrow range and, with few exceptions, the over-all picture of cost-of-living movements remained one of relative stability for the region as a whole. At the end of 1952 and early in 1953, cost-of-living indices were generally at or slightly below the level of 1951, the main exceptions being the Anglo-Egyptian Sudan, and Israel where the chief problem continued to be the absorption of mass immigration and the development of industries and exports to enable the country to pay its own way.

Agricultural Production

In 1952/53 total food and agricultural production in the Near East exceeded the prewar average by about one-third (Table 25). Much of the expansion was attributable to the substantial advances made in Turkey and to a lesser extent in Syria and Iraq. In the major food deficit countries like Egypt and Lebanon, progress was much slower and production failed to recover its prewar per caput level. However, a notable expansion both in total and per caput production took place in Iran.

TABLE 25. — INDEX NUMBERS OF TOTAL AND PER CAPUT AGRICULTURAL PRODUCTION IN THE NEAR EAST, 1948-50 TO 1952/53

ITEM	1948-50 aver- age	1949/50	1950/51	1951/52	1952/53
..... 1934-38 = 100					
Total Production					
All commodities	115	111	120	125	134
Food only . . .	115	110	119	124	133
Population . . .	118	118	121	122	124
Per Caput Production					
All commodities	97	94	99	102	108
Food only . . .	97	93	99	102	107
<i>Near East excl. Turkey</i>					
Total Production					
All commodities	116	114	121	122	123
Food only . . .	118	115	121	122	120
Population . . .	118	118	120	122	123
Per Caput Production					
All commodities	98	97	101	100	105
Food only . . .	100	98	101	101	105

Note: Owing to recent changes in the method of constructing the FAO production indices, the data are not comparable to those published in *The State of Food and Agriculture: Review and Outlook 1952*.

Grain output rose to 29.3 million tons, an increase of almost one-fourth over average production in the years 1948-50 and 2.7 million tons higher than in 1951 (Table 26). Wheat and barley accounted for 80 to 90 percent of this increase with Turkey, Syria and Iraq showing the largest gains. Among the grain deficit countries, Iran and Israel were the only ones to show appreciable progress, output remaining at or below the average postwar level in Lebanon and Egypt. In the latter country, production of wheat de-

clined in spite of price subsidies and minimum acreage allocations. Owing to the insufficient flow of the Nile for the second year in succession, output of rice failed to recover.

Despite the fall in world market prices and the accumulation of sizeable stocks in some of the major producing countries of the Near East, production of cotton continued to expand during 1952. Owing to exceptionally favorable weather conditions, Egypt, Sudan and Turkey harvested record crops. In these countries, however, expansion in area was checked in view of the uncertainty of future market prospects. In other countries production remained unchanged, except in Syria and Iraq where a decline started.

TABLE 26. — AGRICULTURAL PRODUCTION IN THE NEAR EAST

COMMODITY	1949	1950	1951	1952
... Thousand metric tons ...				
Total grains ¹	22,000	24,400	26,500	29,300
Wheat	9,100	10,600	12,100	13,700
Barley	4,500	5,100	5,500	6,400
Maize	2,300	2,200	2,600	2,600
Rice	2,300	2,500	1,800	1,900
Pulses.	1,200	1,100	1,200	1,200
Sugar.	360	420	500	470
Citrus fruits.	640	870	920	950
Vegetable oilseeds and oils (in terms of oil)	480	510	500	580
Cotton (ginned)	600	680	690	790
Tobacco	125	125	120	130

¹Including rye, oats, millets and sorghums.

Among other crops, output of citrus fruits, tobacco and potatoes increased and there was a notable expansion in production of oilseeds and oils due to good harvests of sesame in Syria and the Sudan and a satisfactory olive crop in Turkey. Output of sugar was somewhat lower than in 1951; that of pulses remained unchanged. Output of livestock products, meat, milk and wool continued to expand slowly at a somewhat more rapid rate than in previous years. Fish landings are believed to have remained at the same level as in 1951. In Turkey as well as in several other countries, attention is being given to the mechanization of fishing craft and better utilization and marketing of the catch. Pond fish culture in Israel and fresh water fisheries in Iraq are being developed.

Food and Agricultural Trade

There was little change during 1952 in the volume of total Near East trade (imports plus exports) in food and agricultural commodities, the rise in exports being offset by a somewhat smaller volume of imports. Net exports, though substantially higher than in the immediate postwar years, remained well below the prewar average.

A notable shift occurred in the composition of the region's exports following the expansion in grain output (Table 27). Barley exports were higher than in previous years. Wheat imports into the grain deficit countries showed only a moderate decrease from 1.7 million tons in 1951 to 1.4 million tons in 1952. Exports from the surplus countries reached some 600,000 tons compared with negligible quantities in the previous year. As a result, the Near East was reverting to its prewar position as a net grain exporter and, while the shift was not yet completed during 1952, mainly because of the virtual disappearance of rice exports from Egypt, the balance of unshipped supplies from Turkey, together with such surpluses as will emerge from the current harvest, will largely suffice to transform the region into a substantial grain exporter during 1953.

TABLE 27. — NET TRADE OF NEAR EAST IN PRINCIPAL FOOD AND AGRICULTURAL PRODUCTS¹

COMMODITY	1949	1950	1951	1952 ²
... Thousand metric tons ...				
Total grains ³	390	470	960	260
Wheat	1,040	980	1,740	950
Barley	— 420	— 550	— 480	— 620
Maize	170	180	20	—
Rice	— 320	— 120	— 270	—
Sugar.	430	600	370	380
Vegetable oilseeds and oils (in terms of oil)	— 25	— 30	— 35	...
Citrus fruits.	— 190	— 200	— 200	— 230
Cotton	— 460	— 570	— 440	— 445
Tobacco	— 65	— 40	— 60	— 50

¹Data refer to net imports unless preceded by a minus sign designating net exports.

²Preliminary.

³Including rye, oats, millets and sorghums.

The slackening of foreign demand for raw materials kept cotton shipments at the level of the preceding year, almost one-fourth below the peak of 1950.

Net exports of tobacco declined and those of citrus fruit, while showing a marked improvement over previous seasons, continued to fall short of the prewar level.

Consumption

With the improvement in production and continuance of substantial imports into the food deficit countries, there was an appreciable increase in the total and per caput food supply within the region. However, improvement in average consumption levels was mostly of a quantitative nature without any appreciable change in the composition of the diet, which continues inadequate over large parts of the region.

Prices

The rise in import prices and the decrease in export prices resulted in a major part of the region experiencing in various degrees unfavorable terms of trade during 1952 as compared with 1951. Egypt was most affected, despite the government's efforts to continue to hold its cotton export prices above the international levels. Prices of cotton dropped by about 50 percent between May 1952 and May 1953. In Turkey, the export prices of wheat were reduced from US\$110 f.o.b. per ton to \$96 in order to bring them closer to international levels. This is still above the new International Wheat Agreement maximum.

The index of general wholesale prices in 1952 was lower than in 1951 in Syria, Lebanon and Egypt by 12 percent, 9 percent and 3 percent respectively and continued to ease off in the first quarter of 1953. In Turkey and Iran prices were maintained relatively unchanged. In Iraq and the Anglo-Egyptian Sudan, there was a moderate increase of 3 and 11 percent respectively, whereas in Israel, subjected to sharp inflationary pressures, the index rose by 71 percent over its 1951 level and continued to increase into the first quarter of 1953. However, food prices in all countries were above the 1951 levels, ranging from 3 percent in Lebanon to 60 percent in Israel.

Outlook

Indications are that the upward trend in Near East food and agricultural production will be maintained during 1953/54. The least situation has been extremely serious, however, during the winter and spring and, as last year, large-scale international action was necessary to prevent escapes of swarms from infested areas in North West Arabia and adjacent countries. During the early part of the growing season, there were fears of drought in Jordan, Syria and Israel. Abundant rains during the spring of 1953 eased the situation in the northern part of Jordan and in Syria, and present expectations in the latter com-

try are for the new grain harvests to exceed those of last year. The rains came too late, however, to save grain crops on some 30,000 hectares of the Negev in Israel and southern Jordan; in Lebanon floods have caused considerable damage in the wheat growing districts of the Bekaa and Akkar. In other parts of the region, precipitation in the form of rain or snow was satisfactory. In Turkey, because of further expansion in area under grains, last year's record crops may be exceeded. In Egypt, it is believed that government efforts to stimulate grain output will be successful this year, the wheat harvest being officially estimated at 1.5 million tons, compared with 1.1 million tons in 1952. In Iran and Afghanistan the outlook for the new harvest is reported to be favorable.

As regards cotton, with the exception of countries like Afghanistan, Ethiopia and Iran, where output continues to expand to meet increasing domestic requirements, production in the main areas of the Near East is likely to fall off considerably during the present season. In Egypt, the area under cotton has been restricted to 30 percent of the cultivated land as part of the program to increase food production and because of reduced world prices, and according to unofficial estimates, production may be one-third lower than in 1952. In Syria, where during the past two seasons cotton growers had discouraging experiences as a result of insect infestation, falling world prices and relatively high taxation, the area currently under cotton is estimated to remain well below the maximum acreage set by the Cotton Bureau. A similar trend is expected in other countries, notably in Iraq where already in 1952 the crop was less than one-half of the year before.

Owing to adequate rainfall during the first quarter of the year, range and pasture conditions were satisfactory throughout most of the region and prospects for increased output of livestock products are favorable. In Syria, however, livestock expansion suffered a severe setback due to a serious outbreak of foot and mouth disease, which is also affecting adjoining areas in Iraq and Turkey.

THE FAR EAST¹

Production

The Far East region produced more food in 1952 than in any postwar year. This slight but

¹ Unless otherwise specified, discussion of the Far East regional situation excludes the mainland of China.

TABLE 28. — INDEX NUMBERS OF VOLUME OF TOTAL AND PER CAPUT AGRICULTURAL AND FOOD PRODUCTION IN THE FAR EAST, 1948/49 TO 1952/53

ITEM	1948/49	1949/50	1950/51	1951/52	1952/53
..... 1933-38 = 100					
<i>FAR EAST, including China Mainland</i>					
Total production	94	94	96	98	99
Food commodities.	95	95	96	97	99
Grains only.	99	97	96	97	99
Non-food commodities.	86	82	95	100	97
Population	112	113	114	115	116
Per caput production	85	83	84	85	86
Food commodities.	86	85	84	85	86
Grains only.	89	86	85	85	86
Non-food commodities.	77	73	84	88	84
<i>FAR EAST, excluding China Mainland</i>					
Total production	95	99	99	101	102
Food commodities.	97	101	99	100	103
Grains only.	96	100	96	97	100
Non-food commodities.	86	87	102	106	102
Population	118	120	121	122	124
Per caput production	81	83	82	83	82
Food commodities.	82	84	82	82	82
Grains only.	81	84	80	79	81
Non-food commodities.	73	73	84	86	82

Note: Owing to recent changes in the method of constructing FAO production indices, data are not comparable to those published in *The State of Food and Agriculture: Review and Outlook 1952*.

encouraging progress has been the result of favorable weather combined with the gradual expansion of area undertaken as part of governmental rehabilitation and grow more food programs. The record rice crop harvested late in the year provided relief from the persistent shortages of the last few seasons and, with the exception of wheat and some pulses, all other food crops registered increases. As a result the regional food supply situation is above the postwar peak of 1949/50 and there is less dependence on imports from outside the region than during the previous year (Table 29). Import requirements are still high, however, as a result of the wheat crop failure in Pakistan. Non-food production has declined slightly from last year in the wake of generally decreasing raw materials prices. Total production is provisionally estimated to have increased two to three percent above prewar, but population has meantime increased 24 percent (Table 28). Prewar production was far from adequate to clothe and feed the population according to minimum standards, and per caput production is now 15 to 20 percent below prewar, and only half the world average.

If the mainland of China is included total production for the region is still slightly lower than prewar, but because of the slower population growth in China, per caput production appears a little higher.

Per caput availability of cereals produced in the region has been reduced nearly 20 percent compared with prewar and total per caput supply including imports by about 10 percent. Although these differences may be exaggerated by underestimation in official statistics collected during the postwar grain shortage, the regional deficit is still of serious proportions.

In some of the cereals deficit countries, output of other basic food crops was increased. For example, per caput production of roots and tubers has increased substantially in the Philippines and Japan. Sugar production continues to increase, but only in exporting countries is the per caput consumption higher than prewar and still rising. As in the case of cereals, the region has changed from being a net exporter to a net importer of sugar. Total oilseed production continues the trend of increase above prewar, but supplies available for domestic consumption have not kept

TABLE 29. — CROP PRODUCTION IN THE FAR EAST (excluding Mainland China)

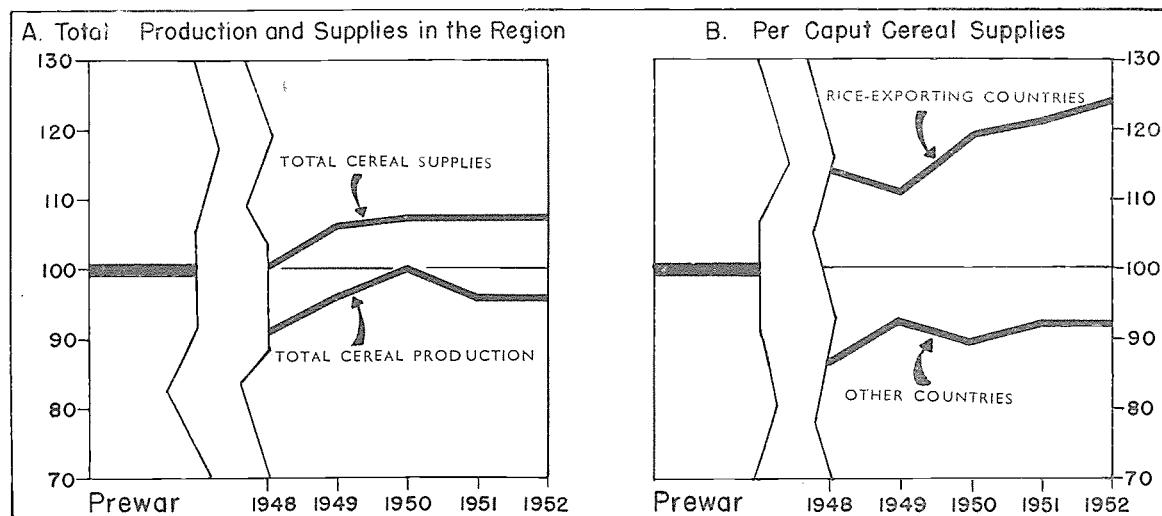
COMMODITY	1934-38 average	1948/49- 1950/51 average	1951/52	1952/53 provisional	1952/53 change from 1951/52
..... Thousand metric tons					
Rice (milled equivalent of paddy)	65,475	65,544	64,226	68,726	+ 7
Wheat	12,128	11,255	12,192	10,722	- 12
Other grains	26,008	24,084	24,117	24,557	+ 2
TOTAL	103,611	100,883	100,535	104,005	+ 3
Potatoes and root crops	19,504	24,653	24,619	25,895	+ 5
Pulses	9,091	9,869	10,131	9,340	- 8
Oilseeds (oil content)	4,441	4,272	4,559	4,640	+ 2
Sugar (raw equivalent)	6,551	5,324	6,636	6,837	+ 3
Tea	444	500	558	554	- 1
Tobacco	794	616	606	596	- 2
Cotton	1,214	791	1,030	960	- 7
Jute	1,873	1,426	2,020	2,125	+ 5
Rubber.	983	1,573	1,816	1,659	- 9

pace with population growth. No marked changes are apparent in livestock production.

Fish is the most important source of protein in many Far Eastern countries. The aggregate output in the region amounts annually to between 8.5 and 9.5 million tons, about 30 to 40 percent of the world's total. It is estimated that marine catches increased rapidly during the first four postwar years while rehabilitation was underway. In all countries recent production is estimated to be about equal to annual prewar output, except in Malaya, where large-scale mechanization is believed to have brought the catch above pre-

war, and in Korea, where hostilities have reduced production by two-thirds. In Japan, the world's largest fish producer, the 1952 catch was over 4.5 million tons, or 23 percent higher than in the previous year. Pond fisheries, an important source of food in wet rice areas, are also known to have been expanding.

The forests of Japan, the largest producer and consumer of forest products in this region, have been heavily over-cut during the past years, necessitating measures to restrict the volume of fellings during 1952. The output of sawnwood in Japan was about 12.1 million cu.m. in 1952,

FIGURE 9 - CEREAL SUPPLIES IN THE FAR EAST
(1934-38 = 100)

Notes: Supplies equal gross production less net exports or plus net imports. Cereals include: rice (milled equivalent), wheat, rye, barley, oats, maize, millets and sorghums.
Total cereal production: crop years 1947/48-1951/52.
Rice-exporting countries: Burma, Cambodia, South Korea, Taiwan, Thailand, Viet Nam.
Other countries: Ceylon, India, Indonesia, Japan, Malaya, Pakistan and the Philippines.

as against some 12.6 million cu.m. in 1951. Production of wood pulp, on the other hand, continued to increase as a result of a switch in the use of available raw materials. From the 1950 record of 720,000 tons, it reached 1,160,000 tons in 1952 and is still rising. The Japanese production of newsprint increased markedly in 1952 and in contrast with the trend in other parts of the world the production and sales of all categories of paper and board also rose. All countries in the region depend almost entirely on imported forest products, especially for wood pulp and its products, but there is scope for development of limited softwood resources on the Chinese mainland, India and Pakistan.

Trade

The region has changed since the war from a net exporter of cereals to a large-scale net importer, principally of wheat and other cereals. The volume of raw materials exports from the region, after an unprecedented rise, is now falling (Table 30).

In 1953 it is expected that needs for cereals from outside the region will be somewhat less than the 8.3 million tons imported in 1952, because of good harvests in the deficit countries and because the chief exporters within the region may have larger supplies available. Including supplies from China, rice available for export in the region could increase from 3 million tons in 1952 to 3.7 million in 1953, a quantity greater than the indicated demand. Although the good rice harvests within the region will reduce some of the need for the cereals which have been

imported as rice substitutes, the demand for wheat and coarse grains among traditional consumers in India, Pakistan, Japan and Korea will keep the region's requirements of wheat and coarse grains at about 7.5 million tons, the amount imported in 1952.

The external trade in this region in fresh, chilled or frozen fish products has remained stable at 12,000 tons. The Ceylon imports of cured fish from India and the Maldives increased between 1949 and 1952 to 50 percent over prewar levels. The cured fish trade from Thailand and Cambodia through Malaya to Indonesia amounted in 1952 to 43,500 tons compared with 55,000 tons in 1938. Canned fish imports into the region have increased rapidly during the postwar years. The major change during 1952 in the regional trade pattern of canned fish is the re-entry of Japan as a source of supplies of canned sardines.

The chief change in the regional trade in forest products was the recovery of Japan's prewar exports of pulp and paper products to other countries in the region.

Gross exports of agricultural products, including forestry and fisheries products, which accounted for over half of the total value of trade in 1951, are a primary source of foreign exchange earnings and government revenues in the region. As Table 31 indicates, terms of trade have begun to be increasingly unfavorable since the volume and prices of many export crops are declining while imports of foodstuffs are continuing at a high level and import needs for development increasing.

Total gross exports and imports for the region were about equal in 1951, but in 1952 exports fell to US \$7,516 million while imports were steady at U.S. \$9,545 million. As a result, most of the ex-

TABLE 30. — NET TRADE IN PRINCIPAL EXPORT AND IMPORT COMMODITIES OF THE FAR EAST REGION
(including China Mainland)

COMMODITY	1934-38 average	1948	1949	1950	1951	1952 provisional
<i>Million tons</i>						
<i>Net Exports</i>						
Oilseeds and oils, (oil equiv.) . . .	1.93	.93	.95	1.20	1.40	1.20
Tea . . . . .	.38	.35	.42	.38	.43	.40
Jute . . . . .	.73	.56	.37	.81	.59	.55
Rubber . . . . .	.89	1.38	1.34	.62	1.52	1.41
<i>Net Imports</i>						
Grains	— ¹	4.46	6.77	4.17	7.14	8.30
Cotton	25	.06	.32	.42	.40	.41

¹ Net exports of 1.7 million tons.

TABLE 31. — INDEX NUMBERS OF TERMS OF TRADE.
SELECTED FAR EASTERN COUNTRIES

COUNTRY	1938	1951	1952
..... 1947-48 = 100			
Burma	74	157	...
Ceylon	141	151	101
India.	86	126	102
Malaya.	120	179	146
Philippines . . . . .	...	84	67

NOTE: Ratio of unit value index of exports to unit value index of imports.

... Not available.

SOURCE: United Nations Economic Commission for Asia and the Far East.

port levies imposed or raised during the post-Korean boom had to be lowered or withdrawn and many countries had recourse in 1952 to import restrictions, some of which, however, have been eased subsequently.

Some of the most pressing foreign trade difficulties have found solution in intra-regional trade agreements. The effect of changed trade terms on the international balance of payments has also been mitigated by continuing economic aid from international organizations and from the United States. Such aid falls far short of total need for capital imports, but makes possible individual projects which will significantly expand production in individual countries, for example the Damodar valley development in India and the Chao Phya irrigation project in Thailand.

Prices and Demand

Prices of export commodities, except rice, have moved freely but during the period of market decline minimum prices were set for cotton, jute and some others. The main objective of domestic price policy, on the other hand, has been to stabilize the cost of living through subsidizing prices of cereals to consumers and controlling prices paid to domestic producers. Ceylon, India, Japan and Malaya have food subsidies to offset the high price of imported grain. Because of the improvement in supplies, systems for delivery of paddy at fixed prices are now in force for parts of India and Japan only. The fixed prices for delivery to mills act as a ceiling price to producers in Burma and Thailand.

Prices of all commodities declined in India, continuing the relief from the inflationary pressure which has been inhibiting public investment under the five year plan. Execution of the investment program has been gaining momentum in the first two years of the plan, but outlay has not yet reached its peak.

Manufacturing activity increased in the two most industrialized countries in 1952. India enjoyed a 7 percent increase between December 1951 and 1952, consumer goods industries contributing most to the rise. In Japan manufacturing activity had reached a postwar peak early in 1953, stimulated in part by the rise in agricultural income. Textile production is still considerably below prewar levels and there has been a general movement toward production based on local raw materials.

Country Review

Agricultural conditions in individual countries, grouped according to type of agricultural economy, are summarized below:

Rice Surplus Countries. In 1953 export availabilities from the surplus rice producing countries might reach nearly 3.7 million tons, a record for the postwar period. An estimated 1.4 million tons may be available from Burma, where reclamation programs over the last few years have helped to extend area to 80 percent of prewar. Production in Thailand was slightly less in 1952, but with the addition of stocks, exports may exceed the previous season's 1.5 million tons. A good crop in Viet Nam, where internal trade is still restricted, may bring 1953 exports up to an estimated 300,000 tons, which represents one-third of prewar availabilities. Other suppliers include China which exported 100,000 tons in 1951 and 200,000 tons in 1952. Burma and Thailand continue to sell two-thirds of their exports under government to government contract and Burma has raised the price by £ 5 per ton this season. Official prices are still well below those bid at open tenders.

Raw Materials Exporting Countries Deficient or Self-sufficient in Food. Two successive years of water shortage have turned Pakistan from a net exporter of wheat into a net importer on a large scale. During the 1952/53 cereals shortage, a United States loan for purchases abroad and a number of barter deals helped to marshall supplies. During 1953/54 the United States, Canada and Australia will donate substantial

quantities of cereals to alleviate the shortage. It has been planned to reduce jute production by 40 percent to 4.2 million bales in 1953 in view of the large carryover from previous seasons. Meanwhile measures are being taken to encourage trade through trade agreements including a three year pact with India and abolition of the export licensing fee. Cotton production increased in 1952/53 although there had been difficulty in disposing of the previous year's surplus.

The increasingly unfavorable terms of trade for raw materials exporters has been especially severe for Ceylon and Malaya, which depend heavily on exports of tea, rubber and vegetable oils and must import approximately half of their food requirements. The revenue from customs, which provide the bulk of government receipts, fell by 25 percent in Ceylon and 35 percent in Malaya between 1951 and 1953. Ceylon has entered into a five year trade agreement with China for the exchange of rice for rubber.

In Indonesia the output of rice and other food crops continued to expand well beyond the prewar level, but copra production dropped, small holder's rubber production fell and sugar production made no progress in 1952. As is also the case in Burma, Malaya and Viet Nam, military and security measures still reduce funds and personnel which might otherwise be available for agricultural expansion.

The Philippines does not now need to import rice. Abaca and copra farmers are reported to have found food crop production more lucrative in 1952. Typhoon damage also contributed to the decline in copra production. Sugar output on the other hand continued to increase.

Food and Raw Materials Importing and Exporting Countries. In Japan controls on all cereals except rice were removed in June 1952. Current rice, wheat and barley crops are excellent and import needs will be slightly less than the 3.6 million tons imported in 1952. Japan is faced with increasing difficulties in paying for both food and raw materials imports.

A bumper rice crop resulting in a reduction of import requirements for cereals by over one million tons was the most important economic development in India between 1951/52 and 1952/53. The 10 percent greater rice harvest was not matched by other grains, however. Wheat, barley and pulses all decreased slightly. Sugar output, which had increased in 1952 to the point where an exportable surplus was available, has declined and further exports are prohibited.

There was a slight decline in cotton production on about the same area and an increase in jute production. Few of the major agricultural projects in the five year plan have been scheduled to yield results before 1953. A final review of the plan in 1952 resulted in a revision of development programs for agriculture to include new schemes like community development projects and reorientation of the grow more food campaign.

Outlook

The year 1953 starts the third year of the Indian five year plan for economic development, an eight year plan for Burma and a second six year plan for Ceylon. Japan is now considering a ten year program which would make her almost self-sufficient in foodstuffs and as a result of recent crop failures, Pakistan is giving agriculture a high priority among its development programs. The next crop season may show the results of the implementation of some aspects of these plans and of other country programs for expanding area and yield.

Among the important aspects of agricultural development in the region is the need to reduce dependence on uncertain monsoon rains responsible for the wide year to year variations in yields. Ceylon, Thailand, Malaya, Japan all have large-scale water control programs under way. During the 1953/54 wheat season Pakistan is accelerating a program for installation of tubewells to free part of the area from reliance on canal irrigation. Among the economic measures aimed at expanding food production in the coming season are the increased funds available for short-term loans in a number of countries and the higher guaranteed producer prices being offered in some deficit countries.

Projects to diversify production, such as the expansion of secondary cereals in Ceylon, are still on a small scale, or experimental, as in the case of cocoa development in rubber producing areas in Malaya. The decline in the market for traditional exports may now give additional impetus to such measures.

The fall in the prices of some of the non-food commodities which have been competing for land or labor with foodcrops may also encourage food output. Civil disorder continues to restrict the movement of cereals in local areas of a number of countries.

The drop in the value of exports of raw materials between 1951 and 1952 may be arrested in the coming year if demand continues to improve,

but foreign exchange difficulties will remain for many countries. The reduction in government revenues from trade receipts have had to be offset in 1953/54 by increases in import duties, in income taxes and internal excises.

Although the cereals supply position for the region has improved, the cost of imported supplies will decline little, since much of the rice is purchased on government to government contract at prices fixed at higher levels this season and wheat imports under the International Agreement may be more expensive. The effect of higher minimum wheat prices may be offset in some countries, however, by an increase in the size of the quota.

The further improvement in supply possible next season should bring most of the countries in the region nearer to their goals of self-sufficiency and larger export supplies, but according to government plans at least five to ten years of intensive improvement programs are necessary before production may be equal to the minimum food requirements.

OCEANIA¹

Current Situation

Economic conditions in Oceania improved throughout the year. With overseas trading conditions more favorable, import restrictions, which had been imposed early in 1952 were progressively relaxed and foreign currency balances built up. From January to July 1952, gold and foreign currency reserves fell steadily, but by February 1953 they had recovered to the level of January 1952. In New Zealand the decline and recovery were somewhat later and less pronounced than in Australia.

Greater agricultural production and sustained overseas demand, with higher prices than in 1951/1952, particularly for wool, caused an increase in the value and volume of agricultural exports. Even so, the recovery in the balance of trade was mainly due to curtailing imports. In Australia, the value of total exports was nearly 30 percent higher in 1952/53 than in 1951/52, whereas import values fell by over 50 percent, converting

¹ The text refers only to Australia and New Zealand. The tables include the products of other areas in the region, mainly sugar from Fiji (about 100 thousand tons) and copra from a number of territories, e.g., New Guinea, Fiji, New Hebrides (individual small amounts totaling about 200 thousand tons).

a trade deficit of £A379 million to a surplus of £A358 million.

Despite the sharp reduction in imports, inflation slowed down, wage rates became somewhat steadier and in Australia unemployment is decreasing after earlier rapid growth. Wage rates in Australia rose less than 6 percent during 1952/53, and the cost of living rose about 3 percent between June 1952 and March 1953. Important elements in restricting inflation were the heavy stocks in hand, sufficient to meet demand while import reductions were in force, and the active steps taken to control demand by such means as limiting loans, higher interest rates and cutting immigration.

Agriculture shared in and contributed to the general improvement of economic conditions and the agricultural industry on the whole enjoyed a greater degree of prosperity than in the previous year.

Agricultural Production

The volume of production of the two countries in 1952/53 was about 10 percent above the preceding year, but production per caput still did not reach the prewar level for either food or agricultural production, with food production lagging the most.

The major production increases were in Australian wheat (20 percent), milk (14 percent), meat (13 percent) and wool (11 percent), and in New Zealand milk (6 percent). The greater part of this increase resulted from improved yields in both countries. In Australia wheat and milk output went up despite a decline in acreage and cattle numbers and the higher wool clip was due to heavier fleeces. In New Zealand the rise in milk yields and production continues, although early estimates show a fall in dairy cattle numbers.

In Australia, output was considerably above the abnormally low levels of 1951/52, which were caused by dry conditions in a number of areas and a drought in Northern Australia. Increases occurred in nearly every major branch of agriculture. Total agricultural production recovered to surpass the level of 1950/51 and considerable progress was made towards fulfilling the government's plan for agriculture. Wheat, wool and barley were above the level set for 1957/58 and milk not far off.

In New Zealand, although over-all output increased, production of beef, veal and lamb de-

TABLE 32. — INDEX NUMBERS OF VOLUME OF AGRICULTURAL PRODUCTION IN OCEANIA

ITEM	1948-50	1950/51	1951/52	1952/53 ¹ (estimates)
<i>... Prewar average = 100 ...</i>				
Total agricultural production	112.1	110.6	107.5	118.3
Population	116.2	120.0	122.8	124.8
Per caput agricultural production	96.5	92.2	87.5	94.8
Food production	111.9	109.1	105.6	117.4
Per caput food production	96.3	90.9	86.0	94.1
<i>Production by Major Groups</i>				
Food :				
Crops	112.4	106.8	100.6	113.3
Livestock Products . .	111.7	110.1	107.9	119.2
Non Food :				
Crops	141.4	159.9	183.3	165.1
Livestock Products . .	112.6	114.4	112.6	120.7
<i>Major Commodities</i>				
Cereals	124.4	119.3	107.7	131.2
Meat ²	107.5	104.5	105.5	117.0
Milk	104.0	105.9	99.4	111.3
Wool	112.6	114.4	112.6	122.4

Note: Owing to recent changes in the method of constructing FAO production indices, these data are not comparable to those published in *The State of Food and Agriculture; Review and Outlook 1952*.

¹Early estimates of New Zealand meat production may be affected by an abnormal seasonal pattern of slaughtering.

²Beef and veal, pigmeat, mutton and lamb.

elined. This may be due partly to the fact that sheep flocks continued to increase, being about 2 percent higher in June 1952 than in 1951, and it is estimated that beef cattle numbers also, by contrast with dairy cattle, are likely to rise.

Agricultural Trade

International trade is the main factor in the demand for the region's agricultural commodities, especially for wool, wheat, processed dairy products and meat. Dairy products and wool constitute about two-thirds of the value of New Zealand's exports, and in Australia wool is about half the total value of exports. During 1952/53, overseas demand for the majority of agricultural exports was stronger than in 1951/52 and prices correspondingly higher, and income from exports was therefore considerably greater. Wool prices benefited from increased activity in the textile industry and were about 10 percent higher in 1952/53 than in 1951/52. Until July 1953, wheat exports consisted mainly of sales under the International Wheat Agreement and quota transactions took place at the maximum price permissible.

Agreement exports in 1952/53, however, were larger than those of the previous year when Australia's quota had been reduced owing to a short crop.

The major part of processed dairy products and meat exports is covered by United Kingdom contracts. For 1952/53 price increases of 5 to 15 percent were negotiated by both countries and the volume of exports also rose. Australia, which in 1951/52 had relatively little surplus for export, increased export volumes sharply in 1952/53. During 1952/53, as compared with 1951/52, mutton, lamb and butter exports rose very sharply and the value of all meat and butter exports, at £A 100 million, was about 25 percent of that of wool. In New Zealand, the quantities available for export of these commodities were relatively stable. Cheese, beef and veal increased, while mutton and lamb declined slightly. A noticeable feature is the growing importance of dried milk and canned meat exports. Furthermore, a tendency to promote sales of dairy products to other European countries besides the United Kingdom was strengthened by the general shortage of milk in Europe in the late summer of 1952.

Agricultural Prices and Incomes

Farmers' receipts, though strongly influenced by overseas markets, do not follow precisely the same course as export receipts, due partly to differential prices for home consumption and partly to the handling of reserve funds by marketing boards. Nevertheless a buoyant home demand strengthened the pressures of international trade. Thus in the second half of 1952 food prices in Australia were 16 percent and in New Zealand 6 percent higher than in the corresponding period of 1951.

In Australia, up to the end of 1952 there was relative stability in the prices of farm requisites and wage rates, with the cost of labor beginning to rise again in 1953. The pattern of farm costs was somewhat different in New Zealand, but it seems probable that the price/cost ratio was slightly though not significantly more advantageous to farmers in 1952/53 than in 1951/52. However, since the increased output will have been disposed of at enhanced prices, it is likely that the income accruing to farm owners will be substantially above the level of 1951/52, which in Australia was about £A 450 million, some 45 percent below that of 1950/51.

Fisheries

No significant or large-scale changes in the fishery production in Australia and New Zealand have taken place. The Australian output in 1951/52 of canned products has remained at the same level as in 1950/51. The canneries are developing new markets in Eastern Africa and the United Kingdom. The steady increase in exports of fresh and frozen spiny lobster tails to the United States, together with a rise in prices, resulted in a 42 percent increase in 1951/52 in dollar earnings from this commodity. Rising costs and scarcity of bait are affecting the spiny lobster fisheries of Western Australia, which account for over three-quarters of the exports.

Although Australia is principally a fish importing country, the trade crisis of 1952 necessitated restrictions on the imports of this commodity. Fishery resources are not large, however, and there was no significant increase in domestic supplies.

Forestry

The large volume of production and imports during 1951, and the high carryover into 1952 resulted in adequate supplies for the first time since the war. In Australia in 1952, although building and price controls were relaxed, demand for sawnwood did not pick up and stocks remained high. Output and imports showed a decline, with the exception of railway sleepers, output of which marked the first postwar rise. In New Zealand, production of sawnwood continued to expand, but the declining market in Australia and contracting local demand resulted in a heavy surplus.

For wood pulp and pulp products the development was somewhat different. Preliminary estimates show that in 1952 output, imports and consumption increased in both countries compared with 1951. A significant trend is that pulp and paper industries are expanding rapidly and during 1953 there is expected to be a considerable rise in regionally produced wood pulp to meet the growing needs of the region's paper industries and consumption.

Outlook

The rising trend of agricultural production during 1952/53 may be expected to continue in 1953/1954. A number of technical innovations of recent years, now well established and widely practised,

give promise of raising the fertility and usable area of agricultural land. As examples may be mentioned the application of trace elements to hitherto unproductive land in Australia, and the aerial spreading of fertilizers on otherwise inaccessible unimproved pastures in New Zealand. In Australia, although there is anxiety about naturally developed immunity, the myxomatosis campaign against rabbits continues, and its success is reflected in the increasing trend of wool production which reached an all-time record in 1952/53. Growing mechanization will probably suffice to counteract labor shortages where they occur; the number of tractors on farms rose by 15 percent between 1951 and 1952, being $3\frac{1}{2}$ times the prewar figure. Apart perhaps from a range of commodities such as piping and galvanized iron, the supply of agricultural requisites now appears to be satisfactory, with the growing ability of local industries to meet local requirements, and the relaxation of import restrictions.

Both governments are committed to expanding agriculture, the experience of 1952 having shown the necessity for a proper balance between primary and secondary industries. Farmers on the whole enjoy favorable treatment for taxation and credit, and producers' returns are to a large extent protected by government controlled price schemes, but incomes, especially from wool, are vulnerable to the effects of a change in overseas demand.

The United Kingdom market is the main outlet for agricultural production and is likely to be able to absorb the increased exports which may become available. Meat and dairy products are mostly covered by long-term contracts, though there has been some evidence of resistance to price increases sufficient to cover producers' costs. For wheat the price outlook is uncertain because of the refusal of the United Kingdom to enter the new International Wheat Agreement and the existence of abundant world supplies in the autumn of 1953. Even so, the Australian sown wheat acreage rose about 15 percent in 1953 as compared with 1952. In order that supplies will be available for sale in the traditional United Kingdom market, Australia proposes to request a reduction in her quota in the new Agreement. Activity in the textile industries and consequently the world demand for wool appears to be continuing at a moderately high level.

The internal demand for farm products as a result of economic expansion and population

increase seems likely to continue high and rising, especially in Australia.

The question of production costs in Australia and New Zealand appears to be dominant in a long-term view. The physical means are adequate for greatly increased production, but it is likely that in the future exports will be sharply affected by prices asked. The very rapid postwar development of both Australia and New Zealand has been partially responsible for a strong underlying tendency to inflation. In Australia at any rate, this has resulted in rising price levels in both agriculture and industry and recently there have been numerous warnings that Australian prices

are out of line with world prices. Where secondary industries are concerned, this is of considerable importance, but for agriculture, mainly dependent on export markets, it is vital that prices should be competitive.

Growing concern has recently been expressed about the possible effect of competition from substitutes for wool and butter, particularly if, as seems to be the case, the United Kingdom favors gradual reduction in the scope of bulk buying and long-term contracts. These developments give warning that price competition is likely to become again an important element in determining the production pattern of agriculture in this region.

Chapter IV

**REVIEW AND OUTLOOK
BY COMMODITIES**

Chapter IV - REVIEW AND OUTLOOK BY COMMODITIES

WHEAT

Current Situation

World wheat supplies reached very high levels during 1952/53. The coincidence of good harvests in several countries resulted in unusually high world production. Crops were particularly large in the major exporting countries. The Canadian crop was a record by a large margin and that of the United States was the third highest ever obtained. A still greater relative improvement occurred in Argentina, whose harvest was nearly four times as large as the preceding crop and substantially better than the prewar average. The Australian crop, despite a reduced area, equalled the postwar average.

A large increase in exportable supplies of wheat resulted from these favorable harvests. On the other hand, crops in importing countries were also good and their import requirements shrank. In European importing countries, where in the previous three years the prewar average production had been recovered, a further increase was secured. Better food grain crops in India also permitted a scaling down of imports. Total world wheat exports consequently declined from the record of 29 million tons in 1951/52 to some 25 million tons in 1952/53.

Outside the three major exporting countries, supplies were not greatly different in the aggregate from those of the previous year. One welcome development was the excellent harvest in Turkey, which enabled its exports to be the best since the war. Offsetting features were a fall in Pakistan's production, serious enough to make imports necessary, and the apparently reduced harvests in the Soviet Union and Eastern Europe. It does not appear that the miscellaneous group of exporters supplied in all an appreciably different share of total exports. During the second half of 1952, moreover, Argentina and Australia, reflecting earlier unfavorable harvests, had smaller exportable supplies. Consequently, importers again relied mainly on the United States and Canada, whose exports in 1952/53, though some three million tons (15 percent) smaller than in 1951/52, again accounted for over 75 percent of the total world wheat trade.

The large harvests and the smaller trade resulted in a substantial addition to the supplies on hand on 30 June 1953. The bulk of the increase is located in the United States which experienced a sharp decline of 32 percent in exports. Its carryover was some 8 million tons larger, a quantity about equal to its total exports in 1952/53. Canada's holdings have increased by some 4.0

TABLE 33. WHEAT PRODUCTION

COUNTRIES	1934-38 ¹	1948	1949	1950	1951	1952
..... <i>Million metric tons</i>						
Canada	7.17	10.52	10.11	12.57	15.04	18.72
United States	19.48	35.75	31.06	27.74	26.88	35.16
Argentina	6.63	5.20	5.14	5.80	2.10	7.80
Australia.	4.20	5.19	5.94	5.01	4.34	5.25
Total 4 countries	37.48	56.66	52.25	51.12	48.36	66.93
Total 17 European countries . . .	30.63	27.05	30.07	30.56	30.01	32.41
WORLD TOTAL (excl. U.S.S.R.)	128.80	145.40	140.70	142.70	142.20	164.30

¹ The average production in the years 1934-38 for the United States and Canada and, consequently, for the world, was abnormally low owing to the effects of extreme droughts in 1934 and 1936. Average production in the years 1937-41, when weather conditions were more normal, was as follows: Canada 10.43 million tons, United States 23.36 million tons.

TABLE 34. WHEAT AND WHEAT FLOUR EXPORTS

EXPORTING COUNTRIES	1934/35- 1938/39	July/June				
		1948/49	1949/50	1950/51	1951/52 ¹	1952/53 ¹
		<i>Million metric tons</i>				
Argentina	3.30	1.66	2.42	2.82	0.82	0.80
Australia.	2.84	3.30	3.07	3.51	2.73	2.80
Canada	4.70	5.97	6.39	5.96	9.40	10.40
United States	1.52	13.79	8.59	10.22	13.00	8.70
Total 4 countries	12.36	24.72	20.47	22.51	25.95	22.70
Others.	5.04	2.28	2.13	2.69	2.95	...
TOTAL	17.40	27.00	22.60	25.20	28.90	...

¹ Preliminary. Not available.

TABLE 35. WHEAT AND WHEAT FLOUR IMPORTS, BY CONTINENTS

CONTINENTS	1934/35- 1938/39	July/June				
		1948/49	1949/50	1950/51	1951/52 ¹	
		<i>Million metric tons</i>				
Europe	11.95	17.10	12.90	13.10	14.40	
Asia	1.90	5.30	5.60	5.20	7.40	
Other continents	3.05	3.90	4.20	5.80	7.10	
TOTAL	16.90	26.30	22.70	24.10	28.90	

¹ Preliminary.

million tons. Very ample stocks of about 5 million tons remained in Argentina owing to its recent good harvest and the very slow movement of wheat in the first six months of 1953. Some increase also occurred in Australia. The total carryover for the four countries amounted to about 34 million tons, nearly twice as much as the stocks held a year earlier and the highest level ever reached in peacetime.

While this result is to be attributed in large measure to the coincidence of good harvests, which cannot be expected to recur regularly, the year under review marks a new phase in the postwar world wheat situation. While year-to-year fluctuations in production will be inevitable, the effects of the large stock position in all probability will maintain easy supply conditions for some time. Moreover, in the importing countries some of the increase in production is a permanent gain deriving from the recovery and expansion efforts of the postwar years. Some gains in production and exportable supplies are still to be obtained among the miscellaneous exporters. While the

postwar exports of this group have made very slow progress on the whole, rising from less than 5 percent in 1947/48 to 10 percent in 1951/52, the generally high level of prices and the preference of importers to purchase from non-dollar sources may be expected to provide a continuing stimulus for greater production and exports. On the importing side, on the other hand, the immediate outlook suggests some further contraction, more particularly in the Asian import requirement, which in the postwar years generally has been abnormally high, owing to some poor crop years in India and to the shortage of rice.

Outlook

Production prospects in 1953/54 point to some decline in United States production from last year's level to a level about the average of 1948-1952. The resulting supplies would still suffice for domestic requirements and exports at the 1952/53 level with no withdrawal from stocks. Very ample supplies should be maintained also in

TABLE 36. ESTIMATED WHEAT STOCKS ON 1 JULY IN MAJOR EXPORTING COUNTRIES¹

YEAR	United States	Canada	Argentina	Australia	Total
..... Million metric tons					
1934-38	4.34	3.85	2.65	1.83	12.67
1948	5.33	2.86	3.54	2.86	14.59
1949	8.36	3.68	3.40	2.59	18.93
1950	11.57	3.81	2.72	3.27	21.37
1951	10.78	6.40	2.31	2.72	22.21
1952	6.91	7.35	0.95	2.18	17.39
1953 ²	15.21	10.90	5.10	2.50	33.71

¹ Based on estimates of United States Department of Agriculture and FAO. For Argentina and Australia, stocks are mid-season supplies and include grain for domestic consumption and exports up to the beginning of their new crop season.

² Preliminary.

Canada. Sowing conditions were favorable in Argentina and Australia and there is an expectation of increased acreages. Both these countries can supply larger exports than in 1952/53, particularly Argentina, where, in addition to the supplies that will accrue from the next crop, an unusually large quantity has been carried over. Larger participation in wheat trade by the U.S.S.R. and Eastern Europe may occur. Pakistan requires large imports, but Turkey expects another good crop. In Europe, the outlook for production is not as favorable as a year ago, but the decline may only be moderate. In India, a good supply outlook and an improvement in the rice situation should reduce the need for imported wheat.

Wheat prices during most of 1952/53 showed only a moderate response to the greatly increased supplies owing to the strength of the United States support program, but a marked fall occurred in the early summer, the lack of storage space limiting the use of loan facilities by farmers. For some two-thirds of world trade, however, prices were determined by the International Wheat Agreement and were generally equivalent to the maximum of the price range. Prices of non-Agreement wheat generally moved with changes in the United States commercial market.

New factors in the price outlook for 1953/1954 are the amended IWA price range involving a rise in the maximum from \$1.80 to \$2.05 per bushel, the abstention of the United Kingdom from the renewed Agreement, and the re-establishment of private trade in wheat in the United Kingdom and some other importing countries. But policy decisions in the United States, together with the outcome of the 1953 crops, will be the main price determining influence. For 1953/54 the support level is again 90 percent of parity for all eligible wheat offered by farmers, but in

TABLE 37. WHEAT PRICES 1951/52 AND 1952/53

Period	United States No. 2 Red Winter cash price Chicago		Canada No. 1 Northern Manitoba ¹		No. 2 Red Winter c.i.f. North Sea Ports ²	
	U.S. \$/bushel		Can \$/bushel		U.S. \$/ton	
	1951	1952	1951	1952	1951	1952
July . . .	2.27	2.21	2.35	2.11	—	91.6
October . .	2.40	2.30	2.40	2.22	111.6	96.4
	1952	1953	1952	1953	1952	1953
February . .	2.51	2.28	2.40	2.18	115.3	—
June . . .	2.19	1.98	2.17	2.06	95.2	73.7

¹Class II in store Fort William/Port Arthur for sales outside I.W.A.

²Source: Die Weltmärkte wichtiger Nahrungsmittel, Bonn.

line with new legislation, a minimum wheat acreage allotment for 1954 of 62 million acres (25 million hectares), 20 percent less than the planted area for 1953, has been fixed. Price supports will be maintained at 90 percent of parity but marketing quotas will be in effect restricting farm wheat marketings in 1954/55 to the output of the allotted acreage. Future United States policy with regard to the wheat stocks of the Commodity Credit Corporation, which held the bulk of the carryover on 30 June, will also have an influence on prices.

COARSE GRAINS

Supplies and Trade in 1952/53

In general, 1952/53 was a good year for coarse grain production with increases in output over the previous year in all continents, except Europe.

TABLE 38. COARSE GRAIN PRODUCTION¹

REGION	1934-38	1948	1949	1950	1951	1952 ²
<i>Million metric tons</i>						
North America ³	79.7	132.6	118.9	116.2	113.6	121.8
South America	17.3	13.3	10.9	13.7	12.0	16.4
(Argentina)	(9.4)	(5.1)	(2.1)	(4.8)	(3.9)	(7.3)
Western Europe ⁴	42.5	37.4	39.4	37.2	42.4	40.1
Others.	77.4	78.6	79.8	76.6	82.2	83.2
WORLD TOTAL (excl. U.S.S.R.)	216.9	261.9	249.0	243.7	250.2	261.5

¹ Including rye, barley, oats, maize.² Estimates.³ The average production in the years 1934-38 for North America and, consequently, for the world, was abnormally low owing to the effects of extreme droughts in 1934 and 1936. Average production for United States and Canada in the years 1937-1941, when weather conditions were more normal, was 17.51 million tons larger than in 1934-38.⁴ Including Yugoslavia.

In the United States, owing to a marked increase in maize production, total feed grain output rose by 7 percent. Total supplies of feed have exceeded the requirements resulting in some addition to year-end stocks, in contrast to the two previous years when stocks were drawn on. Production in Canada, for the third year in succession, was very large; barley and oats production in 1952 was more than twice the prewar average. Though exports increased, end-of-season stocks in Canada were also greater. The production increase in Argentina is relatively much greater. Its maize crop, though still very modest compared with prewar, is expected to be about double the previous harvest and to be supplemented by good crops of barley, oats and rye. Average or better than average barley crops were harvested in other surplus areas includ-

ing Australia, French North Africa, Turkey and the Near East. Some reduction in output, however, was experienced in the Danube countries, particularly in Yugoslavia, where the deficit made heavy imports necessary, in contrast to the preceding year when substantial exports were made.

European coarse grain crops in 1952 were somewhat less satisfactory compared with the year earlier, but better than in most postwar years. Barley crops were generally good and in some cases excellent, but oats production was smaller and maize crops were appreciably smaller.

World exports of coarse grains (barley, oats, maize and sorghums) increased in 1951/52 to their best postwar level and were within 8 percent of the 1934-38 average. This increase over the previous year was provided mainly by Canada, Turkey, Yugoslavia and the U.S.S.R.

TABLE 39. EXPORTS OF COARSE GRAINS¹

COUNTRY	1934/35-1938/39	July/June				
		1948/49	1949/50	1950/51	1951/52	1952/53 ²
<i>Million metric tons</i>						
Argentina	7.34	2.31	1.94	0.67	1.10	1.00
Canada	0.51	1.25	1.09	1.12	2.61	4.00
United States	1.10	4.33	4.42	6.05	4.66	4.00
Others.	6.45	3.26	5.39	4.04	5.81	...
WORLD TOTAL	15.40	11.15	12.84	11.88	14.18	...

¹ Including millet, sorghum and rye.² Preliminary.

... Not available.

Exports in 1952/53 apparently did not mark a further advance. Shipments from the three major exporters were slightly larger than in 1951/52. Argentina's shipments appear to be at the same low level, since little of the increased crops became available for export within 1952/53. Shipments from other sources may show a net decrease mainly because the U.S.S.R. appears to have had smaller quantities for export, and Yugoslavia was unable to make any shipments.

Trade in coarse grains continued to be much of the same general character in 1952/53 as in the preceding four years. For most of the postwar period, about half or more of the total exports have been supplied by the United States and Canada, their shares being markedly greater both relatively and absolutely than prewar. Argentina exported much smaller quantities than prewar. Exports from sources other than these three countries have shown some gain in recent years, though the importance of individual exporters within this "other" group has shown wide variations from year to year; its composition differs quite markedly from prewar when the Eastern European countries and some Far Eastern suppliers were much more prominent.

Prices

In North America, prices of barley and oats showed a slightly rising tendency in the first months of the 1952/53 year, but fell after November or December and by April were back at the levels of the previous June. United States maize, on the other hand, tended to decline after May 1952. Following some recovery in November and December, it declined again and by June was 15 percent lower than a year earlier.

Coarse grains from other sources showed some pronounced falls. Iraq barley, c. & f. London quotations, had declined by March 1953 by about one-third compared with a year earlier.

Outlook

Export capacities and import requirements in 1953/54 will be greatly influenced by two important elements. In the United States, on the evidence of anticipated opening stocks and of farmers' spring planting intentions, the feed supply situation should be better than in 1952/53, assuming no untoward crop results. The second element — and in this respect there is a

TABLE 40. COARSE GRAIN PRICES

DESCRIPTION	Currency and Unit	1951/52			1952/53			
		July	November	March	July	November	March	June
CANADA :								
Barley No. 1 feed, cash price at Winnipeg ¹	Canadian \$/bushel	1.16	1.44	1.28	1.15	1.39	1.22	1.22
Oats Western No. 2, cash price at Winnipeg	Canadian \$/bushel	0.80	1.03	0.91	0.81	0.93	0.78	0.70
U. S. :								
Barley No. 3, cash price at Minneapolis	U.S. \$/bushel	1.19	1.48	1.33	1.43	1.50	1.46	1.26
Oats No. 3, cash price at Chicago	U.S. \$/bushel	0.79	1.07	0.93	0.83	0.90	0.80	0.75
Maize No. 3, yellow, cash price at Chicago	U.S. \$/bushel	1.76	1.83	1.85	1.81	1.58	1.56	1.55
IRAQ :								
Barley c. & f. United Kingdom ports	£.s.d./metric ton	39.15.0	41.10.0	36.0.0	29.15.0	31.6.0	25.0.0	27.17.6

¹ Basis in store Fort William/Port Arthur.

marked difference from 1952/53 — Argentina's export capacity will be significantly greater, owing to the greatly improved carryover of barley, oats and rye from the recent good harvests and the improved, if lower than average, maize crop. On the importers' side, in the absence of significant price declines or a large increase in non-dollar supplies, no substantial change in demand from that of recent postwar years is to be anticipated in Europe. For Asia, an improvement in the supplies of food grains may lead to some decline in the coarse grain import requirement.

RICE

After a period of great scarcity, the rice position has eased, partly as a result of the adjustments foreseen in last year's review, partly owing to favorable weather conditions. International trade is not expanding however, as much of the increase in world production occurred in rice deficit countries. The rise in prices which continued during most of 1952 has halted as far as "free" market transactions are concerned, although there has been a further rise in the price of some government to government contracts. Prices will probably be the factor determining the level of international trade during the coming year.

Current Situation

Most of the Asian rice growing countries reported larger crops in 1952/53 than in preceding years, the main exception being Thailand. The

most notable increase has been achieved in India, which had suffered from two successive poor years. Production continued to expand in the United States and in Southern Europe, recovered somewhat in Brazil, but failed to do so in Egypt. This, however, still left per capita total world (excl. U.S.S.R.) rice production at less than 92 percent of the prewar figure.

Most of the better crops did not, however, become available before the beginning of 1953. Thus, throughout 1952 the demand for rice remained very strong and all quantities offered by exporters were readily absorbed. Not all the surplus available was, however, so offered, some exporting countries retaining stocks possibly with the hope of obtaining still higher prices for them. These expectations have so far been disappointed, while some of this rice is believed to have suffered from prolonged storage. International trade in 1952 was thus limited, and appears to have failed to reach the level of 1951, which was very low compared to prewar, though substantially better than in immediately previous years.

The three leading exporters were still Thailand, Burma and the United States. Italy and China (mainland) now occupy the fourth and fifth places. Indochina, which was the third exporter in prewar days and which was expected to expand its shipments in 1952, has unfortunately been forced to reduce them. Brazil's exports were barely maintained and those from Egypt practically ceased. Little change is expected in 1953. Burma may replace Thailand as the largest ex-

TABLE 41. WORLD PRODUCTION OF RICE (PADDY)

AREA	1934-38 average	1946/47	1949/50	1950/51 (revised)	1951/52 (revised)	1952/53 (provi- sional)
<i>Million metric tons, paddy</i>						
China ¹	50.5	246.3	244.9	246.7	248.3	...
India	34.2	30.3	35.3	30.9	31.6	235.0
Pakistan	11.2	12.8	12.4	12.5	11.8	12.5
Japan	11.5	11.5	11.9	12.1	11.3	12.4
Thailand	4.4	4.6	6.7	6.8	7.2	26.5
Burma	7.0	3.8	25.2	25.2	5.5	5.8
Other Asia	26.0	21.6	25.3	25.1	25.5	26.8
Total, Asia	144.8	130.9	141.7	139.3	141.2	148.0
Other continents	6.4	9.4	11.3	11.6	11.6	12.0
WORLD TOTAL (excl. U.S.S.R.)	151.2	140.3	153.0	150.9	152.8	160.0

¹ 22 provinces and Manchuria.

² Unofficial estimate.

... Not available.

TABLE 42. INTERNATIONAL TRADE IN MILLED RICE¹

AREAS	1934-38 average		1950		1951 (revised)		1952 (provisional)		1953 (forecast)	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
..... Million metric tons, milled										
Thailand	1.4		1.5		1.6		1.4		1.2	
Burma	3.1		1.2		1.3		1.3		1.4	
United States	0.1		0.5		0.5		0.8		0.8	
Indochina	1.3		0.1		0.3		0.2		0.3	
Italy	0.1		0.2		0.2		0.3		0.3	
China ²		0.7		0.1	0.1		0.2		0.3	
Japan		1.7		0.6		0.8		0.9		1.0
India		1.8		0.4		0.8		0.7		0.6
Malaya		0.5		0.5		0.5		0.5		0.5
Indonesia		0.3		0.3		0.5		0.6		0.5
Other Asia	1.7	0.9	0.1	0.9	0.2	1.1	0.1	0.9	0.2	1.2
Other Areas.	0.2	2.0	0.4	1.2	0.7	1.2	0.2	0.9	0.2	0.9
WORLD TOTAL.	7.9	7.9	4.0	4.0	4.9	4.9	4.5	4.5	4.7	4.7

¹ Postwar figures represent 92 percent of the total trade in rice; prewar averages relate to net trade.

² Mainland.

porter, while China may move up to fourth place, having been a net importer up to 1951.

Among importers, Japan took the largest share in 1952, with India second and Indonesia third. Europe continued to reduce its gross imports.

In 1953, Japan is expected to maintain her rate of imports and Korea, a large exporter up to 1943, to expand hers considerably. On the other hand, the previous import estimates for India and Indonesia have been sharply reduced and total import plans, unless revised, may for the first time in years fall below export availabilities. These import plans have no doubt been influenced by price considerations.

During 1952, the price of rice in international trade rose almost continuously, while that of alternative foodstuffs fell. Burma Small Mill specials 42 percent Brokens which had been dealt with early in 1952 on a government to government basis at £50 (\$140) per ton f.o.b. Rangoon, were sold on the same basis at £60 (\$168) in 1953, while at the new open tenders instituted during 1952 up to about £80 (\$224) was paid for the same quality. United States rice for export is 20 to 25 percent more expensive than a year ago with No. 1 Pearl at \$265 f.o.b. San Francisco and No. 2 Rexoro at \$310 f.o.b. Houston.

A feature of the year has been the effort in South East Asia to pay more attention to quality and to revive the export of finer grades. Thus Thailand has offered white rice with only 5 percent Brokens at \$235, or at £92 (\$257) if payable in sterling. This has in turn led to an increase,

at the other end of the scale, of the trade in Broken rice for industry and animal feeding, at about \$110 for lower grades, f.o.b. Kohsichang.

Outlook

The favorable factors responsible for the larger crops continue to operate. Costs have generally ceased to rise, capital goods and agricultural requisites are more readily available, while the returns on alternative uses for land and labor still favor rice growing. This tendency continues, however, to be counterbalanced by the fact that in many countries — with the notable exception of the United States — farmers are still not allowed to reap directly the benefit of world rice prices. These internal price policies formed a main subject at the FAO Special Rice Meeting held in Bangkok, January 1953, which recommended governments to review the policies so as to ensure that those adopted were definitely encouraging production. Burmese production has benefited by more peaceful conditions, but that of Indochina is suffering from the extension of warfare, the future of which will be a foremost factor in rice supplies from South East Asia.

As regards demand, the government delegates at the Bangkok meeting considered it probable that the replacement of considerable quantities of rice by other grains in many countries in Asia will prove to be a permanent feature. The following table shows the striking changes which, owing to the rice shortage, have occurred during

TABLE 43. IMPORTS OF RICE, WHEAT AND WHEAT FLOUR AND OTHER GRAINS OF 6 ASIAN RICE-IMPORTING COUNTRIES¹, PREWAR AVERAGE, 1949-52 ANNUAL

GRAIN IMPORTS	1934-38	1949	1950	1951	1952 (provisional)
. Thousand metric tons					
Rice (milled)	4,982	2,230	2,276	3,146	3,401
Other grains.	589	6,538	4,414	7,591	6,833
Wheat and flour.	(314)	(4,976)	(3,714)	(5,634)	(5,194)
Others ²	(275)	(1,562)	(700)	(1,957)	(1,639)
. Percent					
Percentage of total grains :					
Rice	89	25	34	29	33
Other grains.	11	75	66	71	67

¹ Ceylon, India, Indonesia, Japan, Malaya and the Philippines.

² Includes barley, maize, rye, sorghums and millets, and oats.

the postwar period in the import of other grains into six main rice importing countries of Asia.

Some shifts in demand between rice and other foodstuffs are, however, bound to occur. The policy of governments as regards food subsidies is important here. In recent years subsidies on the one hand have tended to increase consumers' demand for rice, but on the other, to reduce the willingness of governments to import rice, owing to the internal financial burden. During the past year, such subsidies have been lowered, and in some important areas, e.g., in India, even abolished. Wheat imports under the new International Agreement, however, may be more costly, although the effect may be mitigated in some important rice countries, e.g., Japan, by the increase in quotas.

This year's larger rice crop and the apparent excess of export availabilities over import plans do not mean that the world is assured of ample rice supplies. Scarcely 6 percent more has been harvested than in prewar days as compared with

an increase of 11 percent in population in rice-eating countries where, furthermore, there is need for an increase in per caput consumption of rice. The human need for more rice exists; but rice exporters may, in the near future, have to pay more attention to prices and their relations to other grains, than has been necessary in the last few years.

SUGAR

Due to Cuba's curtailment of the 1953 crop to 5.1 million tons and to unfavorable weather conditions in Europe, world centrifugal sugar production (exclusive of the U.S.S.R.) declined in 1952/53 by two million tons from the previous year's record of 32.3 million tons. Yields were appreciably lower in practically all Northern and Central European countries.

The year 1952/53 marked in some respects a step towards stabilization of the world sugar economy and the weakening of war-engendered

TABLE 44. SUGAR: WORLD CENTRIFUGAL PRODUCTION, 1934-38 AVERAGE AND ANNUAL 1950/51-1952/53

REGION	1934-38	1950/51	1951/52	1952/53
. Thousand metric tons				
Europe	6,500	8,900	8,700	8,000
North and Central America	6,900	11,600	12,700	10,700
South America	1,800	3,100	3,300	3,500
Asia	4,400	3,300	4,200	4,300
Africa	1,100	1,600	1,600	1,700
Oceania.	1,800	1,900	1,800	2,000
WORLD (excl. U.S.S.R.)	22,500	30,400	32,300	30,200
U.S.S.R.	2,300	2,400	2,600	2,500

forces. Production in non-dollar exporting countries made significant gains for the first time since the end of the war, with the result that more sugar will be available for export in 1953 from non-dollar sources. Asia's production approached the prewar level, although its distribution within the continent was fundamentally different. Finally, production increased in most self-sufficient or deficit countries, except those in Europe. Highly significant are the steady increases in South America and Africa. In general, these increases were due more to extension of production resources than to favorable weather conditions.

Consumption, Trade and Prices

Although 1952 was a very good year from the standpoint of consumption, trade and prices, it also witnessed some problems. Some of these were due to general balance of payment difficulties, others to the transition from the special conditions caused by the war. The postwar tendency to higher per caput consumption continued, especially in the countries of low consumption in Africa and Latin America, but at a diminished rate. Exports probably declined by 1 to 2 percent from the record high level of 11.7 million tons in the previous year, but were still about 18 percent higher than the prewar average. The most important development was the increase in production by 2 million tons during 1951/52, which raised world output to about 45 percent above prewar and led to the emergence of a surplus for the first time since the end of the war. Around 90 percent of the increase in carryover stocks was concentrated in Cuba, but slight increases took place also in other dollar exporting countries.

The rise of about 1.9 million tons in carryover stocks adversely affected prices and recalled memo-

ries of sugar surpluses, but the measures taken by Cuba were effective in preventing a collapse. About 1.8 million tons were removed from supplies available for marketing and placed in a special reserve and it was announced that the 1952/53 crop would be limited by decree. World prices, instead of falling precipitously, declined gradually. The average price in 1952 of 4.2 U.S. cents per pound was about the same as the price in 1948/49 and 330 percent higher than in 1934-38. Even the "real" price (deflated by U.S. index of wholesale prices and, to some extent, applicable to Cuba) was almost double the prewar average.

The decline in prices, which continued in the first three months of 1953, made possible the termination of practically all consumption controls. Rationing was finally removed in all but two countries: Japan, which had reduced per caput consumption to about one-third of prewar, made significant import relaxations; and the United Kingdom announced early in 1953 that rationing would shortly be terminated. A contract for a million tons was negotiated with Cuba at a special price for the specific purpose of ending consumer rationing.

International Sugar Agreement

Although a real collapse of the world sugar market, which had been forecast in some quarters since 1948, did not occur, deep concern is now felt about the future of the world sugar economy, especially of the free market sector. The chief problem is undoubtedly the intensification of efforts to raise production in protected areas. Discussions about a new international sugar agreement assumed greater urgency and at the end of 1952 it was decided to call an international conference to negotiate a new agreement. Early

TABLE 45. SUGAR: WORLD AND U. S. PRICES, 1934-38 AND ANNUAL 1950-53

PERIOD	World (f.o.b. Cuba)	New York ex-duty	Deflated by the U.S.A. wholesale index 1934-38 = 100	
			World	New York
<i>U. S. cents per lb.</i>				
1934-38 (Average)	0.96	2.22	0.96	2.22
1950	4.98	5.43	2.47	2.69
1951	5.67	5.56	2.52	2.47
1952	4.17	5.77	11.91	12.64
November 1952	4.00	5.94	1.82	2.72
March 1953	3.27	5.83	1.47	2.66
May 1953	3.64	5.85	1.65	2.66

¹ Preliminary.

in 1953, the Secretary-General of the United Nations, acting under the terms of the Havana Charter, invited 78 governments to meet in London in July.

Outlook

While it is clear that 1952/53 marks an important stage of transition for sugar, the new pattern is not yet well defined and not all the forces coming into play can yet be assessed. The main question is the future position of Asia. Africa is launched on a trend to higher consumption and the most spectacular increases in per caput consumption during the last five years occurred in that continent. In Asia, on average, per caput consumption is still only around 2.5 kilograms a year and future development will depend on many complex socio-economic factors. Technologically, resources for increasing production are available; whether economic forces will favor expansion remains to be seen. To achieve that end considerable financial resources would be necessary as well as increases in acreage and emphasis on industrial development.

In other continents, the postwar consumption gains are likely to be permanent and, given high levels of income and employment, the present trend will continue, although probably at a reduced rate.

Production will continue to expand in self-sufficient and deficit countries, as well as in non-dollar exporting countries, particularly in the British Commonwealth and in the French Union. No dramatic developments comparable to the growth of the sugar industry of Java and Cuba after World War I are in prospect, but current forces will bring about a steady growth in many countries. Production resources and potentialities are perhaps not so favorable in other regions as in the Caribbean, but expansion programs are assisted by special price arrangements, tariff preference, long-term contracts and other devices. In 1953, the United Kingdom paid the Dominion and Co-

lonial sugar producers about 50 percent more than the world price and 70 percent more than the special Cuban contract price. In the long run, world production is likely to increase by 1 to 2 percent a year. International trade will reach a new record in 1953, and may exceed the previous 1951 record by almost a million tons. While a decline can be anticipated by 1954, world exports are likely to remain high over the next few years and substantially higher than in prewar years.

LIVESTOCK PRODUCTS

Meat

Meat production in most regions was substantially larger in 1952 than in the preceding year and the increase continued into the first half of 1953. In North America, production in 1952 was 43 percent larger than prewar. Western Europe reached the prewar level in 1951 and production increased further by 6 percent in 1952. Production in Oceania in 1952 exceeded the figure of the previous year by 8 percent, due to heavily increased sheep slaughterings. In Argentina, the effects of three consecutive drought years were still apparent.

Owing to strong domestic demand and high consumption in primary producing countries, coupled with scarce foreign exchange in some importing countries, world trade in meat (including canned meat on carcass-weight basis) in 1952 showed only a small gain over the previous year. New Zealand strengthened its position as the largest exporter followed by Denmark. Shipments from Argentina were only about two-fifths of the prewar volume.

Trade in live animals in 1952 was smaller than in the previous year. Cattle exports from Denmark decreased by 40 percent. Exports of fat stock from Ireland were reduced by one-third due to the expansion of the domestic slaughtering in-

TABLE 46. INDEX NUMBERS OF MEAT PRODUCTION¹ BY REGIONS

REGION	1949	1950	1951	1952
..... 1934-38 = 100				
Western Europe.	83	96	100	106
North America	134	136	135	143
South America	116	115	112	112
Oceania.	114	112	108	116

¹ Beef, veal, pigmeat, mutton and lamb.

TABLE 47. MEAT EXPORTS: SELECTED COUNTRIES, PREWAR, 1951 AND 1952

COUNTRY	All types, except canned (crude weight)			Canned		
	1934-38	1951	1952	1934-38	1951	1952
. Thousand metric tons						
Argentina	511	183	176	70	102	56
Uruguay	71	75	157	33	14	11
Australia	237	147	123	4	51	98
New Zealand	273	280	393	3	8	16
Canada	90	64	40	5	4	7
United States	52	59	62	5	7	6
Denmark	209	241	249	4	47	34
France	2	19	10	2	38	17
Ireland	41	39	59	1	11	19
Netherlands	35	62	68	10	50	56
TOTAL	1,521	1,169	1,237	137	332	320

¹ Preliminary.

dustry, but this decrease was offset partly by larger exports of store cattle, sheep and lambs. The United States ban on livestock imports from Canada reduced Canadian exports to practically nil.

While Western Germany, France, Belgium and the United States in 1952 imported less meat than during the preceding year, United Kingdom imports increased slightly. As larger imports coincided with a further increase in domestic production, the meat situation in the United Kingdom improved, but total supplies were still considerably less than before the war; per caput consumption of all types of meat was only about two-thirds of the corresponding prewar figure.

In recent years prices have been generally very favorable for meat production, but in 1952 they fell substantially in many countries in the Northern Hemisphere. This shift appears to reflect increasing supplies rather than a weakening of demand. In the Southern Hemisphere, on the other hand, prices continued to rise and United

Kingdom contract prices for meat from Argentina, Australia and New Zealand for 1952/53 were considerably above those for the previous season.

In Western Europe, livestock prices in the first months of 1953 were nearly everywhere below the corresponding prices in 1952, the only major exception being the United Kingdom. In the United States prices of beef steers in January 1953 were 24 percent less than a year before and the decline continued during the first half of 1953, whereas pig prices, following a considerable decline in production, were substantially higher than a year earlier. Movements of livestock prices in Canada were similar to those in the United States.

The prospects for meat production in 1953/54 are on the whole favorable. Summer pastures in the Northern Hemisphere seem to be in good condition and the outlook for good crops of feedstuffs in 1953 is encouraging. Cattle numbers in the United States and Canada are at record levels and higher production of beef and veal is expected

TABLE 48. MEAT: UNITED KINGDOM IMPORTS

COMMODITY	1934-38	1950	1951	1952
. Thousand metric tons				
Beef and veal	572	340	159	136
Mutton and lamb	338	400	252	358
Pork	59	31	16	15
Poultry, offals and other meat	106	96	120	96
Bacon, hams and salted pork	385	248	225	256
Prepared meats, other	1	6	19	17
TOTAL	1,461	1,121	791	878
Canned meat	71	153	233	195

not only to offset reduced pigmeat production, but to bring about a further, although small, increase in total meat production. In Oceania the high production level of the 1952/53 season is expected to be maintained. In Western Europe production will continue to increase, but at a slower rate than in the preceding years. Whereas in a number of countries, such as the United Kingdom, Denmark, the Netherlands and Sweden, greater pig numbers point to increases in pigmeat production, in Western Germany and Belgium the upward movement has come to a stop and 1953/54 pigmeat production in these countries will be smaller.

World meat trade is expected to continue its expansion, as the outlook for satisfactory deliveries from Oceania as well as from Denmark and the Netherlands is favorable. The total volume, however, will to a large extent depend on the supply position in Argentina.

Dairy Produce

Conditions for dairying were generally advantageous during the first months of 1953 and milk production in most countries was substantially higher than a year earlier. In the United States, where milk production has been relatively stable since 1947, output during the first half of 1953 was 6 percent above the level of the previous year. Favorable pasturage conditions during the past winter combined with ample supplemental feeding had a major part in this increase. A further factor supporting this development appears to have been the change in price relationships

which in previous years had favored the production of meat at the expense of milk. Canada, which for several years had recorded declining production, showed a considerable increase in 1952, continuing through the spring months of 1953.

In Western Europe, production in 1952 remained at the level of the previous year largely because of dry weather during the summer and of foot and mouth disease, but most countries reported good increases during the first half of 1953. The steady growth of production in New Zealand continued and Australia made excellent recovery from the drought in 1951/1952. Available information from many Latin American, Asian and African countries indicates that energetic efforts of governments, in connection with technical assistance work and general agricultural development, have resulted in good progress of their dairying industries.

Rising milk supplies and firm prices of butter caused an increase in butter production in many countries during the early part of 1953. During 1952 the output in Western Europe was 4 percent below the level of the previous year, while in the United States the downward trend was reversed in the autumn of 1952 preventing a decline from the 1951 level. Canada recorded an increase of 9 percent against 1951, and production in Oceania during the season 1952/53 recovered strongly. The position of cheese continued to be firm. European production increased to 20 percent above prewar and also the United States and Oceania produced more. Output of preserved milk expanded in all major producing countries. Es-

TABLE 49. EXPORTS OF DAIRY PRODUCTS FROM MAJOR EXPORTING COUNTRIES, PREWAR, 1951 AND 1952

COUNTRY	Butter			Cheese			Condensed and evaporated milk			Milk powder		
	1934-38	1951	1952	1934-38	1951	1952	1934-38	1951	1952	1934-38	1951	1952
..... Thousand metric tons												
Denmark	149	139	117	8	46	54	18	45	46	—	9	12
France	4	2	1	11	18	18	15	18	18	—	—	—
Italy.	1	—	—	24	15	19	12	—	13	—	—	—
Netherlands	50	54	50	60	73	78	162	175	199	17	22	38
Sweden	23	26	13	—	2	2	—	—	—	—	4	7
Switzerland.	—	—	—	19	19	20	6	3	4	—	—	—
Canada.	2	—	—	33	14	1	9	14	12	2	5	19
United States.	1	3	—	1	36	2	15	105	57	2	76	46
Australia	100	34	34	9	20	26	7	42	35	2	17	25
New Zealand	140	149	186	87	108	93	3	11	12	7	37	52
TOTAL	470	407	401	252	351	313	227	413	396	30	170	199

¹ Includes milk powder.

pecially strong were increases in dried skim milk, particularly in Canada, the Netherlands, New Zealand and the United States.

World trade in butter in 1952 declined further because of reduced production and exports from Denmark, the Netherlands and Sweden. As part of the shrinkage in world exports, the United Kingdom imported 16 percent less butter than in the previous year, and imports into Western Germany were down by two-thirds. Cheese trade was smaller too. Whereas in 1951 exports from Canada and the United States had amounted to 50,000 tons, they were in the past year less than 3,000 tons. On the other hand, Australia and all major European producers, with the exception of Sweden, exported more.

In contrast to meat, prices for milk and its products were generally higher in 1952/53 than in the previous season. The only major exceptions were Canada and the United States. In Canada, butter prices since May 1952 have been lower than a year before. In the United States, the decline started in the last months of 1952 and in January 1953 the butter price was 16 percent lower than a year before. As prices fell to support levels, the United States government purchased large quantities of dairy products. Following larger output of dairy produce in the first half of 1953, prices of cheese and preserved milk particularly started to decline in other parts also.

World egg production in 1952/53 remained at the level of the preceding year. The 1952 world trade in shell eggs was larger than in the previous year, but there was a severe decline in dried eggs and the quantity of liquid eggs entering trade was reduced also. In Western Europe, egg prices in 1952 had been generally above the 1951 level, while in Canada and the United States they were considerably lower.

All indications seem to promise a good season for the dairy industries in 1953/54. Grazings in the Northern Hemisphere got a good start which also improves the prospects for a good hay harvest. The outlook by mid-year 1953 for good supplies of coarse grains, tubers and other feeding crops is encouraging, and no serious droughts have been reported from the Southern Hemisphere. The continued reduction of the number of horses in many countries may also stimulate livestock production by making more feed available.

Lower meat prices in the United States and Western Europe may also encourage milk production. The United States government will con-

tinue to support milk and butterfat prices at 90 percent of parity until April 1954, which under the prevailing low meat prices should stimulate dairying. Consumption of margarine continued to grow in comparison with butter and reached record levels in many countries, with United States margarine consumption approaching that of butter. There are no signs that the rise in production and consumption of margarine is levelling off, and the competition from this cheaper substitute for butterfat will also in 1953/54 adversely affect the profitability of butter production in practically all countries and encourage the diversion to cheese and other products.

Larger exportable supplies of dairy products in 1953/54 should enable world trade to expand compared with the previous season. Such expansion, however, depends greatly on the easing of protectionist measures and balance of payment difficulties.

FISHERIES PRODUCTS

The world catch of fish crustaceans and mollusks in 1952 has been estimated at 26,000,000 metric tons. An especially large increase in Japan has to a certain extent counter-balanced a slight drop in output in most of the other major producing countries. During 1952 in general, fishermen had to face a rising trend in the costs of craft, fuel and fishing gear, while their products were marketed at prices that had increased only slightly or even declined as compared with 1951.

Catches and Landings

Major Producing Countries. Canada (including Newfoundland), the United States, China, Japan, Norway, the United Kingdom and the U.S.S.R. are the largest fish producing countries in the world. Accurate data are not available on the recent output of China and the U.S.S.R. but some evidence seems to indicate that it is increasing. Japan increased its production from 3,800,000 tons in 1951 to 4,700,000 tons in 1952 (23 percent increase). In Canada, the United States, the United Kingdom and Norway the 1952 production was between 1 and 5 percent less than in 1951 (Table 50).

Medium Producing Countries. This group includes the Union of South Africa (including South West Africa), India, Korea, the Philippines, Den-

TABLE 50. TOTAL ANNUAL CATCH OF FISH, CRUSTACEANS AND MOLLUSKS,
BY SELECTED COUNTRIES, PREWAR AND 1947-52

COUNTRY	1938	1947	1948	1949	1950	1951	1952
<i>Thousand metric tons</i>							
GRAND TOTAL.	12,441.8	12,328.3	12,578.9	13,168.5	14,346.2	15,109.2	16,391.8
MAJOR PRODUCERS	8,994.5	8,572.1	8,573.6	8,898.1	9,895.4	10,013.9	10,856.9
Canada	778.9	914.2	977.1	915.2	993.5	948.0	1,940.0
Japan	3,521.1	2,967.1	2,453.8	2,980.4	3,793.6	3,796.7	4,674.2
Norway	1,152.6	1,196.1	1,504.0	1,297.3	1,467.7	1,838.5	1,798.8
United Kingdom.	1,197.1	1,149.6	1,205.7	1,158.7	988.5	1,085.8	1,100.0
United States	2,344.8	2,345.1	2,433.0	2,546.5	2,652.1	2,344.9	2,343.9
MEDIUM PRODUCERS	2,716.0	2,800.8	2,921.9	3,042.1	3,179.3	3,819.1	4,124.6
Denmark	96.1	205.4	225.8	255.0	251.2	292.4	323.9
France	479.4	352.2	434.6	435.1	432.0	463.6	1,500.0
Germany, Western	779.0	302.0	413.3	513.2	555.3	680.0	663.2
Iceland	274.3	477.2	464.7	394.2	367.8	417.8	1,400.0
Netherlands	228.8	278.7	281.0	249.4	244.0	280.0	298.3
Philippines	270.0	251.4	195.1	238.0	220.2	295.6	323.6
Portugal	239.3	281.5	273.2	281.2	307.3	307.5	333.2
Spain	299.1	572.4	534.2	551.0	576.5	592.2	632.4
Union of South Africa ²	150.0	180.0	100.0	125.0	225.0	490.0	1,650.0
SELECTED SMALLER PRODUCERS	731.3	955.4	1,083.4	1,228.3	1,271.5	1,276.2	1,410.3
Angola	26.2	52.0	114.8	130.6	135.5	176.5	1,180.0
Argentina.	55.3	65.1	71.2	63.9	55.3	75.7	1,180.0
Belgium.	42.8	81.2	70.9	68.3	60.4	56.6	68.6
Brazil.	103.3	139.7	144.8	152.6	155.0	160.0	1,170.0
Chile	30.6	60.1	64.7	76.2	86.7	93.0	94.4
Faeroes.	30.0	50.0	160.0	110.0	115.0	92.7	195.0
French Morocco	30.3	50.4	55.8	96.3	123.2	90.9	121.8
Finland	22.4	46.0	46.0	65.7	65.8	65.6	57.5
Hong Kong.	29.0	12.0	21.2	27.0	31.0	31.0	135.0
Ireland	12.7	21.5	25.9	18.2	15.1	14.0	18.5
Italy	195.2	182.0	170.3	180.0	190.2	184.6	212.1
Sweden	143.5	178.8	207.8	202.2	203.3	200.0	228.9
Belgian Congo	10.0	16.6	30.0	37.3	35.0	35.6	48.5

NOTE: These countries have a total catch representing 80 percent of the estimated world total of 21,000,000 tons which excludes an estimated 5,000,000 tons from China and the U.S.S.R. Data based on the round (whole) fresh weight basis.

¹ Provisional estimates.

² Including South West Africa.

mark, France, Western Germany, Iceland, the Netherlands, Sweden, Portugal and Spain.

The output of the Union of South Africa (including South West Africa) shows the largest gain in this group and was some 20 percent higher than in 1951. For the others, small decreases in the cases, for instance, of Western Germany and Iceland were offset by slight increases in Denmark and the Netherlands.

Small Producing Countries. This group includes all the other countries which usually produce less than 250,000 tons annually. In some instances these countries have shown fairly large percentage changes for the 1952 output, but as the production in the countries involved is not large, these changes have only a local significance, if any, and no effect on the world trade and consumption.

Fresh, Chilled or Frozen Fishery Products

Although frozen commodities are relatively new, the rapid postwar development of freezing processes has brought them to a level approximating in importance to the output of cured and canned fish.

In Canada, production of frozen fillets steadily increased from 15,900 tons in 1947 to some 30,000 tons in 1952. A similar expansion occurred in Iceland, Norway and Japan and other countries which are important suppliers to the United States. The United States 1952 output of frozen fish amounted to 142,100 tons, slightly less than in 1951, largely as a result of a decline in frozen ocean perch fillets.

The United States is the world's largest market for fresh or frozen fillets of cod, haddock and

similar species, and ocean perch. Total annual consumption increased from 49,400 tons in 1939 to 107,000 tons in 1951-52. Domestic production remained fairly stable during 1948-52; the increase in supplies came entirely from a rapidly developing import trade which doubled from 1948 to 1952.

Fresh, Chilled or Frozen Fish. The postwar trend in the international trade in fresh, chilled or frozen fish, as shown in Table 51 shows a slight increase in 1952 over 1951. Both years were higher than 1950, when a recession occurred. The general food shortages immediately after World War II encouraged a high volume of exports from Iceland and Norway in the years 1947-49 into Western Germany and the United Kingdom. In 1952, direct Icelandic landings in the United Kingdom showed a sharp drop as a result of the dispute with the United Kingdom.

Fresh, Chilled or Frozen Mollusks. Fresh, chilled or frozen mussels and other mollusk exports amount to approximately 60,000 tons (which includes a high inedible percentage) annually, the bulk of which is accounted for by the Netherlands and Denmark. This level remained stable during 1947-52 and approximated the 1938 level. The bulk of the imports are accounted for by Belgium, Luxembourg and France.

Fresh and Frozen Crustaceans. The international trade in fresh and frozen crustaceans (lobsters, spiny lobsters, shrimps and crabs) amounts annually to some 40,000 tons. The United States

import trade in fresh and frozen shrimps has increased rapidly during the postwar years from 6,000 tons in 1947 to 19,000 tons in 1951. This increase in the import supply came mainly from Mexico although 1952 was a poor year. The United States absorbs the bulk of the world's output of fresh and frozen rock lobster tails, exported principally from the Union of South Africa, South West Africa, Cuba and Australia.

Cured Fishery Products

Stockfish. Stockfish (cod and similar species dried only without salting) are produced mostly in Norway and to a lesser extent in Iceland and Japan. The output of Iceland increased during 1951-52 while that of Japan fluctuated during the postwar years at levels much lower than prewar.

The Norwegian production was 25,000 tons in 1938 and between 9,000 to 23,000 tons in 1947-51, with a small decline in 1952 (22,000 tons compared with 23,000 for 1951). The 1953 production is likely to be even smaller, due to the failure of the coastal cod fishing in the spring.

Virtually all the Norwegian output of stockfish is exported to Italy and British territories in West Africa, and the exports vary closely with production. The Italian market, where the consumption is confined mainly to a few regions such as Tuscany and Venetia, after the drop in 1949 was stabilized during the three years 1950-52 at levels of 8,000 to 10,000 tons with steady wholesale and retail prices.

TABLE 51. EXPORT TRADE IN SELECTED FISHERY COMMODITIES, 1938 AND 1947-52

COMMODITY	1938	1947	1948	1949	1950 ¹	1951	1952
<i>..... Thousand metric tons</i>							
Fish, fresh, chilled or frozen ²	359.0	465.1	615.2	612.0	426.7	514.7	516.6
Crustaceans and mollusks, fresh or frozen ³	53.3	62.3	68.7	86.3	76.2	84.0	80.7
Cod and similar species, salted ⁴	195.0	157.0	158.6	112.6	157.2	187.8	193.7
Stockfish ⁴	26.5	13.5	12.0	7.8	16.7	21.8	25.7
Herring and similar species, cured ⁵	298.2	209.5	240.0	238.6	180.4	207.6	207.8
Pacific salmon, canned ⁶	44.1	44.7	13.7	24.6	15.8	15.5	13.9
Herring and similar species, canned ⁷	96.2	152.1	137.2	148.5	173.8	170.0	91.7
Fish meals and similar products ⁸	124.6	34.2	94.6	69.4	147.0	249.8	214.7

¹ External trade in 4 big exporters (Canada, including Newfoundland, Denmark, Iceland and Norway) and in 5 medium-size exporters (Faeroe Islands, Japan, Netherlands, Sweden and United Kingdom).

² Exports from Canada, Denmark, Mexico, Netherlands, Norway.

³ Exports of wet-salted and dried-salted cod and similar species from Canada (including Newfoundland), Denmark (excluding the Faeroes), France, Iceland and Norway.

⁴ Exports from Iceland and Norway.

⁵ Exports of salted, smoked, marinated, etc., herring and similar products from Canada (including Newfoundland), Iceland, Netherlands, Norway and United Kingdom.

⁶ Exports from Canada and United States (including Alaska).

⁷ Exports from Canada, French Morocco (except for 1952), Netherlands, Norway, Portugal, United Kingdom and United States.

⁸ Exports from Angola, Canada, Iceland, Netherlands and Norway.

Salted Cod. The world production of salted cod averaged annually 260,000 tons (dried weight basis) during the interwar period 1920-39. (See Table 52). During the 1930's a strong tendency to turn away from salted cod production to fresh and frozen fillets under the stimulus of the United States' import market became perceptible in Canada and Newfoundland. This tendency was strengthened during the postwar years and became noticeable also in Iceland and to some extent in Norway. A diversion of cod landings to the production of dried-salted products tends to occur whenever the fresh and frozen fish prices for these two commodities are not remunerative enough. During the 1940's salted cod output in the Scandinavian countries was at a low level compared with prewar years because of a sharp increase in demand for fresh fish immediately after the war. In 1950-52 an increasing trend towards the production of salted cod appeared in Iceland which had been slow in reviving her postwar salted cod trade. The Portuguese and Spanish production for domestic consumption continued to increase and in spite of the downward tendency in Canada, world production of salted cod was maintained at a high level in 1952.

In Iceland and the Faeroes the postwar tendency has been to export wet-salted commodities rather than finished dried-salted products.

In 1952 Canada exported 54,700 tons (53,500 tons dried weight) of salted cod products, 12,000 tons less than in 1950 and 1951, and approximately 25,000 tons less than in 1938. As a result of the dispute with the United Kingdom, Icelandic exports of fresh and frozen fish dropped in 1952 and the raw materials were switched to the processing of salted cod with the result that exports from this country of the cured products increased rapidly and amounted to 49,600 tons (35,400 tons dried weight basis). Norwegian exports in 1952 of 58,500 tons of dried-salted fish made it a record year for the last three decades.

There was a slight increase in the total exports from Canada (including Newfoundland), Denmark (excluding the Faeroes), France, Iceland and Norway.

Among importers, Spain and Portugal import appreciable quantities to augment their own domestic supplies, while the other large markets are dependent entirely on outside sources for their total supplies.

The Italian market was reported to be quite weak as a result of the heavy imports in 1952 and a decline in demand during the 1952/53 winter.

Considerable stocks on hand have depressed the prices and the poor quality of some imports has caused a drop in demand. Increased fresh fish production in Italy may also influence the demand for salted cod.

Salted Herring. Salted herring is produced chiefly in Western Germany, the Netherlands, Norway and the United Kingdom. During the interwar period the world demand for salted herring had declined and the export markets were restricted as a result of trade barriers, which became particularly intense after the world depression of the early 1930's. During the immediate postwar years 1947-49, there was a temporary increase in the demand as a result of the general food shortages. However, with the improvement of the food position, the decline in the export outlets discouraged curing from 1950 onwards and the reduction industries in various countries have been taking increasing proportions of the landed quantities for processing to meal and oil.

The production of salted herring was maintained in 1952 at approximately the same level as in 1951 which is, however, only two-thirds of the 1938 volume. An improvement in the export situation has been taking place in 1951-53 and the North Western European producers are active in expanding sales to the traditional markets for these exports in the U.S.S.R. and Eastern Europe.

Canned Fishery Products

Pacific Salmon. The catch of Pacific salmon in 1952 was smaller than in 1951 as a result of the two-year cycle, and even smaller than the 1948-50 catches. In British Columbia it was not only the natural fluctuation in the resource which was responsible for the smallest pack since 1944, but also price disputes, strikes, tie-ups, etc., which prevented the full utilization of the fishing potential. These economic difficulties arose from the marketing difficulties caused by the large carryover from the exceptionally good year of 1951.

Canada has been experiencing grave difficulties in its traditional Commonwealth markets which took very little of the big 1951 pack and virtually nothing in 1952. The North American market has, however, been strengthened by the news of the United Kingdom buying large quantities of Canadian salmon in 1953.

Herring and Similar Species. This group includes a great variety of canned packs that vary according to species, ingredients and packing.

In the United States the total production from shad, Maine sardines and sea herring, California pilchards, alewives and anchovies dropped to 35,700 tons or one-half of the 1951 output, which in turn was only 50 percent of the 1950 output. This decrease was caused by a drastic decline in the California pilchard pack from 103,500 tons in 1950 to 2,200 tons in 1952 due to a complete failure of the fishery. United States canned packs from Maine sardines and sea herring doubled to 31,700 tons in 1952 which was still less than the 35,400 tons in 1950. Norway's production of 22,000 tons in 1952 was the lowest since 1947. In French Morocco, experiencing export difficulties, the 1952 output was slightly less than in 1951. Portugal shows a 20 percent excess in 1952 over 1951 as a result of increased abundance in the

natural resource. Increases also took place in the pack from the Union of South Africa with the continued increases in fishing and canning facilities. In Japan, in spite of a rapid expansion as part of the postwar rehabilitation during 1949-1952, the 1952 output of 21,000 tons was still less than the 1938 production of 28,200 tons.

Exports in 1952 from Portugal, Canada and the Netherlands increased but not enough to offset the drop in exports from the United States, where the failure of the California pilchard fishery reduced exportable surpluses, French Morocco and Norway. Total exports to markets all over the world from seven producing countries which in 1950-51 aggregated annually to approximately 170,000 tons declined in 1952 to some 92,000 tons.

TABLE 52. PRODUCTION OF SELECTED FISHERY COMMODITIES, 1938 AND 1947-52

COMMODITY	1938	1947	1948	1949	1950	1951	1952
<i>..... Thousand metric tons</i>							
<i>Frozen products</i>							
Fish, crustaceans & mollusks	...	288.7	357.9	395.7	352.2	512.7	553.0
<i>Cured products</i>							
Herring, alewives and similar species	450.1	451.0	503.4	428.8	352.4	395.8	396.4
Cod, salted (dried weight basis)	260.0	256.0	233.0	274.0	300.0	287.0	280.0
Stockfish	47.2	17.9	17.0	11.0	21.8	27.4	27.4
<i>Canned products</i>							
Salmon	195.7	155.6	133.5	151.6	125.6	143.8	124.9
Herring, sardines, pilchards and similar species	238.0	267.0	281.0	354.0	426.0	318.0	303.0
Tuna, true mackerel and similar species	86.0	108.0	124.0	117.0	156.0	147.0	164.0
Crustaceans and mollusks	...	39.0	41.0	38.0	38.0	49.0	46.0
<i>Oils and fats</i>							
Whale and other aquatic mammal oils and fats ¹	617.8	371.8	414.5	441.3	434.7	503.4	493.9
Fish body, liver and viscera oils	217.9	133.4	167.6	162.9	220.3	272.9	284.0
<i>Meals and other feeding-stuffs</i>							
Fish meals	919.8	398.1	545.7	600.9	748.5	812.7	850.5
Whale and other aquatic mammal meals	...	19.9	25.2	27.4	26.2	26.5	26.7
Animal food, spp. n.s., canned	...	19.8	28.8	42.1	59.3	51.0	76.2

NOTE: Production on net product weight basis in certain major producing countries with revisions in data already published in FAO's *Yearbook of Fisheries Statistics*.

¹ The whale and sperm oil production in the Antarctic (pelagic and shore based operations) amounted during the 1952/53 season to 359,800 metric tons compared with 421,200 tons in 1951/52.

... Not available.

Tuna. The bulk of the canned tuna is produced in California and other Pacific maritime states of the United States. After World War II the United States production under an expanding domestic demand increased rapidly and the peak was reached in 1950 with 79,100 tons compared with 71,900 tons in 1951, 78,600 tons in 1952 and 22,200 tons only in 1938.

The Japanese postwar production, under the stimulus of increasing exports to the United States market, expanded rapidly in 1950-52 to a total of 22,300 tons in 1951 and 34,400 tons in 1952.

Before 1950 the entire United States' imports of canned tuna were in oil and, with the rehabilitation of the Japanese canning industry, these imports increased from 2,000 tons in 1949 to over 16,500 tons in 1950. However, when the United States imposed duty, imports of tuna canned in oil dropped to 1,600 tons in 1951 and 1,900 tons in 1952. As this duty does not apply to tuna canned in brine, the United States imports of this commodity, negligible before 1950, increased from 200 tons in 1950 to 4,300 tons in 1951 and 8,600 tons in 1952. Japan was the main supplier of all the fresh and canned tuna, while Peru and other South American countries contributed small amounts. Total imports mainly from Japan of fresh and frozen tuna, virtually all for delivery as raw material to canneries in the United States, amounting to 6,200 tons in 1938, 4,200 tons in 1947-48, increased rapidly to 31,300 tons in 1952.

Miscellaneous Products. In addition to small quantities of miscellaneous canned fish, crustaceans and mollusks products for human consumption, the United States produced annually a large size pack of canned fish for animal food and pet food, which in 1952 had a value of nearly \$15,600,000. The production of canned fish for animal food increased rapidly during postwar years, as indicated by the figures in Table 52.

Fish Meals

The 1952 output of fish meals (including aquatic mammal meals, the output of which will not increase substantially above the present annual average of some 26,000 tons) was 870,000 tons, which was 300,000 tons more than in 1948. This rapid postwar increase is mainly accounted for by Norway, the Union of South Africa, Angola and the United States and Canada under the stimulus of an expanding demand for livestock feeding in the advanced agricultural regions.

As a result of the complete failure of California pilchard fishery in 1952, the United States output of pilchard meal dropped to less than 400 tons. The continued expansion of the menhaden production, however, more than balanced the decrease in output of fish meals and the 1952 menhaden meal production amounted to 130,700 tons, which is an increase of 26,000 tons over that of 1951. The United States production of fish solubles shows a rapid postwar increase from 8,900 tons in 1947 to 46,000 tons during 1949-51.

The fish meal industry in the Union of South Africa and South West Africa, based on the rapid expansion of the Atlantic pilchard and maaibankie catches, increased its output from a negligible quantity in 1947 to over 71,100 tons in 1952.

While Norway's output of meals, other than herring meal, remained fairly stable during 1947-1952 at the 14,000 to 19,000 tons level annually compared with 16,000 tons in 1938, its herring meal output in 1951 and 1952 was more than twice the 1938 output of 88,300 tons. In 1952 the Norwegian output amounted to 202,000 tons of fish meal.

In the United Kingdom a steady increase in production took place during the postwar years from 41,000 tons in 1947 to 77,000 tons in 1951. The rehabilitation of the fisheries of Western Germany is reflected also in the output of fish meal, which increased from 16,600 tons in 1948 to 63,300 tons in 1951; this is slightly less than the 73,600 tons of 1938. Japan, the world's largest fish meal and fertilizer producer in prewar years, has not yet resumed its place as a significant producer and its 1952 output of 89,500 tons was virtually all fertilizer.

The rapid increase in the postwar external trade in fish meal is shown in Table 51. Angola, the Union of South Africa, South West Africa, Canada, Iceland and Norway were major exporters. The United States, Belgium, Luxembourg, Denmark, Germany, the Netherlands, the United Kingdom and Austria are among the largest importers. The Netherlands, importing over 31,000 tons annually in 1950-51, disappeared as a significant market in 1952 when only 4,100 tons were imported.

Aquatic Animal Oils and Fats

As a result of unfavorable weather in the Antarctic in 1952/53, there was an appreciable drop in the number of whales caught and the quantity of whale oil produced. Only 14,855 blue whale units were caught by the pelagic expeditions in the Antarctic, which is appreciably less than the

16,000 units level stipulated by the International Whaling Convention of 1946.

The production of fish oils showed a steady increase during the postwar years and during 1947-1951 it doubled and during the latter year it amounted to 273,000 tons compared with 133,400 in 1947 and 218,000 tons in 1938. In the United States, the production has been declining as a result of the drop in output from the California pilchard fishery and the Alaskan herring fishery, although partly counter-balanced by the increased output from the menhaden fishery.

FATS, OILS AND OILSEEDS

Current Situation

World production of fats and oils is now about 10 percent above the prewar level. However, as world population has risen about 15 percent, production per capita remains slightly below prewar. Production in Europe has recovered from the wartime low and is now 10 to 15 percent larger than before the war, but in the Far East, notably in

China and Indonesia, production is still below prewar. North American production has increased substantially and is now about 50 percent above prewar.

Despite the increase in world production, world indigenous exports of fats, oils and oilseeds in terms of oil, remain smaller than prewar, as consumption has increased materially in some of the countries that were large exporters before the war. World exports in 1934-38, including whale oil from the Antarctic, averaged 6.1 million metric tons. These exports had fallen to only 2.2 million metric tons by 1945, then steadily rose to 5.7 million tons in 1951, but declined to about 5.1 million tons in 1952 (Table 53).

The decline in 1952 reflected smaller export supplies of some items and a reduced import demand for others. Argentine exports of linseed and linseed oil in 1952 declined by 280,000 tons, in terms of oil, mainly as a result of a partial failure of the linseed crop harvested in November-December 1951. Argentine exports of sunflower-seed oil in 1952 declined by 70,000 tons, mainly because of the small crop in the spring of that year. With the Indonesian coconut crop

TABLE 53. WORLD INDIGENOUS EXPORTS¹ OF FATS, OILS AND OILSEEDS IN TERMS OF OIL, BY REGION AND BY TYPE, 1938 AND 1950-52

ITEM	1938	1950	1951	1952 ²
BY REGION				
Europe ³	492	402	405	293
North America	138	1,004	1,130	1,058
South America	665	580	595	179
Asia	2,682	1,513	1,761	1,517
Africa	1,149	1,353	1,102	1,249
Oceania.	396	378	354	419
Antarctic	566	344	348	371
WORLD TOTAL.	6,088	5,573	5,695	5,086
BY TYPE				
Butter, fat content	509	405	350	333
Lard	166	260	351	317
Liquid edible oils ⁴	1,797	1,310	1,313	1,090
Hard oils ⁵	2,193	2,410	2,518	2,476
Whale and fish oils ⁶	668	512	512	503
Drying and miscellaneous oils ⁷	755	676	651	367
WORLD TOTAL.	6,088	5,573	5,695	5,086

¹Includes only indigenous oilseeds and oils produced from indigenous materials. Trade among Eastern European countries and the U.S.S.R. is not included in postwar years.

²Preliminary.

³Excluding U.S.S.R., except in 1938.

⁴Chiefly groundnut, soybean, cottonseed, olive, rapeseed, sunflowerseed, and sesame oils and oil equivalent of groundnuts, soybeans, cottonseed, rapeseed, sesame seed.

⁵Chiefly coconut, palm, and palm kernel oils, tallow, greases, and oil equivalent of copra and palm kernels.

⁶The entire production of whale oil in the Antarctic is counted here as an export. Sperm oil and fish liver oils are not included in these figures.

⁷Chiefly linseed, castor and tung oils and oil equivalent of linseed and castor seed.

substantially reduced from the unusually high level of the preceding year, world exports of copra and coconut oil in 1952 were down by 180,000 tons, in terms of oil. Exports of soybeans and soybean oil from the United States declined by 130,000 tons, oil equivalent, reflecting a substantial reduction in Italian and Spanish imports. These had been unusually large in 1951 to supplement small domestic supplies of olive oil. The only items showing a substantial increase in 1952 were inedible tallow and greases, with an increase of 90,000 tons from the United States, and palm oil, with an increase of nearly 50,000 tons from Nigeria and Indonesia.

Net imports into eleven Western European countries in 1952 were about 2.9 million metric tons, as compared with 3.4 million tons in 1951, the peak postwar year. Imports were exceptionally large in late 1950 and early 1951 as a result of a strong demand for fats and oils to add to stocks. This demand declined during the latter part of 1951, however, and in 1952 dealers and users, as well as some governments, apparently were reducing the unusually large stocks accumulated in previous years.

Estimated production of fats and oils in the eleven Western European countries, plus net imports, averaged about 5.4 million metric tons in 1951 and 1952 compared with 5.1 million metric tons in 1934-38. The estimated supply

TABLE 54. FATS AND OILS (EDIBLE AND INEDIBLE): INDIGENOUS PRODUCTION AND IMPORT BALANCE OF 11 WESTERN EUROPEAN COUNTRIES,¹ PREWAR AND 1949-1952

PERIOD	Pro- duc- tion ²	Import bal- ance ³	Apparent consumption	
			Quantity	Per person ⁴
... Million metric tons ...				
Prewar ⁵	2.1	3.0	5.1	24.5
1949	1.8	2.8	4.6	20.3
1950	2.1	3.1	5.2	23.0
1951	2.2	3.4	5.6	24.5
1952 ⁶	2.4	2.9	5.3	23.0
... Kgs...				

¹ Belgium-Luxembourg, Denmark, Federal German Republic, France, Italy, Netherlands, Norway, Sweden, Switzerland and United Kingdom. Prewar figures for Germany have been adjusted to represent only the area now included in the Federal Republic.

² Estimated production from indigenous materials in the calendar year indicated.

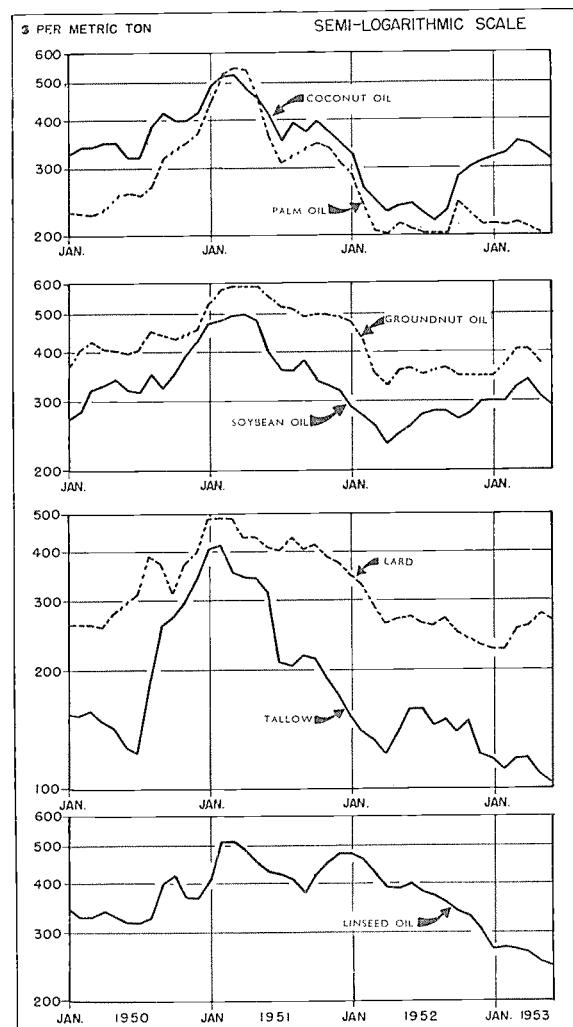
³ Imports minus exports; oilseeds are included in terms of oil.

⁴ Computed from numbers carried to thousands of metric tons.

⁵ Average 1934-38 or 1936-38.

⁶ Preliminary.

FIGURE 10- MONTHLY AVERAGE PRICES OF FATS AND OILS IN INTERNATIONAL MARKETS 1950-53



Notes: Prices are compiled from «The Public Ledger» (London) and are converted to U.S. dollars at official rates of exchange.

Palm oil: Belgian Congo, bulk, c.i.f., European port.
Coconut oil: Straits, 3 or 3½%, bulk, c.i.f., European port.

Groundnut oil: Indian, bulk, c.i.f. European port.

Soybean oil: American, crude, f.o.b.

Lard: Refined, 37-lb. tins, f.o.b. N.Y.

Tallow (inedible): fancy, bulk, f.o.b. N.Y.

Linseed oil: Belgian, bulk, f.o.b.

per caput in 1951 and 1952 averaged 23.8 kilograms, slightly below the prewar level of 24.5 kilograms.

After declining substantially from spring 1951 to spring 1952, prices of fats, oils and oilseeds in international markets showed varying trends, according to the commodity. From April 1952 to April 1953 there were substantial increases in the prices of coconut oil and liquid edible vegetable oils; little change in the prices of palm oil

and tallow; and declines in the prices of lard and linseed oil.

The general level of international market prices of fats and oils, as indicated by a weighted average of 7 major items, rose 20 percent from April 1952 to April 1953. From April to June 1953 there were declines in prices of most items.

The rise in coconut oil and copra prices was largely due to the decline in production and exports in Indonesia and the Philippines, which began in the spring of 1952. Total exports from these two leading exporters were 26 percent smaller in the last 9 months of 1952 than a year earlier and continued at a low level in the first 6 months of 1953.

The government price support program for cottonseed in the United States resulted in the movement of about 400,000 tons of cottonseed oil into government stocks in the 1952/53 marketing year. United States prices of cottonseed oil and of its chief domestic competitor, soybean oil, rose in late 1952 and early 1953; and since the United States is an exporter of these oils, international market prices of all liquid edible vegetable oils also tended to rise.

Production of inedible tallow and greases in the United States remained at a high level in 1952 and early 1953. United States production of soap, the principal outlet for inedible tallow and greases, declined moderately owing mainly to the competition of synthetic detergents; the United States exportable surplus of these fats thus increased and exports rose to a new high. World production and exports of palm oil also rose in 1952. However, since coconut oil competes with tallow in soap manufacture and competes with palm oil in both soap and food uses, the decline in coconut oil supplies was a price supporting factor for palm oil and tallow.

The decline in the price of lard during 1952 was due to continued high production in the United States and a fall in exports during the latter part of 1952. But with a sharp fall in production in early 1953, lard prices rose in the spring.

The price of linseed oil was high at the beginning of 1952, having already risen to discount the exceptionally poor Argentine linseed crop harvested in late 1951. During 1952 and the first half of 1953, the price of linseed oil declined almost continuously. Some countries were able to meet part of their requirements from large stocks on hand at the beginning of the year. Also, exports were forthcoming from countries other than Argentina, and the supply outlook for 1953 became increasingly favorable.

Outlook

Prospects in early summer 1953 indicated a slight increase in world indigenous exports for the year, provided that growing conditions for Northern Hemisphere crops remain favorable. Exports of Nigerian groundnuts and groundnut oil are likely to rise as a result of an improvement in the rail movement from Northern Nigeria to seaports. Supplies of liquid edible vegetable oils in the United States are substantially larger in 1953 than in 1952, reflecting an increased carry-over into 1953. But the total quantity of these oils that will be commercially available in 1953, whether for domestic use or for export, will depend partly on the government's policy with regard to its stocks of cottonseed oil accumulated in 1952/53. World exports of "hard" oils probably will reach about the same total in 1953 as in 1952. Further declines in exports of Philippine and Indonesian copra are likely to be about offset by increases in world exports of palm oil and United States exports of tallow and greases. The catch of whales in the Antarctic in the season ended 16 March 1953 was smaller than a year earlier, and production of whale oil declined about 9 percent. A moderate decline in exports of lard from the United States, the world's major exporter, is likely in 1953. United States production of lard in 1953 probably will fall about 10 percent, reflecting reduced hog production.

With the increased crop of linseed harvested in late 1952, Argentine exports of linseed oil are likely to rise substantially in 1953 from the extremely low 1952 level of 40,000 tons (including some linseed in terms of oil). These exports totalled about 35,000 tons in January-June 1953. Argentina is the leading world exporter of linseed oil.

FRESH FRUIT

The principal kinds of fruit entering world trade — apples, pears, citrus, bananas — have been produced in steadily increasing quantities in postwar years, most regions sharing in this increase. The only exceptions are production of grapes (including wine grapes) which shows no marked change, and of dried fruits. World trade, on the other hand, has been smaller in volume for all principal kinds other than pears and grapefruit, which form a relatively small part of the total, and dried fruit, which has changed little, a decrease in raisins offsetting an increase in dates.

On balance, fruit supplies are larger and consumption is expanding in both importing and exporting countries. Broad movements in production and trade are summarized in the following table:

TABLE 55. INDEX OF PRODUCTION AND TRADE IN MAJOR FRESH FRUITS

COMMODITY	Production 1947-51	Trade 1948-51	Exports 1948-51 average
	... 1934-38 = 100 ...		Thousands ...tons...
Table Apples	130	82	565
Table Pears	108	107	157
Oranges, Tangerines	140	87	1,588
Grapefruit	157	114	125
Lemons.	132	76	213
Bananas	131	88	2,200

Europe

More than half of the total fruit entering world trade finds its market in a relatively small number of importing countries in Western Europe. In fact, except for banana exports, which in tonnage are the main item in the fruit trade and which are directed largely to the United States, European countries absorbed three-quarters of average world exports in 1948 to 1951 and even more in prewar years. The shrinking in world trade since prewar years is the result of a reduction in the imports of European countries, the imports of the rest of the world remaining virtually unchanged. In the period 1948-51 European fruit imports were 17 percent less than prewar. In 1952 United Kingdom imports of fresh fruit decreased 19 percent against 1951, whereas Western Germany increased imports by 27 percent (mainly citrus and bananas) and France by 5 percent. The Scandinavian countries also increased their imports.

At least half of the imports into European countries are supplied by other European countries. These exporters are tending to increase their share in a reduced market so that other suppliers have had to bear the brunt of the contraction.

The largest item in European imports is oranges which recovered their prewar level in 1950 and exceeded it in 1951 and in 1952. The European suppliers did not recover their prewar level of exports until 1951, Africa having meanwhile increased its exports considerably. France, now the leading importer, takes a large proportion of its increased imports from French North Africa. Germany is again as important a market as be-

fore the war, but the United Kingdom's imports are still substantially below prewar.

European imports of lemons, very largely of European origin, have recently averaged some three-quarters of the prewar levels, owing partly to the effects of diseases in producing countries. European imports of grapefruit are also consistently below prewar, imports from the United States, the main supplier, being limited by exchange shortage.

European apple production is more than half as large again as in the prewar years. The exporting countries show a relatively greater increase but European importers now take substantially smaller quantities of apples, while imports of pears show little change. A considerably larger proportion of both is now obtained from European suppliers, the Netherlands, Italy, Denmark and Belgium exporting larger quantities, although Western Germany and the United Kingdom remain the only considerable importers. Exports of apples from Canada, the United States and Australia, the three largest and the only considerable exporters of apples, have shrunk correspondingly.

Imports of bananas into Europe have averaged some 80 percent of the prewar quantities, Africa having gained as exporter at the expense of Central America. The United Kingdom's imports are much below prewar quantities, but other European countries show a general and substantial increase.

Developments in Other Regions

In North America, there has been little change in apple production, but a significant increase in pear production. Exports of both these fruits from this region have declined substantially. On the other hand, production of citrus fruits, notably oranges, which is almost entirely concentrated in the United States, has expanded greatly. Exports of oranges and grapefruit have also grown (by 40 percent), though not to the same extent as production. This increase, together with an increase in United States exports of fresh grapes, is based solely on the expanding Canadian market. Europe, despite heavy United States export subsidies, has been a shrinking market. The movement of bananas from Central America to North America, representing the bulk of the world banana trade, is only slightly below the prewar volume. Shipments to other regions, however, are now smaller.

Banana exports from South America, reflecting an upward trend in production, have increased by 10 percent since prewar years, but exports of oranges are down 50 percent, Brazil having lost much of its former European market. Deciduous fruit exports, largely to destinations within the region, show expansion.

Asia's citrus fruit exports have been significantly smaller in postwar years, especially since the partition of Palestine. Banana exports, mainly from Taiwan, are also greatly reduced. Malayan pineapple production and exports are also much smaller.

In Africa — as in South America and Asia — citrus fruit and bananas are the principal fresh fruit exports and a rapid expansion of production and exports has occurred since the war. The bulk of the exports goes to Europe and the sharp competition in that market with subsidized citrus exports from other regions is causing some concern with regard to the marketing of the still increasing output.

In Oceania, the main feature has been the decline in apple exports, due to the European expansion, though 1952 brought some recovery.

Supplies for Consumption

A calculation of total supplies for domestic consumption of the principal fresh fruits (apples, pears, oranges and bananas) in a few importing and exporting countries indicates a very substantial increase during the last few years compared with the 1934-38 period. On the average, supplies have increased more in the principal exporting countries than in the importing countries but, with the exception of the United Kingdom, total commercial supplies have increased largely in all countries. The United Kingdom supplies are down to about 90 percent of prewar as supplies of oranges and bananas were respectively 66 percent and 52 percent only, while apple supplies have increased 25 percent and supplies of pears 54 percent. Apples and pears account for a substantial part of the increase in most net importing as well as net exporting countries. In France, however, the greater increase has been in oranges and in Spain in supplies of oranges and bananas.

TABLE 56. SUPPLIES FOR HOME CONSUMPTION¹ OF TABLE APPLES AND PEARS, ORANGES AND BANANAS, IN 11 SELECTED COUNTRIES

COUNTRY	1934-38 average	1949-51 average	1952	1949-51 average	1952	Population 1951
	. . . . . Thousand metric tons			Percentage of 1934-38 average		Percentage of 1937
<i>Main Importers</i>						
Germany, Western	1,461	2,057	2,519	141	172	122
France	749	1,160	1,370	155	183	102
United Kingdom	1,431	1,285	1,262	90	88	107
Belgium-Luxembourg	381	622	684	164	180	104
Canada	346	503	483	145	140	123
Switzerland	167	314	436	188	261	114
Sweden	195	315	352	162	180	113
Total (7 countries)	4,730	6,256	7,106	132	150	111
<i>Main Exporters</i>						
United States	6,433	8,846	8,346	137	130	120
Italy	694	1,219	1,642	176	237	110
Spain	3411	770	739	188	180	112
Netherlands	4203	342	414	168	204	119
Total (4 countries)	7,741	11,177	11,141	144	144	117
GRAND TOTAL (11 countries)	12,471	17,433	18,247	140	146	114

¹ Production + imports - exports of fresh fruit. No adjustment has been made for imports and exports of canned fruit or fruit juices.

² In calculating available supplies in Western Germany in prewar it has been assumed that 75% of total supplies in prewar Germany was consumed by the 61% of the population living within the borders of the present Federal Republic plus W. Berlin.

³ 1931-35 average.

⁴ 1935-39 average.

Outlook

The rapid postwar expansion of deciduous fruit production in Western Europe and the even more rapid expansion of orange production in the United States and in the Mediterranean region have caused some concern about future marketing as new plantings continue on a large scale. This concern is increased in years of bumper crops. On the other hand, demand for fresh fruit is increasing in most countries, and there has been a very marked increase in total consumption in North America and in several continental European countries. A high rate of employment and income and the greater appreciation of the importance of better balanced diets have accounted for this expansion. In the United States the demand for citrus juices has opened a new outlet and now accounts for approximately 50 percent of orange consumption.

A considerable relaxation of the United Kingdom restrictions imposed in November 1951 and March 1952 was announced in March 1953 and may result in a substantial increase in imports during 1952/53.

Other European countries may also increase their imports. On the other hand, any economic recession in Western Europe might immediately lead to restrictions on fruit imports and the highly specialized citrus exporting countries, such as Spain, French North Africa, Italy and Israel, are extremely vulnerable to further limitations in outlets for their export supplies. The competition among these countries is very sharp as is indicated by the special government measures applied to promote exports.

WINE AND RAISINS

The postwar years have brought economic difficulties to the grape industry in the principal producing countries. Demand for dried fruit has generally been weaker and so has the demand for wine in both importing and exporting countries. High taxes on wine and quantitative import restrictions have limited the outlets for wine exports. At the same time, competition from other beverages, in particular beer and some non-alcoholic drinks, has limited wine consumption even in some of the principal wine producing countries.

Total wine production in the last few years has, on the average, been at the same level as in the years 1934-38, France, Algeria, and Spain showing a decrease, Argentina and Italy minor increases, but the United States a two to three fold increase.

Wine exports have decreased some 10 percent since 1934-38, though they increased from France and Portugal. On the whole, however, exports account for only a small percentage of production.

French beer production in recent years has amounted only to one-third of the prewar level, whereas Italian beer production has more than doubled in the same period. French wine consumption per caput and year averaged 118 liters in 1934-38 against 92 liters in 1950/51. Italian per caput consumption was approximately 80 liters in 1950 against 85-90 liters prewar. Italian and French wine prices have increased relatively less than most other agricultural products and costs have increased more than prices. France produced in 1952 64.7 million hl. (including Algeria) and had a considerable carryover from 1951 (16.7 million hl. as compared with 6.2 million hl. last year); Italian stocks were 10 to 15 percent of the annual production. To support the market, the French government takes a substantial portion for alcohol production but at a price which is only about three-eighths of the price paid for wine for consumption. Several European countries are restricting areas under vineyards and in France and Switzerland marketing is regulated by gradual release of wine with the aim of preventing a break in the market.

Production of raisins and currants in the five principal producing countries averaged 514,000 tons in 1949-51 against 573,000 tons prewar, a 10 percent decrease although production in the United States remained on the prewar level. Production in 1952 in these countries is estimated at 528,000 tons with United States output alone at 268,000 tons against the prewar production of nearly 200,000 tons.

Total exports in 1949-51 were on the average 15 percent lower than prewar but increased somewhat in 1952. The United States exports are being subsidized by an export premium of \$55 per metric ton. Turkish sultana prices were \$235 per ton by the end of February 1953 against \$258 the year before. By the end of the season (May 1953) prices had improved slightly but were still below those of the previous year. Apparently unsold stocks of sultana raisins were smaller than had been expected.

COFFEE

Current Situation

Although coffee production in 1952 rose by about 5 percent over the previous year, it was still below the prewar level. World imports were

TABLE 57. COFFEE: PRODUCTION IN MAJOR AREAS, PREWAR AND ANNUAL 1950-53

AREA	1934-38	1950/51	1951/52	1952/53 ¹
..... <i>Thousand metric tons</i>				
Brazil	1,446.1	1,071.4	1,080.2	1,156.0
Colombia	251.2	337.8	354.0	360.0
Other Latin American countries.	419.7	427.0	430.0	461.0
Western Hemisphere.	2,117.0	1,836.2	1,864.0	1,977.0
Africa	140.0	281.0	315.0	319.0
Asia and Oceania	164.0	76.0	87.0	81.0
WORLD TOTAL ²	2,420.0	2,190.0	2,270.0	2,380.0

¹ Preliminary.² Rounded to four significant figures.

about 3 percent higher than in 1951, largely owing to increased European imports. Throughout the year prices kept remarkably stable at about 54 U.S. cents a pound (Santos 4, New York). Coffee was thus one of the few commodities almost completely unaffected by the general downward trend of commodity prices in 1952 and higher earnings from its exports were obtained by most producing countries.

The increase in production took place mainly in Latin America. With the exception of a few minor producers, all Western Hemisphere countries recorded larger harvests than in 1951/52. In Brazil, Paraná gained importance as the second largest producing center after São Paulo, owing to the exceptionally high yields of its young plantings. Substantial increases were registered in El Salvador, Venezuela and Ecuador. In Asia and Africa, however, output remained substantially unchanged.

The major development in the international coffee trade in 1952 was an increase in European imports, which in 1947 were still only 55 percent of the prewar level. Substantial increases in purchases by France, Italy, Germany and the Scandinavian countries, facilitated by extensive bilateral trade agreements with Latin American countries, raised total European imports by about 14 percent — a large increase as compared with the two percent rise in 1951. The United States took 62 percent of world imports, as compared with 65 percent in 1951 (49 percent prewar). The slight decline reflected reduced purchases for the armed forces; civilian per capita consumption, on the other hand, is estimated to have increased somewhat. Imports into other parts of the world were probably slightly lower than in 1951.

TABLE 58. COFFEE: IMPORTS INTO THE UNITED STATES, CANADA, EUROPE AND ESTIMATED WORLD IMPORTS, AND PRICES, PREWAR AND ANNUAL 1950-52

	1934-38	1950	1951	1952 ¹
Imports <i>Thousand metric tons</i>				
.....				
United States	789.5	1,105.5	1,218.6	1,215.9
Canada	17.2	37.6	40.1	44.3
Europe	710.0	490.0	500.0	568.0
WORLD TOTAL	1,640.0	1,790.0	1,910.0	1,958.0
Prices <i>U.S. Cents per lb.</i>				
.....				
Santos 4, ex Dock New York	9.70	50.90	54.30	54.04

¹ Preliminary.

Outlook

Assuming normal weather conditions, production in 1953/54 should show a slight rise, as trees planted since the end of the war have come into bearing. In Brazil the early indications are favorable. In other Latin American countries and in Africa the upward production trend is likely to continue, although the increase in exportable supplies may not be very large. Stocks in practically all producing countries are down to the minimum operating needs.

Assuming continued high levels of economic activity in the chief consuming countries, the demand situation of the past years is likely to continue in 1953/54. Since no major increase in supplies is to be anticipated, prices are likely to remain comparatively high.

As to the long-term outlook, the market prospects for coffee appear to be favorable. While prices may decline slightly if supplies increase appreciably, all indications point to the continuation of the demand trend of the past few years. In the high consuming countries wartime and post-war gains in per capita consumption have been solidified, and the coffee drinking habit appears to be spreading in many countries in which pre-war per capita consumption was very low. What is less certain is the outlook for the intermediate period of a few years. If some very optimistic current reports on production prospects during 1956-58 are borne out, it is possible that the expansion of production may be more rapid than the growth of demand, which might have substantial price effects.

However, data on planting, re-planting and on the other basic factors which will determine production are not sufficiently reliable for quantitative forecasts. The range between the potential optimum and minimum, on the basis of available planting data (assuming, of course, normal climatic conditions) may be as much as 200,000 tons or about 10 percent of world production. The most significant doubt concerns the production outlook in Brazil. Considerable planting has taken place in Paraná and other Southern areas, but estimates of the number of trees now in existence vary by as much as 30 percent. One recent official report estimated that Paraná production may reach close to 500,000 tons in 1955 but other reports are considerably less optimistic. Equally uncertain is whether the decline in tree population of the important old producing region of São Paulo is continuing.

High prices have induced new planting in many countries of Central and South America as well as Africa, but available data are not adequate for quantitative estimates of production prospects. In Colombia production has risen steadily by 3 to 5 percent annually, and the trend is likely to continue during the next few years. The Mexican National Coffee Commission has developed a 5 year development program, and further expansion of planting is likely to take place as suitable land is opened to transportation. Work to raise yields of existing coffee plantations or to expand plantings has been going on also in El Salvador, Guatemala, Costa Rica, Nicaragua, the Dominican Republic, Venezuela and Ecuador.

In Africa, continuation of the upward production trend during the next 5 to 10 years can be anticipated in the Belgian Congo, Ethiopia, French West Africa, Uganda, Tanganyika and French Equatorial Africa. Government programs to encourage production and to improve marketing exist in most of these territories.

Despite the prospect of continued substantial increases in production, the demand and price outlook in the long run for coffee appears to be more promising than for most other agricultural commodities.

TEA

Largely because of lower prices and drought conditions in Ceylon and Indonesia, world production in 1952, exclusive of China and the U.S.S.R., was slightly lower than the record crop of the previous year, but was almost 30 percent higher than during 1934-38. In India, which was chiefly affected by the price decline, production fell by 8 percent because of finer plucking. In Japan, however, production rose to about the prewar level, while in Africa the trend to higher production continued (Table 59).

World exports in 1952 declined, reflecting smaller shipments from India, Pakistan and Indonesia; but exports from Ceylon increased slightly due to the general consumers' preference for high quality tea. Exports from British African possessions continued to rise, and, although these are a small part of world exports, 1952 shipments represented an increase of almost 150 percent above pre-war. While imports into the United Kingdom and the United States rose by 7 and 10 percent respectively, total world imports were probably slightly (1 percent) lower than in 1951.

TABLE 59. TEA: PRODUCTION, TRADE AND PRICES
AT COLOMBO AND CALCUTTA AUCTIONS,
AVERAGE 1934-38, AND ANNUAL 1946-52

YEAR	Pro- duc- tion ¹	Ex- ports	Im- ports for con- sump- tion	Index of price. Ave- rage Calcut- ta and Co- lombo	Cal- cutta price deflat- ed by whole- sale price index
<i>Thousand metric tons</i>					
1934-38	440	400	396	100	² 100
1946.	433	301	304	—	112
1947.	458	350	349	245	82
1948.	487	358	374	246	71
1949.	522	435	420	298	80
1950.	562	398	392	318	81
1951.	587	453	438	286	65
1952.	578	416	3435	3240	57

¹ Excluding China, Indo-China and U.S.S.R.

² 1937-39 = 100.

³ Preliminary.

Prices declined severely in 1952, especially those of the low quality India and Pakistan teas. The high quality tea from Ceylon suffered much less, and average prices for the last six months were even slightly higher than during the corresponding period in 1951. The removal of controls on United Kingdom consumption and trade in October 1952, contrary to expectations did not immediately stimulate consumption and prices; however, the measures taken by India to curtail production contributed to a general increase in prices at the end of the year and during the early months of 1953. It seems that, short of a major recession in prices of primary products, tea prices will remain comparatively high for the rest of the current year.

While tea output could be greatly expanded in the Far Eastern countries, tea producers, especially in India, Pakistan and Indonesia, face very serious economic problems. Production costs have risen considerably more than prices, and the "real" price of tea received by producers in 1952 was probably not more than 60 to 75 percent of prewar. In the United Kingdom a gradual return to prewar levels of consumption seems likely. No marked increase in consumption is likely to occur in other consuming countries. However, an over-all improvement in quality should facilitate the marketing of the 1953 crop.

COCOA

Current Situation

World production of cocoa beans in 1952/53 was 10 percent higher than in the previous year. The rise was due to favorable weather conditions in most producing areas and not to any fundamental change in basic supply conditions. In the two chief producing countries of Africa and Brazil the last year's crop was 10 percent below prewar. Practically the entire rise in world supplies over 1934-38 was due to increased production in French West Africa and the minor producing countries of Latin America.

TABLE 60. COCOA: PRODUCTION

COUNTRIES	1934-38 average	1951/52	1952/53 (estimate)
<i>..... Thousand metric tons</i>			
Gold Coast and Nigeria	378.0	316.0	364.0
French Africa	81.5	108.0	121.0
Other Africa	24.5	28.0	35.0
Brazil	124.0	110.0	97.0
British West Indies	21.7	13.0	16.0
Other Latin American countries	92.3	110.0	119.0
Other countries	8.0	5.0	8.0
WORLD TOTAL	730.0	690.0	760.0

The low crop of 1951/52 and the absence of carryovers reduced 1952 exports by 7 percent. During the first part of the year world prices rose to 38 to 42 U.S. cents a lb., which is the highest on record except for a few months in 1947/48 after the removal of price control in the United States. Although the supply situation improved greatly in the autumn, and prices declined at the end of the year, the annual average New York price was about the same as in 1951 — 35.5 U. S. cents as compared with 6.1 during 1934-38. During the first part of 1953 prices recovered somewhat and remained relatively firm.

However, producers have not benefited to the same extent in all countries from the great price rise. In the French West African territories and in Latin America, producers' prices have increased more or less proportionately with the world prices, and this may explain the upward trend of production. On the other hand, producers in Nigeria and on the Gold Coast have benefited least, largely because the Marketing Boards, which monopolize the buying and selling activity, have paid the producers only about 50 percent

TABLE 61. COCOA: PRICES OF COCOA BEANS AND OF OTHER COMMODITIES IN THE UNITED STATES, SWITZERLAND, AND THE UNITED KINGDOM, 1950-52

YEAR	U. S. A.				Switzerland		U. K.
	Wholesale price index of cocoa beans in New York	Index of the unit value of cocoa bean imports	Wholesale price general index	Wholesale price food index	Index of the unit value of cocoa bean imports	Wholesale price general index	Index of export value
	<i>1934-38 = 100</i>						
1950	524	472	202	210	415	211	283
1951	582	604	225	236	575	235	326
1952	580	1587	220	229	1525	231	341

¹ 9 months.

of the average f.o.b. price realized since 1947/48. Moreover, the high cost of imports and internal inflationary developments have further reduced the "real" price of cocoa. While the index of cocoa prices (1934-38 = 100) in 1952 was around 580 as compared with 220 of the general United States wholesale price index, the index of the United Kingdom export prices which reflects costs of imported goods to producers in tropical exporting countries, averaged 341. The incentive to expand production has thus been great where world prices were fully reflected in prices to producers.

The long-term effects of high cocoa prices on demand may be less fortunate. The last year witnessed a considerable strengthening of consumer resistance to high prices, especially in the United States, where imports of beans and cocoa products (in terms of beans) declined for the third successive year, although prices in 1952 were no higher than in 1951 and only slightly higher than in 1950. Net imports of beans in 1952 were even lower than in 1934-38. On a per capita basis, the Unit-

ed States imports were almost 25 percent lower — 1.5 kilograms per person as compared to 1.9 in 1934-38. Only the United Kingdom and some African and Latin American countries increased imports.

Outlook

No major increase in production is to be expected during the course of the next few years. New plantings have taken place since the end of the war, especially in the minor producing countries, but it is doubtful whether this factor is strong enough to offset more adverse forces, let alone to allow for a substantial net increase.

On the demand side, the price and supply developments of the last few years have reversed a 50-year trend of continuously rising consumption in Europe and North America. The production and marketing programs of industrial processors of cocoa beans, especially in the United States, have been curtailed, and the acceptance by the public of alternative products is increasing

TABLE 62. COCOA: IMPORTS BY UNITED STATES AND CANADA, UNITED KINGDOM, EUROPE AND TOTAL WORLD, PREWAR AND 1950-52

AREA	Average 1934-38		1950		1951		1952	
	Cocoa beans	All cocoa ¹	Cocoa beans	All cocoa ¹	Cocoa beans	All cocoa ¹	Cocoa beans	All cocoa ¹
	<i>Thousand metric tons</i>							
U.S.A. and Canada	254	254	288	296	262	272	251	261
United Kingdom	98	85	128	122	98	116	95	119
Europe (excl. Eastern Europe)	273	...	272	...	255	...	220	...
WORLD TOTAL	670	...	730	...	680	...	630	...

¹ Cocoa products in terms of beans.
... Not available.

in many countries. Since it does not seem, at present, that supplies will greatly increase, prices are likely to remain firm. In the event of a sudden rise in production, prices would be likely to decline more than proportionately and the prewar long-term trend of rising consumption would then reassert itself.

TOBACCO

World tobacco production in 1952 was only slightly smaller than in the previous year whereas world trade decreased by nearly 15 percent. Stocks by the end of 1952 were substantially larger in the United States, but were greatly reduced in the United Kingdom. Average prices of United States and Canadian tobaccos were slightly lower than in 1951, whereas Southern Rhodesian tobacco increased appreciably in price.

The decrease in production in the United States was due to the dry summer, whereas the decrease in Canada and Greece was due to reduced plantings. Output of Virginia tobacco in Southern Rhodesia and India increased slightly. The output of cigar leaf was lower as the Bahia crop in Brazil amounted to only 18,000 tons, against 27,000 tons the year before; the 1953 crop is expected to reach only 9,000 tons because of a severe drought.

Trade

The fall in leaf exports was mainly due to the cut in United Kingdom dollar allocations for United States and Canadian tobacco imports.

The 1952/53 allocation for United States tobacco was only \$34.9 million compared with \$145.9 million in 1951/52, \$86 million in 1950/51 and \$90 million in 1949/50. Allocations for imports of Canadian tobacco showed the same movement. Additional allocations for United States tobacco in 1952/53, however, have been made early in 1953 to buy 36,000 tons of the 1952 crop earmarked for British manufacturers under a special option.

Total United States exports in 1952 decreased by 57,000 tons and exports to the United Kingdom alone decreased from 100,000 tons to 25,000 tons. United States exports to Western Germany, however, rose by 14,000 tons reaching 36,000 tons, six times the prewar figure. Canadian exports in 1952 showed some increase as a result of increased United Kingdom purchases during the later part of 1951, but will decrease during 1952/53. Greek exports of leaf rose 33 percent and accounted for 43.3 percent in value of all Greek exports. Most of the increase was in exports to Western and Eastern Germany, Austria, Scandinavia, Spain and the United States.

Stocks and Prices

United States stocks as of 1 April 1953 were 2,038,000 tons (farm sales weight) or 112,500 tons larger than in 1952. The increase was all in flue-cured and Burley tobacco. Canadian stocks were slightly larger whereas Greek surplus stocks of old tobacco have been substantially reduced as a result of the increased exports. Stocks in the United Kingdom as of 1 April were 176,800 tons

TABLE 63. PRODUCTION AND EXPORTS OF LEAF TOBACCO, PREWAR, 1951 AND 1952
(8 MAJOR EXPORTING COUNTRIES)

COUNTRY	Production			Exports		
	1934-38 average	1951	1952	1934-38 average	1951	1952
..... Thousand metric tons.....						
United States	590	1,057	1,001	198	236	179
Canada	28	70	61	5	13	17
India	¹ 344	229	238	221	50	39
Southern Rhodesia	10	42	45	9	33	40
Turkey	55	82	81	29	58	57
Greece	57	63	42	44	31	41
Brazil	93	118	127	31	30	30
Cuba	22	34	39	12	17	18
TOTAL (8 countries)	1,199	1,695	1,634	349	468	421

¹ 1936-38 average.

² Including Pakistan.

(dry weight), a decrease of 43,600 tons since 1 April 1952.

Prices in the United States market during 1952 were slightly below the previous year except in the best grades of which output was comparatively smaller. Southern Rhodesian flue-cured prices at the auctions in April to August 1952 were higher. The average price in 1952 reached 42.8d. per lb., or 8.25d. per lb. more than in 1951. Average unit values of exports in seven major exporting countries 1949-52 are shown in the following table. The unit values differ widely according to types and grade. Unit values for Rhodesian and Indian tobacco which are the main substitutes for Virginia tobacco from the dollar area showed an increase in 1952.

TABLE 64. EXPORT UNIT VALUES OF LEAF TOBACCO

COUNTRY	1949	1950	1951	1952
..... U.S. \$ per kg.				
U.S.A.	1.11	1.16	1.37	1.37
Canada	1.21	0.92	1.12	1.24
Cuba	2.19	2.49	2.31	2.31
Greece	1.59	1.48	1.29	1.27
Turkey.	1.17	1.19	1.12	1.07
Southern Rhodesia .	1.06	1.20	1.22	1.32
India ¹	0.59	0.65	0.64	0.79

¹ Year beginning April, except 1952 when data refer to calendar year.

Outlook

As a result of the large carryover in the United States, the 1953 acreage allotments to flue-cured and Burley are respectively 7 and 8 percent lower than in 1952 and total plantings may decrease 6.5 percent. The Canadian acreage of flue-cured, drastically cut in 1952, has been allowed to increase 12.5 percent. Supplies of flue-cured from Southern Rhodesia (auctions April-August 1953) may reach a record in spite of excessive rains at the end of the growing season. Oriental supplies may be about the same, but the serious decrease in Brazilian cigar leaf may result in a shortage of supplies for the cigar industry.

It is expected that the United Kingdom will increase its dollar allocations for 1953/54. Available substitutes from soft currency countries are insufficient to keep imports of Virginia tobacco from the United States and Canada as low as in 1952/53. There are indications that oriental tobacco will gradually regain an important share

of the German market. The Greek currency devaluation in April 1953 may stimulate tobacco exports further.

Demand for leaf tobacco is strong in all countries and tax reductions on tobacco products in some West European countries may raise demand further.

COTTON

Current Situation

For the second time in the postwar period there are signs of cotton surpluses. After additions during two successive seasons, the world carryover at the end of 1952/53 stood in about the same ratio to consumption as at the end of the 1949/50 season, and prices are being largely upheld by price support operations in the United States. With production estimated at 35.3 million bales and consumption at 32.5 million bales in 1952/53, the world carryover is calculated to rise to nearly 18 million bales, corresponding to about 6 to 7 months consumption at the current rate.

TABLE 65. COTTON: WORLD PRODUCTION, CONSUMPTION AND STOCKS

SEASON	Production	Consumption	Stock at end
			..... Million bales
1934-38 average . .	30.5	29.5	17.0
1947/48.	25.1	28.9	14.7
1948/49.	28.9	28.6	15.0
1949/50.	31.1	29.6	16.6
1950/51.	28.2	33.2	11.6
1951/52.	35.7	32.3	15.0
1952/53.	35.3	32.5	17.8

¹ Provisional estimate.

SOURCE: International Cotton Advisory Committee.

The upward trend of production since the end of World War II was broken only in 1950/51 when acreage restrictions were in force in the United States and low yields obtained. By 1951/52 and again in 1952/53, production was 16 percent above the 1934-38 average. In spite of the expansion in the area under cotton in postwar years, acreage in 1952/53 is still rather smaller than the prewar average. Yields have shown a remarkable increase, averaging about 20 percent higher in the past five seasons than in the five prewar seasons. This is partly due to the extension of irrigation (e.g., Middle East) and the shift to irrigated re-

TABLE 66. COTTON: PRODUCTION IN MAJOR PRODUCING REGIONS

REGION	1948/49	1949/50	1950/51	1951/52	1952/53 ¹
<i>Million bales</i>					
United States	14.6	16.0	9.9	15.2	15.0
Soviet Union and China	4.7	4.4	5.9	7.0	6.8
Elsewhere	9.6	10.7	12.4	13.5	13.5
of which Mexico	0.5	0.9	1.1	1.3	1.3
Brazil	1.5	1.4	1.7	2.0	1.5
Egypt	1.8	1.8	1.8	1.7	2.1
Turkey	0.3	0.4	0.5	0.6	0.8
Pakistan	0.8	1.0	1.2	1.3	1.5
India	2.0	2.4	2.7	3.2	2.9

¹ Provisional estimates.

gious (e.g., United States) where adequate moisture is provided and the climate less conducive to pests and diseases. It also reflects the extended use of higher yielding varieties, notably in Pakistan and the Middle East, and a greater use of fertilizers and chemicals in disease and insect control. At the same time, the mechanization of cotton cultivation and harvesting is extending. In the United States, nearly one-fifth of the crop is now mechanically picked, with a consequent considerable saving in labor costs.

Production trends move upwards in all regions except in the United States where, leaving out of account the restricted 1951/52 crop, a rather stable volume of 14 to 16 million bales has been harvested over the past four or five years. There are unofficial reports of a notable increase in cotton growing in the Soviet Union and China, but the most significant proportional expansion has taken place in Mexico and Turkey, where output has almost trebled, and in Pakistan which has almost doubled its production over the past five years. Expansion in Brazil, Egypt and India has been smaller. Other crops, notably coffee, tended to reduce cotton growing in Brazil until the sharp rise in cotton prices in 1950/51, while in India and Egypt expansion has been limited by the concentration on food production. Changes in Egypt's production pattern as between longer and shorter staples have also affected the size of the crop.

In 1952/53 efforts to grow more cotton were checked by falling prices at planting time but, although total acreage was curtailed, the reduction in the world crop was not commensurate. Of the major producers Brazil, India and China harvested smaller crops. The substantial reductions were attributable mainly to reduced plantings in the case of Brazil and to drought and conse-

quently lower yields in the case of India. In other countries yields were generally higher. Improved yields partly offset the effect of smaller plantings in the United States, and entirely accounted for the increase in the Egyptian crop. Record crops were harvested in Turkey and Pakistan. The maintenance of a high level of world output was therefore in some measure fortuitous and farmers and governments in important growing regions are now concerned to plant less cotton.

The postwar upward trend has been less steep and less definite in cotton consumption than in production, thus bringing about a tendency toward surplus from time to time. With higher standards of living, a trend in the consumption of fibers, which are very largely used for apparel purposes, at least commensurate with population growth might be expected.

TABLE 67. APPAREL FIBERS: WORLD CONSUMPTION PER CAPUT

YEAR	Cotton, Wool and Rayon	Cotton	Percentage cotton
<i>Kilograms</i>			
1938	3.7	2.9	78
1948	3.7	2.7	73
1949	3.6	2.6	72
1950	3.8	2.7	71
1951	4.1	3.0	73
1952	3.9	2.8	72

Per caput consumption of the major apparel fibers has been at or above the prewar level almost continuously over the past five years. This, however, does not apply to cotton. Only once in the postwar era, in 1951, when large scale military and speculative demands affected the situa-

TABLE 68. COTTON: CONSUMPTION IN MAJOR TEXTILE PRODUCING REGIONS

REGION	1947/48	1948/49	1949/50	1950/51	1951/52
<i>..... Million bales</i>					
United States	9.4	7.8	8.9	10.5	9.2
Europe of which	6.1	6.4	6.9	7.4	6.7
United Kingdom.	1.9	2.0	2.1	2.1	1.8
France	1.1	1.0	1.1	1.2	1.2
Germany	0.4	0.6	0.9	1.1	0.9
Italy	0.8	1.0	0.9	1.0	0.9
India.	3.6	3.7	3.3	3.2	3.5
Japan	0.6	0.7	1.0	1.6	1.8
China	3.1	3.0	2.3	2.9	3.1
Soviet Union	1.9	2.3	2.3	2.5	2.8

tion, did cotton consumption exceed the prewar per caput rate. Cotton's proportion in the total apparel fibers consumption has declined from 78 percent to around 72 percent. This is attributable to technological advances in manmade fibers and to the emergence of rayon as the lowest priced apparel fiber.

Apart from this relatively modest scale of increase, cotton consumption has suffered intermittent setbacks connected with relatively mild changes in economic activity which have rather pronounced effects on textile industries.

The decline in cotton consumption in 1948/49 was attributable to the pause in economic activity in hard currency countries, notably the United States. Following the upsurge connected with the Korean conflict, a more general decline occurred in 1951/52. It affected all textile industries and all of the Western Hemisphere including Europe and the territories economically closely associated with it. Only in the Eastern hemisphere, where apparel standards are relatively low and, in many countries, have not yet recovered to prewar levels, did cotton consumption continue to make headway, reflecting for India, China and the Soviet Union larger domestic crops. The 1952/53 season has seen some limited recovery in textile activity in the Americas and Europe. On the whole, however, as markets are fairly well supplied with textiles there is little incentive to manufacture beyond immediate requirements. In the East, on the other hand, there are still large local potential markets, and in export markets also Eastern textiles industries have some advantage in relatively low raw material and manufacturing costs.

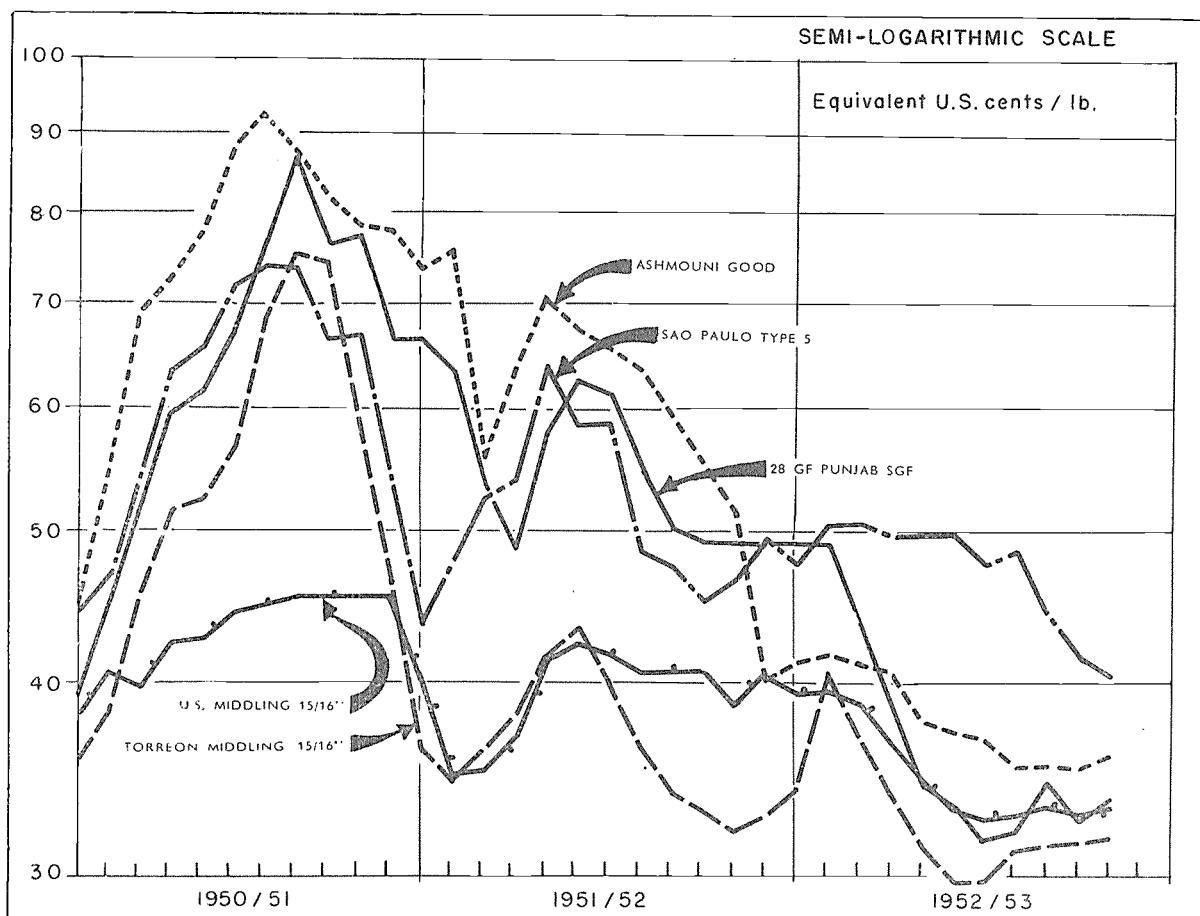
World trade in cotton has been subject to a long-term decline due to industrialization and the accompanying fall in cotton textile imports, and also to the general advance of rayon into cotton's markets. Even under the most propitious conditions in 1949/50 with a cotton shortage expected and prices rising steadily, exports failed to reach the prewar average of 13 million bales. The volume in subsequent seasons at 12 million bales is unlikely to be achieved in 1952/53. Prices of cotton have declined to support levels, and except for strategic reasons, there is some incentive in importing countries to allow stocks to run down.

The United States share in world trade in cotton, which before the war was broadly determined by the availability of other cottons at or slightly below the United States support price, has over the past few years been more determined by the dollar shortage and the scale of United States foreign aid for cotton. Only in 1950/51 when a world cotton shortage developed and export restrictions were in force in the United States, did United States shipments fall below the prewar propor-

TABLE 69. WORLD AND UNITED STATES EXPORTS OF COTTON

YEAR	World	U.S.A.	Percent U.S.A.
	<i>..... Million bales</i>		
1934-38 average . . .	13.0	5.3	41
1948/49.	10.7	4.7	44
1949/50.	12.5	5.8	46
1950/51.	11.9	4.1	34
1951/52.	12.0	5.5	46

FIGURE 11 - WORLD COTTON PRICES 1950/51 - 1952/53
(Local price plus export taxes)



tion. In 1952/53 some symptoms of the prewar situation reappeared. Dollar aid for cotton in various forms is still necessary, but larger export availabilities of non-dollar cottons have now developed and these are moving into export channels freely and under various forms of trade agreements at prices more competitive with United States prices than at any time in the past four years. Consequently the United States share of the world's market may contract.

The absence of a world market for cotton in the postwar era and the multitude of governmental operations affecting trade in this commodity makes the determination of its world price exceedingly difficult. In the early postwar years, when textile industries were being rehabilitated and war accumulations of cotton were being worked down, United States prices tended downwards and those elsewhere upwards — a symptom of the developing dollar shortage. But while the dollar short-

age curtailed demand for United States cotton this brought only limited reductions in United States prices since they were already coming to rest on the official support level. The curtailment did, however, have a counterpart in an expanded demand for non-dollar cottons. The output of such cottons was expanding only very gradually. In consequence, prices for non-dollar (Brazil, Egypt, Pakistan) cottons have since 1948 tended to a premium over dollar (United States and Mexican) cottons. This premium has narrowed with foreign aid programs for United States cotton and increased supply of non-dollar cotton.

During 1952/53, the outstanding feature has been the diminished demand for all cottons, the fall of United States prices to the support level and the virtual disappearance of the premia for non-dollar cottons. In fact, some countries, notably Egypt, have introduced price support arrangements linked with United States prices.

Outlook

The 1953/54 season will be a crucial one for cotton. With prices at a lower level than at any time in the last four years, and resting largely on official supports, governments are already discouraging cotton production. In the United States a crop 2½ million bales smaller than last season was officially recommended, but the first estimate of the area planted, at 24,618,000 acres, indicates a crop of perhaps one million, but not more than 1½ million bales smaller. Official cotton acreage restrictions are in force in Pakistan, Egypt, and Syria and reduced plantings are expected also in Mexico and Turkey. In general, therefore, even excluding the possibility of yields falling below last season's relatively high level, a fairly substantial reduction in the world crop is anticipated.

A reduction of 3 million bales in the world cotton crop would bring it substantially into line with the current rate of world consumption. The future of cotton consumption is, however, doubtful. The conflicting long-range influences of losses of markets to manmade fibers and of gains in standards of living in densely populated regions where cotton textiles are consumed on a large scale are not easy to balance. In any event, they may be masked in the short period by the influence of price fluctuations and general industrial levels. The outcome of the 1953/54 harvest and the way in which governments define their production and price policies will therefore be important factors determining the volume of consumption achieved next season.

As to the longer range factors, it cannot be assumed that the inroads made by synthetics into cotton's markets will be continued at the same rate as in the past few years. Early postwar technical

and economic advantages of rayon may now be nearing fullest exploitation and new advantages may be less easily developed. At the same time the promise which rising standards of living hold for increased cotton consumption can be expected to be fulfilled only gradually and will depend to a considerable extent on continued economic progress in underdeveloped countries.

As importing countries have tended to allow stocks to run down somewhat, an increase in prices would encourage trade. Longer range prospects depend on the nature of the price leadership given by the United States. Since export subsidies for cotton have now been officially ruled out, the world price structure for cotton and the volume and pattern of trade in it will depend on the more fundamental issues of United States agricultural policy.

WOOL

Current Situation

The present world wool situation shows a better balance than at any time in the postwar era. Production and consumption are approximately in line and slowly rising, and stock movements have tended to equalize and stabilize prices.

From 1946 up to 1950, world consumption was running 20 percent ahead of production. The wartime shortage of textiles and the high levels of real income in the postwar period stimulated consumption. This was made possible by releases from substantial stocks of British Commonwealth and other wools accumulated during the war. The postwar boom in textiles was extended by the strong buying movement which followed the outbreak of the Korean conflict. For wool it was heightened by projected large scale strategic re-

TABLE 70. WOOL: WORLD PRODUCTION, CONSUMPTION AND STOCK CHANGES

ITEM	1946/47	1947/48	1948/49	1949/50	1950/51	1951/52	1952/53
..... Thousand metric tons clean basis							
World clip	964	953	977	999	1,036	1,044	1,110
Changes in stocks in producing countries and government hands	— 114	— 181	— 54	— 200	+ 10	+ 34	...
	1947	1948	1949	1950	1951	1952	
World consumption	1,108	1,158	1,107	1,213	1,027	1,046	
Changes in stocks in consuming countries	— 30	— 24	— 77	— 15	— 2	— 36	

TABLE 71. WORLD TRADE IN WOOL¹: SEASON OCTOBER-SEPTEMBER

PERIOD	Exports				Imports ²				
	Dominions ³	S. America	Others	Total	U.S.A.	Europe ⁴	Japan	Others	Total
<i>Thousand metric tons clean basis</i>									
1934-38 average	338	118	94	550	61	425	49	15	550
1947/48	528	196	51	775	219	452	6	38	715
1948/49	537	90	53	680	124	526	12	38	700
1949/50	579	158	83	820	212	495	22	36	765
1950/51	424	100	51	575	164	343	35	33	575
1951/52	465	50	55	570	166	375	40	25	600

¹ Excluding wool on skins.² Retained. Imports are for calendar year beginning in season indicated.³ Excluding J. O. shipment to U.K., including sales of J. O. wool at U. K. auctions.⁴ Including U.S.S.R.; excluding J. O. shipments to U.K., including sales of J. O. wool to British mills at U. K. auctions.

quirements and by the exhaustion of the wartime accumulations. During this period, textile trade stocks increased while wool prices advanced greatly. This led mills to use a larger admixture of substitutes, not only mungo and shoddy, but also of manmade fibers.

Subsequently, the general reaction to large stocks was a severe contraction in wool consumption. The decline would have been even more severe, particularly in the United States, had it not been for the increase in military orders offsetting, to some extent, the decline in civilian demand. The reaction in prices was even more marked; wool prices shranked to a fraction of their previous peaks and this tended to discourage wool textile buying. Throughout 1951/52 mill activity remained at a reduced rate with wool consumption 10 percent below current production.

In 1952/53 the recession gave way to gradual recovery. Textile stocks having been worked down to normal levels, home and export demand improved. Confidence in wool prices recovered. Governmental price support operations in the United States and strategic stock purchasing by the United Kingdom contributed to this, as did also the eventual downward adjustment of Argentine wool prices to world levels, through currency devaluation. There was also the fact that wool prices had receded to their pre-Korean relationship with prices for synthetics. The proportion of virgin wool used by the major wool textile industries increased significantly in 1952 after the setback of the two preceding years; from 68½ percent in the first quarter of 1950 it fell continuously to 57 percent in the third quarter of 1951 and then rose to 66½ percent in the first quarter of 1953.

Except for a pause in 1947/48, world wool production has expanded gradually throughout the

postwar period to a record clip (on a clean basis) in the 1952/53 season. The expansion is mainly attributable to British Commonwealth countries in the Southern Hemisphere. There has been some decline in South American production from the exceptionally high levels reached at the end of the war and the postwar decline in North American production has been proportionately large. In recent years there have been some signs of recovery in these areas. In Europe and the Soviet Union, the postwar trend has been upwards as sheep numbers recovered from the wartime decline.

Postwar world trade in wool has been larger than prewar. Since the exhaustion of wartime stocks in 1950 the increase over prewar has been about 5 percent. The larger and freer availability of "Dominion" wools has resulted in their occupying a larger share of the world market. Trade in South American wools has been adversely affected by currency and trade difficulties and by attempts to maintain export prices above the world level. The shrinkage in Argentine shipments in 1951/52, due to this latter factor, resulted in considerable stock accumulation. With the devaluation of the Argentine peso for wool exports in July 1952, however, these stocks were reduced. There was generally a substantial increase in wool exports in 1952/53.

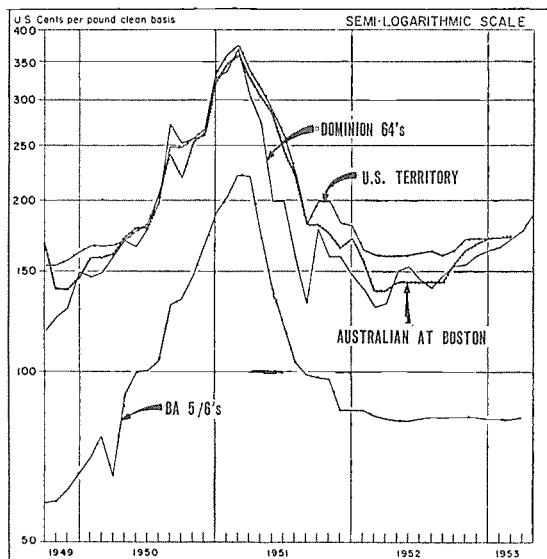
On the demand side, the outstanding feature has been the increase in United States imports to about three times their prewar volume. During 1952 there were times when world prices plus the United States tariff were somewhat below the United States support prices and this tended to bring about a displacement of domestic by foreign wools. The rising trend of world wool prices throughout most of the 1952/53 season has, however, altered the situation. Among the special

factors influencing demand since 1951/52 has been strategic stockpiling of wool by the United Kingdom government. Purchasing for this purpose was suspended at the end of the 1952/53 season.

Outlook

Given favorable economic conditions, recovery in the wool textile industry may continue. With prices on a sounder basis than at any time in the

FIGURE 12 - WOOL PRICES 1949-53



Notes: *Dominion 64's*: United Kingdom and Dominion Agencies.
Australian at Boston: 64's, 70's in bond.
U.S. Territory: 64's, 70's, 80's: Boston.
BA 5/6's: Buenos Aires, scoured, in bond at Boston.

past few years manufacturers will feel more inclined to increase their usage of wool and to extend their operations. Commercial stocks of wool are by no means over-abundant and some rebuilding may occur.

The average rate of increase in wool production has been about 3 percent annually over the past five seasons, a rather higher rate (6 percent) being achieved in 1952/53. Expansion is, however, dependent on many uncertain factors and highly susceptible to weather conditions. Moreover, the past few years have demonstrated that variations in consumption in the shorter run may be comparatively wide and prices unstable.

Over the longer term wool prices will be affected by advances in technology and falling costs of manmade fibers. Exceedingly high prices for wool in recent years have provided an opportunity for the usage of such fibers in products formerly entirely or largely manufactured from wool.

The extent to which this will continue depends largely on the quality of such fibers and their ability to replace wool.

JUTE

Current Situation

After a prolonged and, at times, acute shortage, jute supplies became plentiful in 1951/52 and have been in surplus since 1952. The market for jute products for certain uses, which had previously been reduced as a result of the shortage and high price, is to some extent being recaptured. But the demand for raw jute has so far been insufficient to prevent an accumulation of stocks in Pakistan, where price support operations have been in progress, and raw jute cultivation is to be severely restricted in the 1953/54 season.

Postwar recovery of raw jute production was delayed until 1950/51 as the main producing region, the Indian subcontinent, suffered from food shortages and was adversely affected by political partition. With partition, the main jute growing areas fell to Pakistan and the major jute manufacturing center to India. Obstacles to trade and maladjustments in policies resulted in a declining production of raw jute and jute goods. India pursued a policy of jute self-sufficiency, extending the area under cultivation, and while raw jute supplies were scarce locally, jute manufacture was curtailed. With outlets limited, Pakistan curtailed raw jute production.

On the other hand, world demand for packing materials and other products into which jute enters was expanding with the growing postwar volume of agricultural and industrial production. In consequence, prices for jute and jute goods reached extraordinary heights. In Pakistan and India heavy duties were imposed on exports of raw jute and jute goods respectively, and both countries made efforts to safeguard hard currency markets by the imposition of destinational quotas on exports to the remaining markets.

The period of shortage gave signs of ending in 1951 with the expansion of India's production to a volume which took care of two-thirds of domestic consumption and with the subsidence of post-Korean inflated demands. It had, however, undermined Indo-Pakistani jute and jute goods markets in Europe, America and elsewhere. Expansion in jute growing outside the Indian sub-continent has been considerable only in Brazil and the development of substitute natural fibers has not been notably successful as yet. A relative decline in the use

TABLE 72. RAW JUTE: PRODUCTION, EXPORTS AND CONSUMPTION

ITEM	1934-38	1948/49	1949/50	1950/51	1951/52	1952/53
<i>..... Million bales</i>						
<i>Production</i>						
Pakistan	{ 10.0 }	5.5	3.3	6.0	6.3	6.8
India		2.0	3.1	3.3	4.7	4.7
TOTAL	10.0	7.5	6.4	9.3	11.0	11.5
<i>Exports-Overseas</i>						
Pakistan	{ 4.2 }	1.8	1.7	4.2	3.2	14.0
India		0.6	0.6	—	—	—
TOTAL	4.2	2.4	2.3	4.2	3.2	14.0
<i>Consumption</i>						
India	6.4	6.5	5.3	5.7	6.1	15.6

¹ Estimates.

of jute goods has taken place through different methods of handling produce formerly packed in jute and through the use of paper (bags), especially in the United States.

Raw jute production has expanded steadily over the past three seasons. Both India and Pakistan have extended the area under cultivation, but India is now concentrating on improving yields. Measured by exports overseas and consumption in India, consumption fell substantially short of production in the 1951/52 season; about 1½ million bales of Pakistan's crop was carried over into the 1952/53 season. Since production increased further, the world supply of raw jute was at a near record volume. While recovery of markets, notably in hessian bags in the United States, is in progress, it has not yet been translated into a volume of demand for raw jute which would stem the further accumulation of stocks. Despite a substantial reduction in Pakistani minimum prices and in export duties which brought raw jute prices well into line with other prices in their relationship to prewar, the offtake during the 1952/53 season showed no sign of increasing substantially. In view of this and pressing food production needs, Pakistani authorities decided to curtail jute production by approximately one-third in 1953/54.

Outlook

Although production in Pakistan may be no more than 3 to 4 million bales in 1953/54 as compared with 6.8 million in the preceding season, it

will be supplemented by a substantial carryover, possibly about 2½ million bales. In India, the extension in the jute area appears to have come to an end. Although yields may improve, low prices are likely to result in some cut-back in production. Including the carryover, a world supply of about 10 million bales is likely given normal yields.

If demand generally remains good, the 1953/54 season should see the scale of raw jute requirements rise. With prices at a lower level and less vulnerable, in view of the prospective reduction in Pakistan's stocks, there is greater incentive to buy. Moreover, the reduction and alignment of export duties in Pakistan and the greater freedom of trade channels on both export and import sides which now prevails, is conducive to trade. At the same time assurance of a substantial offtake is given by a wide range of trade agreements negotiated by Pakistan. The agreement with India extends over three years and provides for the shipment of at least 1.8 million bales annually.

Of longer term significance is the improvement in jute's position at the manufactured goods stage. Duties on the export of jute goods from India have been successively reduced and such exports are now no longer subject to destination quotas. Moreover, a sharp recovery has taken place in the consumption of hessian in the United States. Eventually these developments should find their reflection in an expanding demand for raw jute.

RUBBER

Current Situation

Instability in the world market for natural rubber has been aggravated in recent years. The large scale synthetic rubber industry built up during World War II would in any event have been a new source of potential instability, but special measures taken to secure strategic requirements, especially after the outbreak of the Korean conflict, and their subsequent adjustments, have been the main destabilizing influences. There have been large non-recurring demands for natural rubber for strategic stockpiling, while consumer demand has been met to an increased extent by expansion in synthetic rubber output. In 1952, strategic purchases tapered off at the same time as the full impact on consumption of the displacement of natural by synthetic rubber became felt. Notwithstanding a downturn in production, prices for natural rubber receded sharply in 1952.

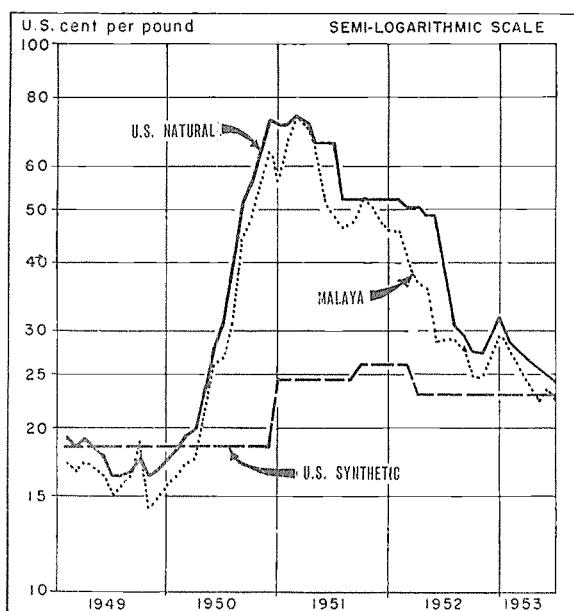
Postwar recovery in natural rubber production was strong until 1949, when it reached 1.5 million tons, i.e., about 50 percent above the prewar average. Recovery took place in South-East Asia; elsewhere production was declining though higher than in prewar years. In the two following years, with the sharp increase in prices attending the outbreak of the Korean war, output reached the exceptionally high level of almost 1.9 million tons. The increase in supply came largely from Indonesia, where smallholders' output doubled. With the recession in demand and falling prices, production fell to 1.8 million tons in 1952. All the major producing countries shared in the setback. It was, however, largely concentrated in small holdings; estate production in Malaya and Indonesia showed remarkable resilience.

Until distorted by strategic requirements, the trend of natural rubber consumption was moderately upwards, being rather more marked in Europe than in the United States. A record volume of 1.7 million tons was reached in 1950, but in the following two years consumption averaged about 1.5 million tons, roughly corresponding to the level of production prior to the Korean conflict. The downward adjustment was almost wholly attributable to the United States, where restrictions on the consumption of rubber favored the synthetic product, while purchases of natural rubber were made for the strategic stockpile. Elsewhere consumption has been steadily at about 1 million tons annually over the past three years.

During 1952, however, the United States rubber

industry operated under conditions of increasing freedom from government regulations. At the beginning of the year, limitation of the total consumption of rubber (natural and synthetic) was terminated. By mid-1952, a series of relaxations relating to the allocation of synthetic rubber, to the control of natural rubber, and to the return of importation of natural rubber to private trade left natural rubber virtually free from discrimination, apart from national security provisions for a minimum usage of 510,000 tons of synthetic rubber. Actual usage in 1952 totalled 807,000 tons.

FIGURE 13 - RUBBER PRICES IN THE UNITED STATES AND MALAYA 1949-53



Notes: U.S. Natural: No. 1 R.S.S. New York — Malaya: No. 2 R.S.S. Singapore — U.S. Synthetic: GR-S, United States.

After their sharp rise, downward adjustments of natural rubber prices proceeded a stage further and rather more sharply in 1952. At the end of the year they were not far out of line with pre-Korean levels and were again competitive with prices for the synthetic product. The bulk of synthetic rubber is a product of United States government-owned industry. It has been suggested that there are elements of cost normally borne by private industry which are avoided in governmental operations. To the extent that this is reflected in the synthetic rubber price, the latter cannot be regarded as truly competitive. As it is now intended to turn the industry over to private hands, however, this problem may be avoided.

Outlook

Over the past few years, natural rubber production has been consistently in excess of consumption; in 1952 the excess amounted to 365,000 tons. The excess mainly reflected governmental stockpile purchases as commercial stocks have remained

TABLE 73. RUBBER: WORLD PRODUCTION AND CONSUMPTION

ITEM	1952	1953
<i>Thousand long tons</i>		
Production :		
Natural	1,815	1,785
Synthetic	877	989
TOTAL	2,692	2,774
Consumption :		
Natural	1,450	1,595
Synthetic	885	909
TOTAL	2,335	2,504
Balance :		
Natural	365	190
Synthetic	—8	80
TOTAL (for addition to government and commercial stocks)	357	270

relatively stable. An increase in consumption and a further decline in production is expected to reduce the surplus to 190,000 tons in 1953.

There are prospects that natural rubber will capture a larger share of the expanding rubber usage, especially in view of the greater scope for

competition with the synthetic product given the more favorable natural/synthetic rubber price relationship. At the same time, the United States has not yet finished stockpiling. Purchases for this purpose and by commercial stock purchasers are expected to absorb the surplus and to prevent any further significant decline in prices.

The short-term outlook may also be influenced by trends in motor car production. The United States car industry has been running well above replacement requirements for several years, and may average somewhat lower in the years immediately ahead than recently, with consequent effects upon the total demand for rubber.

Surpluses in more immediate years may very well give way to deficits in the years further ahead, in view of the rising long-term demand for rubber and the discouraging trend of current prices on future natural rubber production. Much depends on the trend of private investment in the United States synthetic rubber industry and the prices ruling when in private hands. The International Rubber Study Group met in May 1953 and discussed the possibility of an international commodity agreement for natural rubber. It decided, however, to postpone a decision until later in 1953.

HARD FIBERS

Current Situation

The strong postwar demand for hard fibers which had been reinforced by governmental stockpiling and by some speculative purchasing in more recent years, abated in 1952. With output maintained at relatively high levels, there was some increase in stocks, and prices declined sharply.

Production of hard fibers continued in 1952 at a rate about 10 percent above the prewar volume. The postwar pattern of output has altered considerably in favor of sisal. This is due not only to

TABLE 74. PRODUCTION OF HARD FIBERS

PRODUCT	1935-38 average	1949	1950	1951	1952	1953 ¹
<i>Thousand metric tons</i>						
Abaca	187	90	122	156	145	130
Sisal	257	276	309	355	363	300
Henequen	110	120	114	104	109	90
Other	66	64	55	55	50	50
TOTAL	620	550	600	670	665	570

¹ Provisional estimates.

TABLE 75. IMPORTS OF HARD FIBERS

AREA	1935-38 average	1949	1950	1951	1952 ¹
..... <i>Thousand metric tons</i>					
North America	201	189	242	285	308
Europe	250	160	210	220	190
Japan	68	37	25	20	24
Other countries	21	26	28	35	33
WORLD TOTAL	540	412	505	560	555

¹ Provisional estimates.

... Not available.

the advantageous wartime location of the main producing areas (e.g., British East Africa) but to technical changes in hard fiber usage and to the fact that sisal is a non-dollar commodity. Philippine abaca output declined in 1952 and 1953, largely as a result of the typhoons. Output of sisal and henequen continued to increase in 1952 and stocks in Brazil, Mexico and in Europe were mounting. Efforts to maintain prices failed; they broke sharply first in sisal and later in henequen.

The importance of North America in world hard fibers markets has greatly increased in post-war years reflecting the greater expansion in agricultural and industrial output, as well as a substantial volume of strategic stockpiling. European and Japanese imports have failed to reach prewar volume. In 1952 the sustaining influence of North American demand was particularly marked.

Outlook

Output appears to be adjusting itself fairly rapidly to the changed market situation with a reduction of perhaps 15 percent in prospect for 1953. On the other hand, demand may now be expected to improve since there has been no significant decline in consumer demand for cordage and cordage stocks are being reduced. Stockpiling for strategic reserves which accounted for perhaps 10 percent of total offtake in previous years may also continue. Competition between producers, however, promises to be more intense than in earlier postwar years, and production of high cost producers is likely to fall.

FOREST PRODUCTS

The year 1952 marked the first serious post-war recession in the trade of most categories of forest products except newsprint. Europe, highly

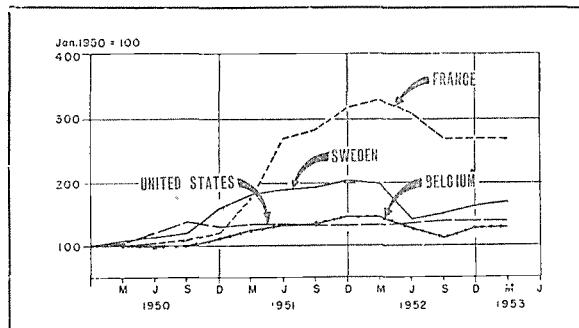
dependent on international trade, was the hardest hit. North America, however, was less affected by the shrinking market. The demand for newsprint continued at a high level throughout 1952.

Prices of most forest products were subject to marked fluctuations in 1950-53. Fears of a shortage following the outbreak of the Korean war led to heavy buying with considerable increases in importers' stocks, and during 1951 there was an unprecedented rise in prices. By the end of 1951, importing countries, fortified by newly accumulated stocks, were beginning to react against the high level of prices. The market deadened, and prices took a violent downward turn in 1952, except in North America. Any hopes that European prices would quickly stabilize at a reasonable level were frustrated by a real reduction in demand, especially for pulp and paper other than newsprint, that accompanied the check in the general rate of economic growth which occurred in 1952. Though sawnwood prices had steadied by mid-year, it was not until the closing months that the European pulp market began to manifest firmer tendencies.

Price fluctuations were much more violent in countries and regions which depend greatly on international trade than in more self-sufficient regions. Whereas most of the North American production of forest products is consumed in the United States, more than one-third of the European output enters the international market. Moreover, while ceiling prices were established in the United States for most forest products during the general boom period, price formation was left free in Europe and most other parts of the world. Figures 14-16 show the course of prices for sawnwood, wood pulp and pulp products in these two main regions during the period 1950-1952. Wholesale prices for sawnwood in the United

States and Canada achieved a peak in 1952 of 30 to 40 percent above their January 1950 level, but Swedish and Finnish export prices at their highest in 1951/52 were about double those attained in January 1950. The greater dependence of European countries, both importing and exporting, on trade in sawnwood was responsible for the contrast in the movement of sawnwood prices in North America and in Europe.

FIGURE 14 - PRICES OF SAWN SOFTWOOD 1950-53



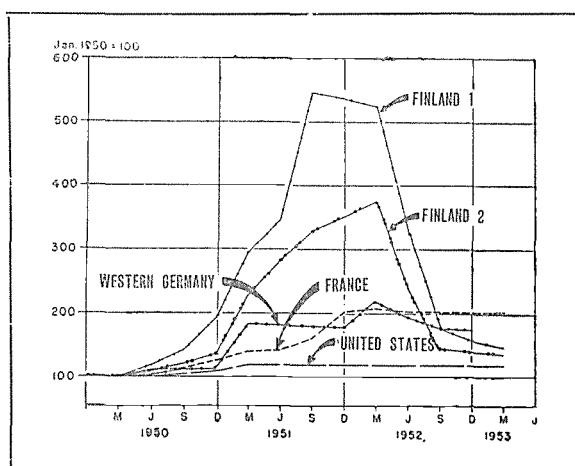
Notes:
Belgium: Average wholesale price from importer to wholesaler.
France: Unedged spruce boards, 26 mm. thick, for construction.
Sweden: Average export price, f.o.b. basis $2\frac{1}{2} \times 7$ in. red wood u/s.
United States: Wholesale prices, Douglas Fir, Dim. No. 1 2×4 in., dried f.o.b. mill, rail shipment.

The contrast was even more marked in pulp. (See Figure 15). The bigger European paper producers depend largely on imported pulp and pulpwood. In 1951 both pulp and pulpwood prices rose rapidly in Europe, and in the importing countries paper producers found it difficult to compete with imported paper, the price of which had not risen to the same extent. Paper imports were curtailed; in France for instance previously lifted import duties on pulp products were reimposed. With prices of imported pulp rising there was greater recourse to lower priced domestic pulp.

Pulp prices in North America remained remarkably steady throughout 1951 and 1952, after the rise of some 20 percent in the latter half of 1950 and the first quarter of 1951 (Figure 15). The relative advance in European pulp export prices from January 1950 to March 1953 was roughly the same, in spite of the extraordinary fluctuations in 1951 and 1952. United States newsprint prices advanced in 1950/51 and again in 1952 by a little more than the wood pulp price increase.

By the middle of 1953 forest products prices in Europe seemed to have reached a level accept-

FIGURE 15 - PRICES OF WOOD PULP 1950-53



Notes:
Finland 1: Sulphate, unbleached, export, f.o.b.
Finland 2: Bleached sulphite other than rayon-pulp, export, f.o.b.
France: Domestic mechanical wood-pulp.
United States: Domestic and Canadian sulphite, bleached, f.o.b. mill Atlantic sea board.
Western Germany: Domestic price, sulphite, unbleached, free at inland stations.

able to buyers and sellers alike. It is generally agreed that any sharp advance is likely to provoke consumer resistance. Both importing and exporting countries hope that the present level will prove stable and give the market that confidence which has been so conspicuously lacking in the last two years.

A brief review of production and trade trends for the major groups of forest products is given below.

Roundwood

The production of industrial roundwood in 1952 was maintained chiefly due to raw material purchases for 1952 and 1953 production being made earlier while the demand was still strong. Production in 1952 is estimated to be about the same as in 1951, and slightly above 1950. The increase in output of roundwood in North America, due to a rise in sawlog output, was offset by a decrease in Europe. In 1952, the European market for forest products declined at a time when substantial new supplies were reaching industry, and accordingly purchases of new raw material for 1953 and 1954 were heavily curtailed. With demand falling off, stocks were reduced. This tendency was reinforced as replacement cost of raw materials also fell. The fall in roundwood production was mainly in softwoods. Moreover,

in Europe in 1952 there was, in general, an almost complete absence of any competition between different categories of roundwood. The slight rise in the demand for pitprops, normally pulpwood's strongest competitor, was much too weak to compensate to any great extent for the fall in the demand for other categories.

Large raw material stocks in most forest industries at the turn of 1952 acquired in Europe at prices somewhat higher than those now ruling, makes it probable that the output of industrial roundwood in 1953 will remain rather low, even if the market for forest products strengthens towards the end of the year. The supply situation in most industries is likely to be fairly satisfactory until 1954.

Sawnwood

International trade in sawnwood, particularly softwoods, reached a postwar peak in 1951, but eased off by 1952 (Table 76). In North America demand had declined rather steeply in 1951, whereas in Europe trade was booming and approached prewar figures. In regions such as Australia and Africa, which largely depend on imported supplies, the volume of trade in sawnwood was also on a high level. All these trends were, however, reversed in 1952, demand reviving in North America but showing a marked fall in Europe and other regions. In 1951 there was an accu-

mulation of stocks in importing countries, and unprecedented rises in prices, except in North America. However, consumers' resistance to high prices, developed in the summer of 1951, reached a high point by the end of 1951. In 1952, the general slackening of the economic activity in most countries added weight to this consumers' resistance. Though trade showed some revival in the summer of 1952, after the sharp fall in prices, it still remained at a rather low level. An up-swing in European trade came in the autumn of 1952, when the United Kingdom commenced large scale purchasing for 1953; thereafter this trend levelled off. The resulting rise in prices continued until the end of 1952 when they seemed to have more or less stabilized at a level some 20 percent below the previous top prices. Other importing countries also began purchasing for 1953 and business generally was rather brisk until the end of April 1953, by which time most of the sawnwood available in the main European exporting countries had been sold. So far as inter-regional trade is concerned, the effects of 1951 overbuying appear not to have been overcome and trade remains at a low level. Balance of payments difficulties and shortages of foreign currencies, particularly of dollars, also contribute to this low level of activity. Imports of sawn softwood (Table 76) in 1952 were 4.44 million stds. (1 std. = 4.672 cu. m.) as against 5.08 million stds. in 1951, and exports fell from 5.36 million stds. in 1951 to 4.44 million

TABLE 76. WORLD TRADE IN SAWNWOOD

REGION	Sawn Softwood			Sawn Hardwood		
	1950	1951	1952	1950	1951	1952
	..... Thousand standards					
EXPORTS						
Europe ¹	2,620	2,860	2,210	1,160	970	460
North and Central America	2,080	2,240	2,020	740	700	600
South America	190	240	² 190	² 200	180	² 150
WORLD TOTAL	4,910	5,360	4,440	2,970	2,720	2,040
IMPORTS						
Europe ¹	2,270	2,990	2,540	1,620	1,590	1,070
North and Central America	1,630	1,210	1,230	790	780	680
South America	185	210	² 170	90	90	² 70
Africa	340	370	² 250	240	250	² 200
Oceania	140	210	² 150	50	70	² 50
Asia	110	90	² 90	170	190	² 170
WORLD TOTAL	4,675	5,080	4,440	2,960	2,970	2,240

¹ Reporting countries only.

² Estimates.

TABLE 77. EXPORTS OF SAWN SOFTWOOD

EXPORTED TO :	Europe ¹		Canada		United States	
	1951	1952	1951	1952	1951	1952
	<i>Thousand standards</i>					
Europe ¹	2,438.1	1,971.3	486.9	460.3	145.0	47.8
North America	2.2	0.2	1,154.1	1,178.6	35.4	42.2
Latin America	60.2	6.7	15.6	12.2	72.8	62.8
Middle Eastern and North African countries	178.1	149.0	10.9	3.6	12.9	12.3
Union of South Africa	46.7	27.1	36.4	21.2	36.8	37.0
Australia	81.9	16.9	46.6	21.9	52.3	30.4
Other countries	52.8	38.3	48.1	28.1	57.9	43.8
TOTAL	2,860.0	2,210.0	1,798.6	1,725.9	413.1	276.3

¹ Europe: Austria, Belgium, Luxembourg, Denmark, Finland, France, Western Germany, Ireland, Italy, Netherlands, Norway, Sweden, Switzerland, Yugoslavia, United Kingdom. Includes exports to countries of Western Europe from Czechoslovakia, Eastern Germany, Poland, Romania, U.S.S.R., as reported by importing countries.

TABLE 78. WORLD PRODUCTION OF SAWNWOOD¹

REGION	SAWN SOFTWOOD			SAWN HARDWOOD		
	1950	1951	1952	1950	1951	1952
	<i>Thousand standards</i>					
Europe ²	8,400	8,600	7,800	8,300	8,600	8,200
North and Central America	19,270	18,570	18,970	18,930	19,680	19,300
South America	650	820	800	1,130	1,430	1,350
Africa	190	190	200	750	940	850
Asia	2,490	2,580	2,500	4,120	4,240	4,200
Oceania	290	340	330	1,920	2,250	2,050
TOTAL ³	31,290	31,100	30,600	35,150	37,140	35,950

¹ Reporting countries only.

² Includes estimates for non-reporting countries in Eastern Europe except Eastern Germany and U.S.S.R.

³ Total sawnwood (softwood and hardwood) in cu. m (1. standard = 4.672 cu. m.): — 1950: 181,000; 1951: 182,000; 1952: 179,000.

stds. in 1952, inter-regional trade declining relatively most. The corresponding sawn hardwood trade figures were 2.24 million cu. m. in 1952 and 2.97 million cu. m. in 1951 for imports and 2.04 million cu. m. in 1952 and 2.72 million cu. m. in 1951 for exports.

As shown in Table 77, shipments from Europe and from the United States to other regions were markedly lower. Canadian exports, on the contrary, were generally fairly well maintained, both to the United States and to more distant markets.

The low demand in 1952 led to a 2 percent decline in the world output of sawnwood, with the relative decline slightly larger in hardwood than in softwood.

Despite the recent decline in world trade and production of sawnwood, there is no reason to believe that the long-term trend in demand has

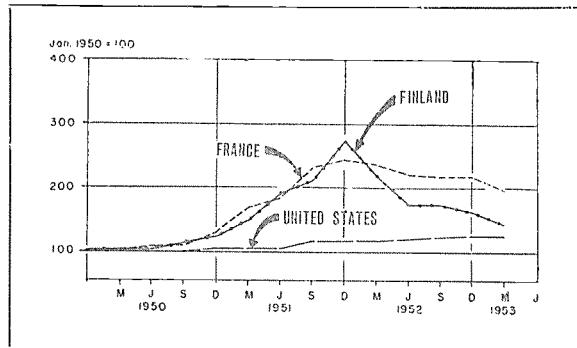
taken a downward turn. The world's total requirements of sawnwood are likely to continue to rise. The developments of 1952 may be regarded as a temporary deviation from the general trend caused by consumers' reactions to high prices. But though total requirements appear to be increasing, consumption per head seems already to have reached its maximum in the most important sawnwood consuming regions, and is likely to show a slight gradual decline in the future.

Wood Pulp and Pulp Products

1952 marked the first postwar recession in demand for pulp and paper. This was due to the rather high level of stocks at the end of 1951 and the unprecedented high prices at that time causing consumer's resistance towards products of the

paper and board industry and pulp mills. The reduction in industrial activity also meant reduced consumption of board and wrapping grades of paper, since these are used in almost every sector of the economy. Although the demand for most pulp products declined, that for newsprint continued at a rather high level throughout 1952 and the first months of 1953.

**FIGURE 16 - PRICES OF NEWSPRINT
1950-53**



Notes: *Finland*: Newsprint, export, f.o.b.
France: Domestic price, f.o.r. newsprint.
United States: Newsprint, standard rolls, freight allowed, contract price N.Y.

There were some parallels in the demand and price trends of the pulp and paper industries in North America and Europe, but the European market fluctuated more violently. The North American continent is generally self-sufficient, and foreign trade is marginal. The great degree of integration in the United States pulp and paper industries resulting in smaller volume of market pulp, coupled with the fact that Canadian wood pulp is largely devoted to newsprint, demand for which remained fairly stable, were mainly responsible for the relatively greater stability of the North American wood pulp market.

In Europe, the major part of pulp production is for the market. The biggest paper producers depend largely on imported pulp. Only the three Northern countries have a considerable export of pulp and for these countries pulp exports are vital. The world demand for wood pulp and pulp products had, in 1951, exceeded the available supply and prices rose to unprecedentedly high levels. The steep rise in European pulp prices, which reached their maximum in January 1952, led the chief European importers, embarrassed by new balance of payments difficulties, to set import price ceilings. Other importing countries did likewise. As a result, new buying was checked, production fell and consumers began to draw on stocks.

In North America pulp price controls checked price fluctuations and the market consequently remained fairly stable. In Europe, however, hopes of an early stabilization of price levels, following a decline in purchases and shrinkage of stocks, did not occur. The slowing down of industrial progress brought difficulties in the paper and board industries and led to a fall in demand. Not

TABLE 79. WORLD PRODUCTION OF WOOD PULP

REGION	1950	1951	1952
<i>..... Thousand tons</i>			
Europe	9,916	10,697	9,714
Finland, Norway.	(6,087)	(6,639)	(5,806)
Sweden	¹ 1,600	¹ 1,800	¹ 2,000
U.S.S.R.	13,471	14,964	14,900
Canada	7,462	8,152	7,970
Latin America	180	184	¹ 200
Asia (excl. China)	724	1,012	¹ 1,170
Africa	33	35	¹ 35
Oceania	154	154	¹ 165
WORLD TOTAL	33,500	37,000	36,200

¹ Estimate.

until the last quarter of 1952 did prices show signs of any levelling off. By then, however, it was generally conceded that they were well below current production costs, many elements of which are temporarily fixed, e.g., roundwood prices, or rigid, e.g., wages. In the latter half of 1952, therefore, production was voluntarily restricted in the main European pulp exporting countries, and in general it remained at a rather low level during

TABLE 80. WORLD TRADE IN WOOD PULP

REGION	1950	1951	1952
<i>..... Thousand tons</i>			
<i>Exports</i>			
Europe	3,970	4,044	3,251
Canada	1,662	2,021	1,751
WORLD TOTAL	5,720	6,250	5,200
<i>Imports</i>			
Europe	3,090	3,468	2,885
U.S.A.	2,164	2,145	1,755
Latin America	317	329	¹ 280
WORLD TOTAL	5,730	6,170	5,090

¹ Estimate.

the first quarter of 1953, although demand was by then beginning to revive.

World pulp production (including estimated output in the U.S.S.R.) attained an all time high of 37 million tons in 1951 but dropped slightly in 1952, especially in the Scandinavian countries. Imports also fell by a million tons as compared with 1951 (Table 80), the biggest declines being recorded in Europe and the U.S.A. The main burden of the reduced export trade was borne by Finland, Norway and Sweden, whose exports fell about 20 percent. Canadian exports also dropped. Both exports and imports of wood pulp, however, fell by about a million tons to a level half a million tons below that of 1950. The efforts made in all regions since the end of the war to raise pulp production have increased regional self-sufficiency. Just as the progress of integration has diminished the relative importance of market pulp on the national level, similarly the need to secure domestic supplies of this essential raw material, has, on the international level, reduced the importance of pulp trade in relation to world pulp output. Imports of pulp for many countries, with notable exceptions, became steadily less important. Alongside this development, the situation of those countries whose economic life depends on pulp exports becomes more vulnerable to fluctuations in world demand.

While world trade and output of wood pulp thus showed a distinct decline in 1952, newsprint showed an increase. World output, which in 1951 had been 8.9 million tons, rose by 0.3 million in 1952, and exports which in 1951 were 4.6 million tons, increased by 0.2 million. As a result of these increases and with an apparently fairly stable rate of consumption, stocks of newsprint reached postwar record levels in many countries and regions, notably in North America. The supply of newsprint in 1952 was for the first time in several years adequate to meet the effective demand.

Production and trade in other papers and boards, principally packaging grades, declined. Production and trade in fiber building boards, which had been steadily expanding since the end of the war, suffered its first postwar setback in 1952. This recession was less severe in North America than in Europe. World production of fiber boards fell from 2.75 million tons in 1951 to 2.21 million tons in 1952, the North American share remaining unchanged at about 1.4 million tons. In the rest of the world, notably in Europe, which is more dependent on international trade, fiber-

board output fell from 0.86 million tons in 1951 to 0.69 million tons in 1952.

The year 1952 witnessed a reappearance of the short working week in some countries and a partial closing down of mills. Events seemed to suggest that the pulp and paper shortage which had been apparent all over the world for several years, and which had been regarded as likely to last well into the future, was a passing phase and that earlier apprehensions were unjustified. This, however, was taking only the short-term view. It is more accurate to regard the 1951/52 phenomena as an inevitable effect of the Korean war inflation and of the slowing down of industrial progress. Taking a long-term view there are several factors making for a steady rise in the demand for wood pulp and pulp products through, for example, increasing industrialization and the progressive liquidation of illiteracy and the general rise in population, real incomes and consumption standards. Even in parts of Europe per caput consumption is still below the prewar level. Consumption is generally expected to continue to increase in the United States though at a lower rate than in recent years. For all these reasons the recession in the world demand for pulp and paper may be regarded as a passing phase and as a temporary deviation from the long-term upward trend.

FERTILIZERS

The trend towards the greater use of fertilizers in all parts of the world continued in 1952/53. This tendency is specially marked in countries where commercial fertilizers have been used relatively little hitherto. Governments of many countries show increasing interest in the use of fertilizers and manures as one of the quickest means of getting increased production of food crops.

Production and consumption returns of fertilizers in 1952/53 are still incomplete, and total figures cannot yet be given. The percentage figures given below may however be taken as reasonably good approximations, being derived from returns covering most of the countries of high production and consumption. The total production of nitrogen (N), phosphoric acid (P_2O_5) and potash (K_2O) in 1952/53 shows an increase of 9 percent over that for the previous year. The world production of nitrogen (N) shows an estimated increase in 1952/53 of 9 percent over 1951/1952. The biggest increase was in North America (14 percent). Considerable interest is being shown in the production of nitrogen fertilizers in the

Middle East oil fields, using natural gas and refinery waste gas as a source of energy (and of sulphur), but no plant has yet been erected in this region. Output of phosphoric acid showed an increase of about 5 percent for 1952/53 for the world as a whole, reflecting some easing in the acute shortage of sulphur which was responsible for restricting the manufacture of superphosphate in the previous year. Some acid plants were adapted to use pyrites instead of elemental sulphur and development work was continued on the manufacture of phosphatic fertilizers by processes not requiring sulphur. The increase in world production of potash in 1952/53 over 1951/1952 is estimated to have been over 10 percent.

The consumption in 1952/53 of plant nutrients in the form of commercial fertilizers is estimated to have increased by about 10 percent over the previous year. Nitrogen shows the highest over-all increase, about 14 percent, with phosphoric acid and potash 8 percent and 9 percent respectively. There are, of course, big variations in the rate of increase in different parts of the world. Some of the newly developing countries show relatively high rates, but highly developed countries with old established and relatively intensive agriculture have also increased their consumption considerably. In the United States, for example, consumption of nitrogen increased by 16 percent, and in the United Kingdom the increase was 15 percent.

The outlook for the immediate future is for continued increases in consumption of all plant nutrients at rates close to those shown in recent years, and for production to increase, at least for the next few years, at rates sufficient to cover the increased demand.

PESTICIDES

The supply situation for nearly all pesticides was satisfactory in 1952, with the exception of sulphur, which has been in short supply for a number of years.

The use of pesticides is steadily increasing; production could keep pace with demand if consumers would make known their needs in advance in order to allow time for production, formulation and shipment. The 1952 demand was met in a satisfactory manner primarily because of the wide acceptance of recently developed pesticides which, having outgrown the experimental stage, were used partly as substitutes for and partly as supplements to the older pesticides.

The expansion of the industry producing chemicals used in the manufacture of pesticides and the removal of restrictions on some newly developed materials in the main producing countries, such as the United States, indicates that supply may generally match the demand. It is, however, important, especially for countries distant from producing centers to place orders early and thus avoid shortages.

FARM MACHINERY

World production and exports of tractors in 1952 fell considerably short of the record level in 1951. Expansion in some European countries was more than offset by the decline of production in the United States and United Kingdom. Tractor numbers in agriculture, however, continued to increase in all regions, including the economically under-developed parts of the world, but at a slower rate than in 1951.

Production and Export of Tractors

The production of tractors in the United States (see Table 81) in 1952 was 23 percent less than in 1951. This decline was in part due to the temporary steel shortage arising out of the steel strike. Exports, mostly absorbed by Canada and Latin America, showed an even more substantial decline, dropping from 104,165 units in 1951 to 72,881 in 1952.

TABLE 81. TRACTOR PRODUCTION BY MAIN PRODUCING COUNTRIES

COUNTRY	1949	1951	1952
..... Thousand units			
U.S.A.	600.1	570.8	437.3
United Kingdom.	90.4	140.2	124.3
W. Germany.	26.9	89.1	105.0
France	20.8	19.9	29.7
TOTAL.	738.2	820.0	696.8

In the United Kingdom, the 1952 tractor production was about 11 percent less than in the previous year. Exports, however, decreased by only 7 percent over 1951 because of the continued policy of assigning priority to production for

TABLE 82. TRACTOR EXPORTS IN 1952

REGION OF DESTINATION	Countries of origin				Regional total imports
	U.S.A.	U.K.	W. Germany	France	
Europe	2,778	49,218	13,784	1,679	67,459
North America	37,667	8,644	82	—	46,393
Latin America.	19,787	3,338	4,012	349	27,486
Far East	1,239	1,385	253	153	3,030
Near East.	1,340	8,462	4,222	146	14,170
Africa	4,018	6,567	1,093	1,090	12,768
Oceania	3,363	20,060	141	—	23,564
Unknown	2,689	7,268	3,051	829	13,837
TOTAL	72,881	104,942	26,638	4,246	¹ 208,707

¹ Total world imports in 1952: 220,190 units.

export. Approximately 85 percent of the total production was exported, principally to Europe and Oceania.

In the Federal Republic of Germany the tractor industry continued in 1952 the upward trend observed since the end of the war, setting a new production record, 17 percent over the previous year. Exports increased even more significantly and were 21 percent higher than in 1951. Substantial amounts of Germany's exports were absorbed by other European countries, Argentina and Turkey.

France produced in 1952 approximately 50 percent more tractors than in 1951 and surpassed the 1949 record. Approximately 14 percent of the production was exported, mostly to other European countries and French colonies in Africa. Italy continued its foreign trade drive exporting about 2,700 tractors in 1952, with Europe and Latin America as the most important markets. Canada's exports amounted to about 6,150 tractors, the major proportion of which were sold to the United States and smaller amounts to Latin America. Small numbers of tractors were also exported by Sweden, Czechoslovakia, Austria and the Netherlands.

Mechanization in Newly Developing Regions

The number of tractors imported into the underdeveloped areas showed a marked decrease compared with 1951, being about 50,000 units less than the record level of the previous year.

Latin America continued its process of rather rapid mechanization which is fairly evenly spread throughout most of the region, even though imports, at 27,000, were appreciably less than the year before. Principal importers were Argentina (8,000), Brazil (7,000) and Mexico (5,000). By the end of 1952 there were estimated to be around 170,000 tractors in this region. Considerable progress has been made in many countries in the establishment of facilities for training operators and mechanics and most countries have established agricultural machinery pools whereby small farmers can gain access to the use of farm machinery.

Tractor numbers in the Far East increased only very slightly during the year with imports at about one-third of the 1951 level. Unlike Latin America, where tractors are being used primarily for actual farming operations and are mostly individually owned, a large proportion of the tractors are imported and used on government account, mainly for land reclamation and clearance and the initial tilling of such land before it is handed over to small cultivators. This equipment is utilized by central organizations which control the operation, servicing, maintenance and repair. Generally speaking, the technical and economic difficulties of using mechanized equipment for farming are very great in this region and more attention needs to be given to the improvement and effective use of animal-drawn and hand-operated implements.

Tractor numbers increased substantially in the Near East where imports were nearly 50 percent

higher than in 1951. This was principally due to the mechanization program of Turkey which took approximately 90 percent of the regional imports. In Africa, however, the increase during the year was very slight, imports dropping to almost half the 1951 figure.

On the whole, progress has been made during 1952 in providing the facilities and the training that is needed for the effective introduction of

mechanization into agriculture. FAO has rendered major assistance in this respect in the Far East, notably to India, Pakistan and Ceylon, and in the Near East. This assistance includes the development of field services to ensure full employment of machinery, organization of adequate workshop practices, improvement of small indigenous farm implements and training of technicians in each of these fields.

TABLE 83. NUMBER OF TRACTORS USED IN AGRICULTURE

REGION	1949	1950	1951	1952
<i>..... Thousand units</i>				
Europe ¹	880	990	1,120	1,230
North America.	3,919	4,174	4,276	4,375
Latin America	98	123	153	169
Far East ²	13	20	26	30
Near East	15	22	38	50
Africa	73	88	106	112
Oceania	124	142	170	193
TOTAL	5,122	5,559	5,889	6,159

¹ Excl. U.S.S.R.

² Including tractors only on government stations in China.

APPENDIX

Note on Indices of Agricultural Production

The present index number series of the volume of agricultural production represents further developments of the series appearing in *The State of Food and Agriculture: Review and Outlook 1952*. The availability of more and better statistics has made it possible to include more commodities and to adjust the series more closely to a concept of "net" production.

This year the following additional commodities have been included: fruits, vegetables, all dairy products (expressed in terms of milk equivalent), poultry and eggs. The commodity groups included are as follows: grains, starchy roots, sugar, pulses, oil crops, nuts, fruits, vegetables, wine, livestock and livestock products, fibers, rubber, beverage crops and tobacco¹. The index series thus includes all the principal food and agricultural commodities, with the exception of fishery and forestry products. All commodities are included in the index at the farmgate level except in the case of livestock production, where the individual items are included in terms of meat and fat rather than in terms of total animal carcass weight, and in the cases of oil, wine and sugar.

To prevent double counting an allowance is made for all crops used as feed, both from indigenous production and imports. A deduction is

¹ Except U.S.S.R. which excludes fruits, nuts, wine, vegetables, eggs and tobacco and where the coverage of the other groups is also incomplete; and Eastern Europe where eggs and vegetables are excluded.

also made for cereals and potatoes used as seed. A further allowance is made for skim milk used as feed. These feed and seed deductions have not been made for Africa because of the lack of data. In the case of northern and southern Europe additional deductions were made for processed feeds such as oilcakes and bran, both from domestic production and imports. None of these allowances were made in the 1952 index series.

The weighting system, base period, and statistical formula are essentially unchanged from the 1952 series. The weighting system is based on wheat relative price weights existing in the 1934-38 period. The commodity weights are derived mainly from world prices. In the case of many commodities these prices are the average prices in exporting countries adjusted to weighted averages of national prices in leading producing countries. For those commodities not moving in large amounts in international trade or where exports consist largely of special quality varieties, weighted averages of national prices in leading producing countries have been used. Calculating each commodity price in terms of gold francs per metric ton automatically establishes its price relation to wheat, since the price of a metric ton of wheat in the base period was 100 gold francs.

The FAO index numbers are based generally on the five-year period 1934-38. In the 1952 index series this base was used for all countries. This year exceptions have been made in some countries to allow for abnormal conditions that prevailed in the 1934-38 period. The main exceptions are: Spain 1931-35; Australia, 1936-39; and Canada, New Zealand and the United States, 1935-39.

THE STATE OF
FOOD AND AGRICULTURE
1953

PART II - LONGER TERM PROSPECTS

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
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INTRODUCTION

A resolution of the Sixth Session of the FAO Conference, held in November 1951, placed on record "its belief that a well-balanced increase of one to two percent per annum in world production of basic food and other essential agricultural products in excess of the rate of population growth may be all that can be reasonably hoped for in the years immediately ahead, but is the minimum necessary to achieve some improvement in nutritional standards." The Conference went on to recommend "that all Member Countries should co-operate in the effort to achieve this overall objective by preparing and carrying out forward agricultural development plans suited to their own circumstances and conditions, covering the next five years and designed to provide their contribution to the achievement of the objective." Finally it decided "that these national programs and their progress should be reviewed at FAO regional meetings...with the object of promoting regional co-ordination and making available to the Conference following...an overall review of the programs prepared and the progress achieved and an assessment of the contribution they have made and will make to meeting the world's increasing need for food and other essential agricultural products."

The present report has been prepared in accordance with these instructions. It is based on statements and estimates which Member Governments were invited to submit to FAO on their present agricultural policies and production objectives, and on published agricultural programs and other material available to FAO. Regional Meetings on the lines proposed were held for the Far East at Bangalore and for the Near East at Cairo in July and September 1953 respectively. In preparation for these meetings, and for a third meeting in Latin America, projected but not held, staff visits were made to most countries in these three regions and detailed information collected on agricultural production programs or expected lines of development. On the basis of this information draft reports were prepared on prospects in the three regions. Those for the Far East and Near East were amended in detail and approved at

the Regional Meetings, while the Latin American draft was sent to all countries in the region for comment. Copies of all three reports are available.

An attempt is made in the following pages to build up an overall picture of how the food and agricultural situation may develop in the next few years if governments' present objectives and estimates are realized. The first chapter briefly reviews expected trends of production in each region and in the world as a whole. The second considers how these changes may affect the supply position for some of the main commodities. Finally the third discusses some of the technical and economic factors which may determine how far the expected increases in production are achieved.

It should be stressed that the estimates of production in or around 1956/57 which follow are not FAO forecasts. Essentially, they represent what governments planned to do or expected would happen, given normal weather, at the time that the basic data were assembled from late 1952 to the summer of 1953, and FAO has done no more than to fill any gaps in the official figures. Some of the plans may have to be modified under the pressure of events. Similarly estimates based on current trends may need modification if circumstances change. Actual production may sometimes fall short of the 1956/57 estimates or may exceed them though in most instances this seems less likely. The figures do, however, reveal the way in which governments are thinking on problems of agricultural production, and indicate broadly what would happen if present plans are successfully implemented and if current policies and trends continue.

FAO has limited itself to setting out the broad picture and drawing certain general conclusions, but has not attempted to suggest any revision of the objectives or programs. It is for governments, individually or together, to examine their own agricultural policies against this world background and to consider whether in their own countries any changes of direction or emphasis seem desirable.

NOTE ON METHODS

As mentioned previously in this Section, the estimates of future production which follow are not FAO estimates, except to the limited extent necessary to fill gaps in government targets or estimates, including estimates for countries where no official figures were available. Such FAO estimates account for less than one quarter of the expected world production in 1956/57.

Current or expected future production has been compared both with the prewar average 1934-38,¹ and with a postwar average covering the three years 1948/49 to 1950/51, and referred to for brevity as 1948-50. It would have been undesirable to use a single year as a postwar base and these years were considered the longest relatively "normal" period prior to the Sixth Session of the FAO Conference. In examining the trade outlook longer averages have been used to reduce the effect of fluctuations from year to year.

The estimates of future production have been made for 1956/57 in view of the period of five years mentioned in the Conference resolution. This date was also convenient in that a good many countries had established production programs due to be completed at about that time. It was felt, however, that it would be wrong to imply too great a degree of accuracy in what, in the nature of things, can only be rough and tentative estimates of expected or planned production. Therefore, when an official program or estimate ended a year earlier or a year later than 1956/57, the difference of timing was ignored. For example,

¹ In some regions, e. g. North America and Oceania, where the average for 1934-38 was affected by abnormal weather, a somewhat different prewar base has been used. The exact periods are indicated in Annex 1.

the objectives of the OEEC countries and also the production plans of India, the U.S.S.R. and some Eastern European countries run to 1955/56, while the Australian production goals and the projections supplied by the United States run to 1957/58. But in all these cases the official objectives or estimates have been included unchanged in world and regional totals for 1956/57. The only exceptions are the Argentine Five-year Plan which runs to 1957/58 and the provisional Mexican program to 1958/59, where interpolations were made for 1956/57 because of the very steep rise expected in production. The estimates of planned or expected production in "1956/57" which follow should not therefore be interpreted too literally but rather regarded as the approximate level of production at or about that date if present official plans or expectations are fulfilled.

In general, (the U.S.A. is a notable exception), countries' estimates of consumption or trade were much less complete than their estimates of production. Where official data were lacking, rough estimates have been made of possible consumption levels for the main commodities in 1956/57 to indicate the likely exportable supplies and import requirements if the production increases are achieved. It has been assumed that there is likely to be a continuing slow increase in most countries in per caput national incomes. No attempt has been made, however, to take account of possible cyclical changes and it has been assumed that demand will not be sharply changed up to 1956/57 by a boom or a depression. Similarly it has not been possible to make any detailed studies of the possible influence of price developments, or of the effect of national policies, currency difficulties, competition with synthetic materials, and other factors which may influence consumption trends over the next few years.

SUMMARY AND CONCLUSIONS

WORLD AND REGIONAL TRENDS

1. In the last few years the world's population has increased by about 1½ percent each year, and agricultural expansion at the rate recommended by the last session of the FAO Conference would thus mean an annual increase of 2½-3½ percent in world production. But because of wide differences in the growth of population, a "well-balanced" increase of this magnitude would imply a much higher rate of expansion in some regions than in others; for example about twice as high in Latin America as in Europe.

Recent Progress

2. In the area excluding the U.S.S.R., Eastern Europe and China, the actual increase in agricultural production from the base period 1948-50 to 1952/53 was about 2.3 percent annually or 0.8 percent more than the growth of population. If foodstuffs alone are considered, production exceeded the growth of population by about 0.7 percent. Thus the expansion actually achieved came close to the minimum objective recommended by the Conference. Inclusion of tentative estimates for the U.S.S.R., Eastern Europe and China, based on rather incomplete official figures, would somewhat increase the rate of progress, mainly because of the recovery in China from the disastrous crop failure of 1949.

3. There were, however, wide disparities between regions. In Europe, the Near East and Africa, production increased appreciably faster than population. In the Far East, where larger food supplies are most badly needed, there was only a slight improvement, and in North America, Latin America and Oceania agricultural expansion barely kept pace with the growth of population. Nevertheless in North America, where the main increases in production had occurred earlier, large unsold stocks began to accumulate.

Progress Expected to 1956/57

4. Current plans and estimates for 1956/57 suggest that expansion will continue at about the same overall rate as in the past few years in the area excluding the U.S.S.R., Eastern Europe and China. Slower progress is indicated in most regions, especially North America and Oceania, though in the latter it seems possible that the present objectives may be exceeded. But a considerably accelerated rate of increase is expected in Latin America, where the growth of population is very high, and also in the Far East, where far-reaching plans have been established to overcome present shortages.

5. If the 1956/57 estimates are realized, per caput food production will increase in all regions except North America and Oceania. The greatest increase (about 8 percent) would be in the Far East. These developments would only slightly diminish the great disparities in per caput food production in different parts of the world. In particular per caput food production in the Far East would still be nearly 10 percent less than before the war and only about half the average for the world as a whole. Thus, the essential problems of world food supplies, which determine nutritional levels, would remain much as they are now. Moreover, where the plans and estimates imply a sharp increase over past rates of progress it is by no means certain that they will be fully realized.

6. In the non-food sector (raw materials, beverages and tobacco) per caput production has remained some 5-10 percent lower than before the war, though the gap was narrowed by the spurt in the production of raw materials during the Korean boom. If the 1956/57 estimates are realized, production of these commodities would come within some 3 percent of the prewar per caput level. Actual developments will probably depend largely on general economic conditions, which affect the production of raw materials more directly than food production.

7. Large increases in agricultural production are also planned in the U.S.S.R., Eastern Europe and China. In the U.S.S.R. the current Five-year Plan provides for very rapid increases in the output of cereals, other crops and livestock products, based mainly on higher yields. Recent official statements show that progress to date has been disappointing, but suggest also increased attention to agriculture for the future. Much the same is true in Eastern Europe, where current plans, if realized, are estimated to raise production to some 10 percent above the prewar level. In China, where good crops were reported in 1952/53, the aim is to raise the production of food crops by some 30 percent above the 1952 level in the next five years, and nearly to double it in 10 years, though no details are available to FAO of individual commodity targets. The impression given by official statements in all three areas is that these increases in production are planned primarily to raise domestic consumption levels rather than export availabilities, but within limits this policy might of course be modified at any time.

Food Consumption Levels

8. Since food supplies in some regions are largely affected by international trade, changes in per caput production are not a reliable indication of probable changes in food consumption levels. Because of the many uncertainties in the outlook, it would be premature to attempt a detailed assessment of probable changes in food consumption by 1956/57. In general, the production estimates suggest a gradual improvement, especially in the less developed regions, but at a slower rate than the targets suggested in the FAO "Second World Food Survey."

COMMODITY TRENDS

9. In comparison with 1952/53, the largest increases in world per caput production in 1956/57 are expected in sugar, oilseeds and vegetable oils, pulses, rice, tobacco and rubber. Smaller increases seem likely for meat, eggs, coarse grains, citrus and bananas, potatoes, coffee, tea and cocoa. The estimates show a decline in the per caput production of wheat and jute from current high levels, and little change in the present production per head of milk, cotton, wool, and all cereals taken together. Brief comments on the outlook for a few major commodities follow.

Cereals

10. The 1956/57 estimates suggest some decline in the world production of bread grains from the high level of 1952/53, and a considerable expansion of rice and coarse grains. The decline in bread grains occurs only in North America, where the exceptional yields of the last two years are not expected to continue, and where a reduced acreage is projected in U.S.A. If the estimates are realized, per caput production of all cereals would be about 2 percent higher than before the war, though the per caput production of rice would still not regain its prewar level. Per caput production of cereals would remain well below the prewar level in the Far East, Latin America and Europe.

The major uncertainties in considering trade prospects for bread grains are the size of the import demand in the Far East, and the exportable supplies likely to be available from North America and the Near East. Far Eastern countries plan a sharp increase in cereal production by 1956/57 and in consequence, a reduction in net import requirements from the recent level of about 8 million tons (all cereals) to some half million tons. For reasons discussed in the report, however, so sharp a fall in net imports into the Far East seems unlikely. If the fall is less drastic there may be a reasonable balance in 1956/57 between export supplies from current production and import requirements of bread grains, even if a considerable export develops in the Near East, provided that North American production and exports are limited to the extent which seems to be implied by the acreage restrictions recently decided on in the U.S.A.

The 1956/57 estimates for coarse grains suggest little exportable surplus from current production in North America, though the situation would obviously be changed by a bumper crop and high yields, but much larger quantities should become available from Latin America and the Near East if the production objectives are reached. A considerable expansion of production is also projected in Europe, and if European import requirements were correspondingly reduced there might be serious problems of marketing. However, larger non-dollar supplies would probably stimulate consumption in Europe and perhaps elsewhere, especially if the downward trend of prices continues, and may also reduce the incentive to expand European production. Moreover, the expansion of exports from Latin America and the Near East may develop more slowly than present production targets suggest.

Sugar

11. Although some expansion of North American imports seems probable by 1956/57, projected increases in production may limit any increase in European import requirements. On the export side, the restrictions on production in Cuba are outweighed by projected increases in other Latin American countries and the Far East. Although sugar consumption is increasing, a continuation of present marketing difficulties seems likely unless the situation is stabilized by the Sugar Agreement.

Oilseeds and Vegetable Oils

12. An easier supply position seems likely, since only a limited increase is to be expected in import requirements by 1956/57, while a considerable expansion of production is projected in exporting countries. In some cases, however, the production targets are very high and they may not all be fully realized, while another element of uncertainty is the extent to which consumption may increase in exporting countries if supplies become more abundant.

Livestock Products

13. The slow fall in per caput milk production as a result of the decline in butter consumption seems likely to continue in North America and Oceania, but in Europe it may be partly offset by a larger consumption of liquid milk. A major problem is the stimulation of milk consumption in the less developed regions, as was stressed in resolutions of the Far East and Near East Regional Meetings.

Meat production per head is lower than before the war, except in North America, but somewhat greater per caput supplies are expected in all main producing regions by 1956/57. The production of eggs is expected to be stabilized at about its present high per caput level in North America, and to increase slowly in Europe and Oceania.

The 1956/57 production estimates suggest some increase in available supplies of pigmeat and eggs in the exporting countries of North Western and Eastern Europe, but also some decline in the requirements of the main importing countries. For other types of meat, especially beef, only a limited increase seems likely in the recent level of export supplies. The production estimates give no clear indication of possible trends in the trade in milk products.

Fish

14. Weakness of domestic and international demand and the increased availability of other foods may retard the rate of fisheries expansion for the provision of supplies for human consumption in Europe, North America, Southern Africa and Japan. In less developed fisheries areas there may be relatively large increases in production, and a resolution on the need for greater technical assistance in such development was agreed at the Regional Meeting for the Far East. Advances in pond fish culture and the cultivation of fish in rice fields may result in increases in food supplies of significant local importance. Many of the technical innovations which have been introduced or which may be introduced in the developed fisheries may not result in increased production as they reflect more the need for improving competitive ability through lowering costs rather than an attempt to increase production. The total world catch, which amounted to about 22 million tons before the war and 26 million tons in 1952, may reach some 30 million tons by 1957.

Beverages

15. The 1956/57 estimates suggest a small increase in the per caput production of coffee and cocoa, though both would remain appreciably lower than before the war, and a continuing rise in the production per head of tea, which may, however, be limited by finer plucking if the demand falls short of the supply. Thus for all these commodities no marked change is indicated from the present position.

Tobacco

16. Increased production is expected by 1956/57 in the Far East and Latin America, but in North America and the rest of the world the estimates suggest little change from the high production levels of recent years, at which stocks have accumulated. Demand may increase, though currency difficulties may well prevent any great rise in the level of imports from the dollar area.

Natural Fibers

17. A rapid expansion of cotton production is expected in Latin America, the Near East and the Far East, which if realized would more than offset a projected decline in production and exportable supplies in North

America. But the restrictions now in force or recommended in Egypt, Pakistan and U.S.A. may be continued and even extended to other countries if production continues to exceed demand.

The production of jute was also restricted in 1953, and the estimated output in 1956/57 is somewhat less than the large 1952/53 crop.

Only a moderate increase in wool production is expected by 1956/57, with little change in per caput supplies, and if there is no change in general economic conditions the strong demand may continue. With all major fibers, however, increasing competition from synthetic materials may limit future expansion.

Rubber

18. World production of natural rubber was nearly twice the prewar level in 1950 and 1951, but receded somewhat in 1952. The estimates for 1956/57 suggest a production about 10 percent above the previous peak. The total demand for rubber seems certain to increase but the share of the natural product in the market must depend largely on its success in competing with synthetic rubber when the U.S. synthetic industry is turned over to private enterprise.

Forest Products

19. Per caput production of sawn wood is likely to remain about the same in 1956/57, but that of wood pulp may expand further if economic activity continues at a high level. Looking further ahead, natural resources in Latin America and Africa still allow for a substantial expansion in the output of forest products, but the possibility of a marked long-term expansion is greatly limited in Europe and the Far East and to some extent also in North America, unless measures to maintain forest resources are made really effective. Recommendations on this point were made both by the Far East and Near East Regional Meetings.

TECHNICAL AND ECONOMIC FACTORS

20. There are indications that the rate of technical progress in the agriculture of the less developed regions is accelerating, although progress is uneven between countries. Many countries have large-scale programs for the development of land and water resources, and increasing attention is being paid in these regions to the use of fertilizers

and improved varieties of crops, the protection of plants and animals against diseases and pests, and improvement of educational and extension services.

Development of Land and Water Resources

21. The dominant feature of the agricultural development programs in most under-developed regions is the emphasis given to programs for the development of land and water resources. Nearly ten million hectares are programmed to be newly brought under irrigation in the Far East between 1951/52 and 1956/57. Smaller but important programs exist in the Near East and Latin America. Irrigation, flood control, drainage, reclamation of salty and water-logged areas, clearance of land under jungle or deep-rooted weeds and land settlement schemes, if fully implemented, may contribute half or more of the production objectives in the Far East, around 20 percent in the Near East and about 10 percent in Latin America, or 20 percent in Latin America excluding Argentina. They may also be important in the U.S.S.R. and China, but their contribution in other regions will be relatively small.

Farm Machinery

22. As long as farmers' incomes remain high, continued expansion in the use of farm machinery, though perhaps at a slower rate, appears likely to be a major factor in making possible production increases in the more developed regions. In many countries in Latin America, and in Turkey in the Near East, tractor-drawn equipment is coming to play an important part in farming operations. But in most countries in the under-developed regions, the use of tractors, though growing fast, is still too small to be an important element during the next few years.

Fertilizers

23. The use of fertilizers is expanding rapidly in the countries where they are already widely used, and substantial progress has been made in a few countries in under-developed regions in using fertilizers on food crops for domestic consumption and not only on export crops. In a few countries greater use is beginning to be made of organic manures. Provided the ratios between the cost of fertilizers and the price of farm products remain favorable, heavier consumption of fertilizers may be an important factor in

achieving the production objectives in the more developed regions and in some countries in the other regions. However, in most parts of the Far East, Near East and Latin America and Africa, the contribution will be small compared with what would be possible under more intensive programs.

Improved Varieties

24. Improvement in crop varieties in the more developed regions will probably continue at about the same rate as before, except that the stage has been reached where fairly rapid progress could occur in Europe from the wider use of hybrid maize. In the less developed regions the prospects are uneven, though more promising than a few years ago. Several countries are making progress in breeding and distributing better varieties, particularly of rice in the Far East, maize and wheat in Latin America and wheat in the Near East. But this progress is still confined to a few countries.

Plant Protection

25. Progress is being made in many countries in the less developed regions in establishing the necessary organization for plant protection and training of future staff, with FAO technical assistance playing an important part. But the concrete results are likely to be limited for a few years, except in the case of the international co-ordination for locust control which has been developed in the Near East and Central America.

Livestock

26. In the livestock field, the principal progress in all parts of the world will probably be in disease control, especially of some of the more lethal diseases, such as rinderpest and ranikhet. Improved feeding and up-grading will also play an important part in the more advanced countries, but not yet in the under-developed areas.

Economic Aspects

27. The extent to which the technical programs will be put into effect will be largely influenced by economic conditions. Unless market demand and prices are favorable, farmers, and often governments, have little incentive for further investment, and in North America and North Western Europe in particular, limita-

tions of demand are already retarding agricultural development.

Again, the economic and budgetary situation of a country largely determines the possibility of financing development programs, including necessary imports of capital goods and farm requisites. The fall in the prices of primary products and the less favorable terms of trade are already causing difficulties for some primary exporting countries in financing schemes put in hand when price relationships were more favorable, especially where government revenues depend largely on import or export duties.

General

28. A review of the technical programs suggests two main conclusions. First, that in the under-developed countries the technical programs seem inadequate to achieve the production increases aimed at, and second, that considerable shifts in emphasis and re-alignment of investment may be desirable in some countries. It appears that in some cases the programs may be paying relatively too much attention to expansion of area, and too little to raising yields. A gradual shift in emphasis, giving more attention to training technicians, strengthening extension services and promoting wider use of fertilizers, better seed, etc., would often probably give greater returns in the long run. This would imply some change in the investment pattern, though expenditures required for these programs are usually small compared with those for opening up new areas.

GENERAL CONCLUSIONS

29. It is apparent that if the 1956/57 estimates are fully realized, the prospects are for a more abundant supply of many commodities, sometimes in excess of the likely effective demand, particularly in the export markets. But this conclusion must be heavily qualified. In the first place it is doubtful, for reasons already discussed, whether all the production plans and estimates will be achieved. The actual expansion from 1948-50 to 1952/53 was only about two-thirds as great as was estimated in a paper¹ prepared in October 1951 on the basis of the plans and forecasts then available, and it would not be surprising if there

¹ *Present and Prospective Development of Agriculture in Principal Regions.* C 51/23, October 1951. Presented to Sixth Session of FAO Conference, 1951.

were a comparable shortfall from the 1956/57 objectives.

30. In the second place, in the event of a further gradual decline in price levels, there may be a substantial increase in the demand for some products, not only in the world market, but perhaps even more in the domestic markets of the less developed exporting countries, where the elasticity of demand for foodstuffs is high. Some allowances have been made for such increases in consumption, but they can be no more than informed guesses.

31. If, because of the fear of surpluses, there were a general scaling down of present production plans, the result might be a continuation of past shortages and inadequate levels of nutrition, for there can be little doubt that a high rate of population growth will continue at least for some years to come. The margin between the expected expansion of production and population is narrow, and one or two bad harvests could wipe out much of the expected improvement in food supplies. On the other hand, nothing could be more damaging to future agricultural progress than the emergence of burdensome surpluses in the next few years. Although the increasing degree of control over production by governments lessens the likelihood of large and continuing surpluses, the possibility of some imbalance cannot be ignored. A selective approach to problems of agricultural expansion is thus necessary if the opposing dangers of inadequate progress and imbalanced markets are to be avoided.

32. In these circumstances it seems important to keep a close watch on the supply and demand situation for all major commodities in each region and to prepare frequent outlook reports for the information of those responsible for production planning. (Both Regional Meetings in 1953 recommended improvement in agricultural statistics.) Similarly it seems important to assemble more precise information on changes in demand in response to price movements. If supplies and requirements seem likely to move out of step, international discussions might usefully be called to consider how the situation can best be rectified. The Committee on Commodity Problems provides a useful forum for the consideration of these issues, particularly for commodities where no specialized machinery is in existence. This general question was considered at the Regional Meetings, and it may be related to the resolution of the Far Eastern Meeting suggesting informal con-

sultations on rice in the event of marketing difficulties, and also to its resolutions on crop and livestock insurance and on the need to continue international efforts to stabilize export prices, as well as to the Near Eastern recommendation for consultations on intra-regional trade.

33. The possibility that supplies may at times exceed effective demand should not obscure the fact that most of the world's population still lack enough food. It would be tragic and socially dangerous if we found ourselves back in the dilemma of the 'thirties with excess stocks co-existing with hunger. The essential problem is to raise the purchasing power of the poorer consumers.

34. So far as this implies raising national incomes by increased industrial production, it is of course outside FAO's terms of reference. But there is another and complementary approach. By raising agricultural productivity the cost of production can be reduced, while still safeguarding the real income of farmers. Similarly, by improvements in methods of marketing, reductions are possible in the costs of distribution and thus in retail prices. In both these latter directions FAO can assist governments,¹ notably through its technical assistance programs.

35. FAO has always emphasized that industrial and agricultural development must keep in step. In countries where there are too many people on the land and rural under-employment is widespread, the maximum increase in productivity can only be achieved as the surplus rural population is gradually absorbed into industrial and other occupations. But this does not mean that further progress in agriculture must wait on industrial development. Perhaps half of the world's underfed people are to be found among the subsistence farmers and cultivators in the less developed regions. Improved farming practices and higher productivity could quickly enable them to feed themselves better, even if the commercial market for their products expanded more slowly; among

¹ The Near East Regional Meeting recommended that FAO in consultation with other international organizations should study means of increasing the efficiency and production of agriculture in the region, while the Far East Meeting raised the marketing issue in relation to the storage and marketing of rice, and also in its recommendation that FAO should assist governments in further studies of price policies and price margins.

the chief needs are improved education and extension services and greater security of tenure.¹

36. In production for the market, however, it is evident that the problems of raising consumption levels, particularly where they are now low, will be as important as those of production. Changes in economic and monetary policy which influence industrial activity and hence the demand for agricultural products will largely determine the rate of progress. In so far as agriculture can contribute to more orderly marketing, e.g., by co-operative action, it can aid in stimulating demand through lower retail prices.

37. But the main contribution which agriculture itself can make to an expanding market will be gradually to raise productivity and reduce costs

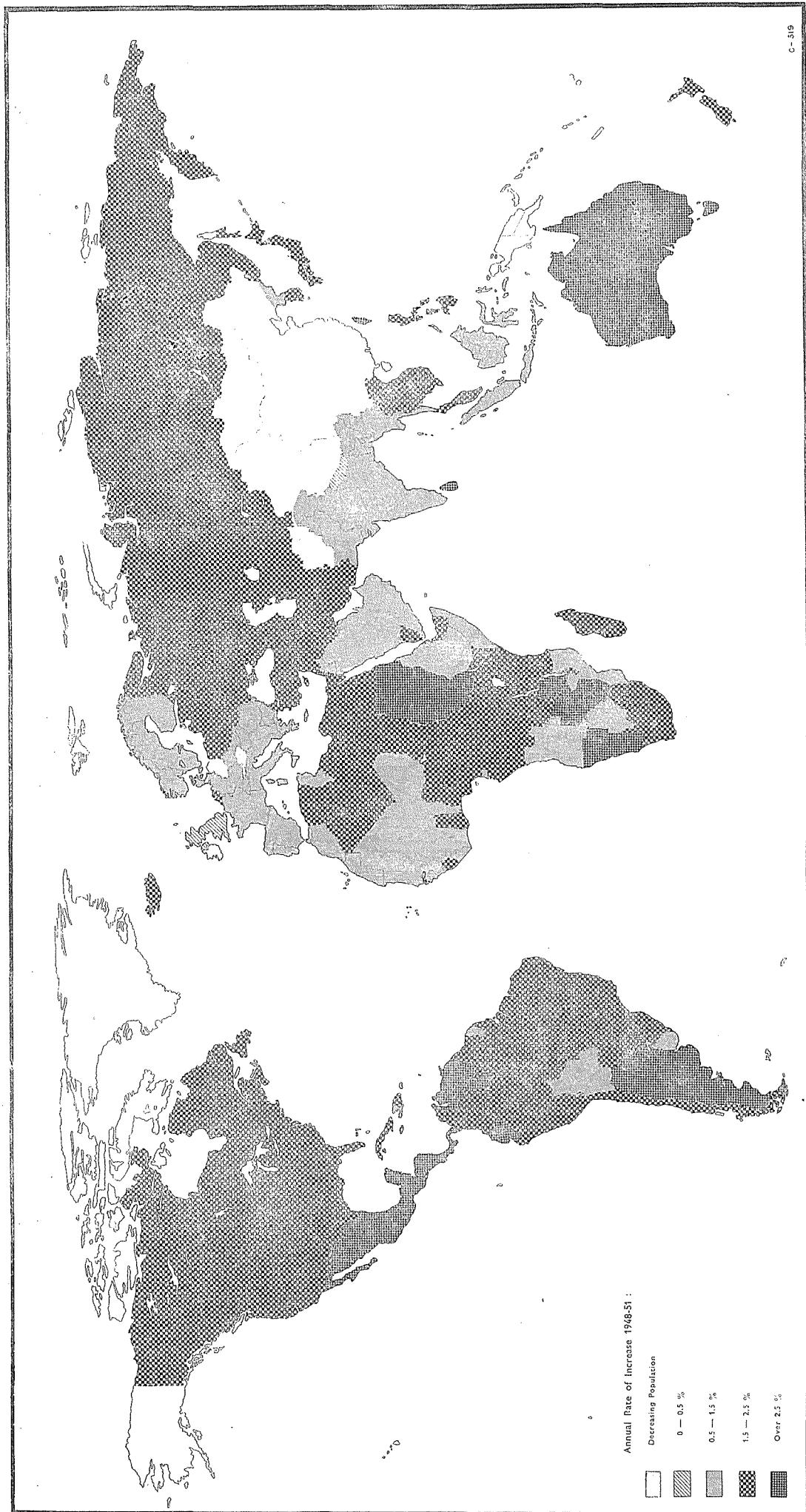
¹ These problems were discussed in the Regional Meetings: the Near East Meeting recommended that governments should improve extension and other services to agriculture, and establish or strengthen nutritional services, while both Regional Meetings recommended seminars on land problems.

of production, so that in this way too, prices may be lowered without lowering real farm incomes. This suggestion in no way conflicts with the widely adopted policy of price supports, which can be justified by the disproportionate effect on agricultural prices of small changes in demand or supply. It does not, of course, imply that agricultural production can be increased in the absence of adequate incentives to producers; these include adequate measures of international stabilization in the interest of producers and consumers, without which it will be impossible to provide the incentive of secure and stable world markets. Full account must be taken of the relationship between the prices the farmer receives and those he has to pay for essential production requisites. But in the last resort it remains true of agriculture, as of the whole economy, that it is the level of productivity which determines the real level of income, and price supports and other instruments of agricultural policy should therefore be operated so as to increase rather than diminish incentives to greater efficiency.

Chapter I

GENERAL WORLD AND REGIONAL TRENDS

FIGURE 1. Average Annual Increase in Population 1948-51



Chapter I - GENERAL WORLD AND REGIONAL TRENDS

Between 1948 and 1951 the annual increase in world population averaged about 1.5 percent, but ranged from under 0.5 percent in some European countries to over 3 percent in some countries of Latin America, Africa and the Far East (Fig. 1). Even when larger areas are compared the differences remain substantial, and the annual growth of population varied from less than 1 percent in Europe to 2.4 percent in Latin America and to 2.8 percent in Oceania where immigration was particularly heavy (Table 1).

The Conference resolution quoted in the Introduction recommended a well-balanced increase in agricultural production of 1.2 percent in excess of population growth for the world as a whole, rather than for individual countries or regions. But the words "well-balanced" seem to imply that the increase should be properly spread between products, and also between different parts of the world, taking account both of their potentialities for production and their requirements. The growth of population is not, of course, the only

factor which determines the trend of food requirements, but the differences apparent in Table 1 seem too large to be overlooked in considering production plans and policies for future development.

Another important feature evident in Table 1 is the accelerating growth of population during recent years in most parts of the world. In the less developed regions this is mainly due to the sharp fall in death rates with the gradual extension of health services. Although birth rates are also slowly falling in some of the more urbanized countries in these regions, e. g., Japan and India, this is by no means the case generally and as a rule birth rates have remained unchanged and very high. Death rates are likely to continue to fall, so that an increasing excess of births over deaths and a rapid growth of population in these regions may be expected for some time to come.

In the more developed regions of Europe, North America and Australasia, where death rates have long been reduced to a low level, the faster growth

TABLE I. — ESTIMATED ANNUAL PERCENTAGE INCREASE OF POPULATION BY REGIONS

REGION	1928-33	1933-38	1938-48	1948-51	Assumed 1952/53- 1956/57
Percent					
Oceania ¹	1.0	0.8	1.2	2.8	2.2
Latin America	1.8	1.8	2.1	2.4	2.4
Near East	1.5	1.6	1.6	2.2	2.0
North America	1.0	0.7	1.2	1.8	1.5
Africa	1.4	1.3	1.3	1.7	1.7
Far East (excl. China)	1.3	1.3	1.3	1.3	1.4
North Western and Southern Europe.	0.7	0.7	0.7	0.8	0.7
All above regions.	1.2	1.2	1.3	1.5	1.5
U.S.S.R.	1.2	1.2	—	1.6	1.6
Eastern Europe	1.0	0.8	-0.7	0.8	0.8

NOTE: Based prior to 1938 on estimates of the International Institute of Agriculture and after 1938 of the United Nations. In estimating the annual rate of increase a few countries for which no recent data are available, and for which the same token estimate is included year after year, have been left out of account. The above figures are not therefore fully comparable with those in Table 2.

¹ Australia and New Zealand only.

— Negligible.

of population mainly reflects the rise in birth rates which began even before the war and reached a peak in the immediate postwar years. In most European countries this was a transient phase, but it has been more persistent in North America and Australasia, where birth rates are still 30-40 percent higher than in the 'thirties.

Thus in most regions a rapid growth of population seems likely to continue in the next few years. In the area outside the U.S.S.R., Eastern Europe and China, for which both population and agricultural data are most complete, the Conference resolution implies an annual increase in production of about $2\frac{1}{2}$ - $3\frac{1}{2}$ percent. The same range probably applies to the world as a whole, though the lack of information on population trends in China makes any reliable estimate impossible. But whereas in Europe an annual increase in production of about 2 percent would give the suggested margin over population, in Latin America the annual expansion would need to be twice as high.

Whether or not such increases in production are obtained, it seems reasonably sure that by 1956/57 the world's population will be about 30 percent higher than before the war (it is already nearly 25 percent higher), and that there will be over 100 million more people to be fed than in 1952/53 (Table 2). Roughly half this increase will be in the Far East, where the large concentration of population offsets the somewhat slower rate of growth.

WORLD PRODUCTION 1948-50 to 1952/53 AND OBJECTIVES FOR 1956/57

In the area excluding the U.S.S.R., Eastern Europe and China the actual increase in agricultural production from the base period 1948-50 to 1952/53 is provisionally estimated to have averaged 2.3 percent annually and to have exceeded the growth of population by 0.8 percent. If foodstuffs alone are considered, production exceeded the growth of population by 0.7 percent. Inclusion of tentative estimates for the U.S.S.R., Eastern Europe and China, based on rather incomplete official figures, somewhat raises the rate of progress, mainly because of the recovery in China from the disastrous crop failure of 1949. The expansion of production in the three years to 1952/53 thus came close to the minimum objective proposed in the Conference resolution and world per caput production rose by about 2 percent (Table 3).

Satisfaction with this result must be tempered, however, as progress was somewhat unbalanced between commodities and between regions. In particular, expansion was slowest in the Far East, where larger food supplies are most badly needed. Partly because of the lack of balance in world production, unsold stocks of agricultural products have accumulated in some areas.

The progress actually achieved fell some distance short of earlier plans and estimates. A

TABLE 2. — ESTIMATED WORLD POPULATION BY REGIONS

REGION	1934-38	1948-50	1952/53	1956/57	1948-50	1952/53	1956/57
..... Millions .....				..... Indices: 1934-38 = 100			
North Western and Southern Europe	275.4	301.5	308.4	317	110	112	115
North America	140.4	164.7	173.0	184	117	123	131
Latin America	121.5	159.1	170.1	188	131	140	155
Oceania	10.5	12.2	13.1	14	117	125	133
Far East (excl. China)	615.0	735.1	764.8	808	120	124	131
Near East	104.3	123.6	129.2	140	118	124	134
Africa	126.9	149.2	156.6	167	118	123	131
All above regions	1,394.0	1,645.4	1,715.2	1,818	118	123	130
U.S.S.R.	188	200	210	225	106	112	120
Eastern Europe	94	90	92	95	95	97	101
World (excl. China) ¹	1,676	1,935	2,017	2,138	115	120	127

NOTE: Based on UN estimates except for the U.S.S.R. where the figures are based on official estimates assembled by ECE. The figures relate to the populations at the end of 1936, 1949, 1952 and 1956 respectively.

¹ Preliminary reports in September 1953 of the census taken on 30 June indicate that the population of China is probably of the order of 500 million, and considerably above earlier estimates which ranged from 460-475 million. In view of the uncertainties of recent and prospective population trends China has been excluded from the estimates of world per caput production given later in this report.

TABLE 3. — ESTIMATED WORLD AGRICULTURAL PRODUCTION 1956/57 IF OFFICIAL OBJECTIVES ARE REALIZED, AND AVERAGE PERCENTAGE ANNUAL INCREASE

REGION	1948-50 (Average)	1952/53 (Provisional)	1956/57 (Estimated)	1948-50- 1952/53	1952/53- 1956/57
<i>Indices : 1934-38 = 100</i>					<i>Annual percent increase</i>
<i>Total agricultural production</i>					
World Excl. U.S.S.R., Eastern Europe and China.	109 114	118 122	134 134	2.7 2.3	3.3 2.3
<i>Food only</i>					
World Excl. U.S.S.R., Eastern Europe and China .	109 115	118 123	134 135	2.6 2.2	3.2 2.3
<i>Per caput food production</i>					
World (excl. China) Excl. U.S.S.R., Eastern Europe and China.	97 98	100 100	107 103	— —	— —

NOTE: For basis, see footnotes to Tables 4-11.

paper¹ summarizing and analyzing prospects to 1952/53 on the basis of the data then available was prepared for the Sixth Session of the FAO Conference in November 1951. Because of revised methods of calculation the indices given below are not always comparable with those in the earlier paper. But these changes do not greatly affect estimates of the recent annual increase in production, and it may be calculated that if the earlier objectives and estimates had been realized, world production from 1948-50 to 1952/53 would have increased not by 2.3 percent, but by 3.6 percent annually. Thus the rate of progress actually achieved was about two-thirds of that projected. Similar comparisons by regions are shown later.

Projections for the four years from 1952/53 to 1956/57 for the world as a whole tend to be more modest than those established earlier. Excluding the U.S.S.R., Eastern Europe and China, they correspond to an annual increase in production of about 2.3 percent, or about the rate actually achieved in the three preceding years. Inclusion of these areas is estimated to raise the world average to about 3.3 percent, chiefly because of the very high production goals published by the U.S.S.R. While the slower expansion now envisaged in many countries reflects growing concern with surpluses, this more cautious approach is not universal and in some areas production plans have been stepped up considerably. The broad outlook for each region is discussed below, while the statistical data are set out in more detail in Annex I.

¹ See footnote 1, page 7.

North America²

Until recently agriculture has expanded more rapidly in North America than in any other region, and in spite of higher domestic consumption levels and greatly increased exports, it is there that the main problems of excess stocks have arisen. As would be expected, therefore, the latest estimates show some slowing down in the rate of expansion, though there is no doubt this trend could be quickly reversed if necessary. The annual average increase of 1.7 percent from 1948-50 to 1952/53 barely kept pace with the growth of population, and from 1952/53 to 1956/57 an annual increase of only 0.6 percent in production is expected (Table 4). The estimates for 1956/57 indicate a sharp fall from the high level of 1952/53 in the production of cereals (which may be intensified by the recent decision to restrict wheat acreages in the U.S.A.) and also a smaller production of cotton and some decline in milk. On the other hand, the output of some other products now in heavy supply, including meat, wool, eggs and vegetable oils, is estimated to increase appreciably by 1956/57; some of these figures may be subject to revision.

Oceania

Oceania has been concerned to step up production because of the rapid growth of its population, its need to earn foreign exchange by agricultural exports, and the strong overseas demand for its products. Although production was seriously checked by dry conditions in Australia in

² Includes Hawaii.

TABLE 4. — NORTH AMERICA, ESTIMATED PRODUCTION 1956/57
AND ANNUAL PERCENTAGE INCREASE

ITEM	1948-50 (Average)	1952/53 (Provisional)	1956/57 (Estimated)	1948-50- 1952/53	1952/53- 1956/57
	<i>.....Indices : 1934-38 = 100.....</i>				
Total agricultural production	136	143	146	1.7	0.6
Food only	139	146	150	1.6	0.8
Per caput food production	119	118	115	—	—

NOTE: Based on projections by U.S. Department of Agriculture to 1957/58 and FAO projections for Canada.

¹ Projected annual increase in estimates assembled in October 1951 for the Sixth Session of the Conference: 2.5 percent for total agricultural production and 2.2 percent for food only.

1951/52, the following season was favorable and from 1948-50 to 1952/53 the average rate of increase was about 2 percent annually. The main increases occurred in livestock products: meat,

milk, and especially wool. The output of coarse grains, though not large, increased considerably, while wheat regained the average postwar level in 1952/53 after the poor crop in the previous year.

TABLE 5. — OCEANIA: ESTIMATED PRODUCTION 1956/57
AND ANNUAL PERCENTAGE INCREASE

ITEM	1948-50 (Average)	1952/53 (Provisional)	1956/57 (Estimated)	1948-50- 1952/53	1952/53- 1956/57
	<i>.....Indices : 1934-38 = 100.....</i>				
Total agricultural production	112	119	123	2.0	1.0
Food only	112	118	123	1.6	1.1
Per caput food production	96	94	89	—	—

NOTE: Based on Australian agricultural production objectives, government reports to FAO and FAO projections.

¹ Projected rate of increase in estimates assembled in October 1951 for the Sixth Session of the Conference: 2.8 percent for total agricultural production and 2.2 percent for food only.

In the light of the continuing demand for most of the region's chief export products, including the assured markets in the United Kingdom for meat, dairy products, sugar, etc., the rate of increase projected to 1956/57 seems rather low. In fact, Australian production of wheat, barley and wool in the favorable 1952/53 season already exceeded the 1957/58 objectives, while milk production fell very little short of the goal. If livestock expansion in Australia and New Zealand continues, and if sugar production reaches the level envisaged in the Commonwealth Sugar Agreement, it would not be surprising if the present 1956/57 estimates proved to be on the low side.

Latin America¹

The sharp rise in Latin American food requirements, due to the exceptionally rapid growth

of population coupled with rising standards of living, has given rise to serious problems, further aggravated by recent setbacks in Argentine agriculture. Exports have had to be curtailed and large supplies of food imported from North America. These changes have led to currency difficulties and in some countries contributed largely to internal inflation.

The situation in Latin America improved considerably in 1952/53, mainly because of the recovery in Argentine production after the disastrous drought of the previous year, and comparing 1952/53 with 1948-50, agricultural production as a whole, though not food production, roughly kept pace with the growth of population. The main increase occurred in wheat and maize, but there was also a rapid expansion of cotton and bananas, and a substantial increase in the output of coffee. Meat production was lower than in the base period, and owing to restrictions in Cuba sugar production fell from the 1951/52 peak to little more than the 1948-50 average.

¹ The situation and outlook are discussed more fully in a recent FAO publication, *Prospects for Agricultural Development in Latin America*.

TABLE 6. — LATIN AMERICA: ESTIMATED PRODUCTION 1956/57
AND ANNUAL PERCENTAGE INCREASE

REGION	1948-50 (Average)	1952/53 (Provisional)	1956/57 (Estimated)	1948-50- 1952/53	1952/53- 1956/57
..... Indices: 1934-38 = 100					Annual percent increase ..
LATIN AMERICA					
Total agricultural production	122	130	150	2.3	3.6
Food only	127	134	155	1.8	3.7
Per caput food production	97	96	100	—	—
LATIN AMERICA, EXCLUDING ARGENTINA					
Total agricultural production	132	143	160	2.7	2.9
Food only	141	149	167	1.9	2.9
Per caput food production	107	107	110	—	—

NOTE: Based on reports by governments to FAO and data assembled by staff visits to countries. Official objectives and estimates account for about 80 percent of total 1956/57 production; the balance has been covered by FAO projections.

¹ The per caput figures differ slightly from those in *Prospects for Agricultural Development in Latin America* because of an adjustment in the estimate of population.

² Projected rate of increase according to data assembled in October 1951 for presentation to the Sixth Session of the Conference: 3.4 percent annually for total agricultural production and 2.8 percent for food only.

A further large increase is expected by 1956/57 in the production of coarse grains (principally maize) and rice, but wheat production is likely to show little increase over 1952/53. The large expansion of maize production is in fact the basic element in the Latin American program. Nevertheless, if all objectives are reached, the per caput production of all cereals will remain some 10 percent lower than before the war. Projected increases in sugar production in other countries largely offset restrictions in Cuba, and if they materialize will raise the regional output to some 8 percent above the 1952/53, but not to the 1951/52 level. A considerable expansion in oilseeds, cotton, wool, hard fibers, tobacco, coffee, meat and milk is also proposed.

The expected increase in Latin American production is somewhat unevenly distributed between countries and depends heavily on the rapid expansion contemplated in Argentina and Mexico. If the present objectives are reached, food production will regain the 1934-38 per caput level, while the production of all commodities will come within 3 percent of that level. Though some shifts of emphasis between commodities may prove necessary, recent difficulties underline the importance of achieving an increase in production of this general magnitude, but to do so will imply a considerably faster rate of progress than in the past, substantial though this has been.

Near East ^{1, 2}

Aided by good harvests in 1951 and 1952, the Near East achieved an annual increase in production in the period 1948-50 to 1952/53 of about 5 percent. This rate fell very little short of the rate of expansion which had been planned or estimated earlier. The main contribution came from an increase of 25 percent over the 1948-50 average in grain production, mainly in Turkey and Iran, but the production of cotton, vegetable oils, sugar and citrus fruit also rose by something of the order of 20 percent while most other commodities showed material increases. Although progress has been most striking in Turkey, indices of production in 1952/53 for the region excluding Turkey are also impressive at 129 for total production and 130 for food only.

The rate of increase expected from 1952/53 to 1956/57 is somewhat lower but at 3.2 percent exceeds the recent growth of population by rather over 1 percent. It is expected to come mainly from a further sharp and rather widespread in-

¹ The situation and outlook is examined in greater detail in the report of the FAO Regional Meeting held in Cairo in September 1953, and the working paper prepared for that meeting, published as *Agriculture in the Near East: Development and Outlook*.

² This term is taken to include the countries from Turkey in the North to Ethiopia and the Somaliland in the South, from Libya in the West to Afghanistan in the East.

TABLE 7. — NEAR EAST: ESTIMATED PRODUCTION 1956/57
AND ANNUAL PERCENTAGE INCREASE

ITEM	1948-50 (Average)	1952/53 (Provisional)	1956/57 (Estimated)	1948-50- 1952/53	1952/53- 1956/57
..... Indices: 1934-38 = 100 .....					.. Annual percent increase ..
Total agricultural production	115	134	152	15.2	3.2
Food only	115	133	152	14.9	3.5
Per caput food production	97	107	113	—	—

NOTE: Based on reports by governments to FAO, data assembled by staff visits to countries in preparation for the 1953 Regional Meeting and information supplied at the Meeting. Official estimates account for nearly 90 percent of total 1956/57 production; the balance has been covered by FAO projections.

¹ Projected rate of increase according to data assembled in October 1951 for presentation to the Sixth Session of the Conference: 5.9 percent for total agricultural production and 5.3 percent for food only.

crease of nearly 20 percent in cereal production, including a recovery in Egypt from recent lower levels, and a further rapid expansion of sugar and vegetable oils, together with smaller increases in the output of cotton and pulses and in live-stock production. The output of tobacco is likely to decline to the 1948-50 level.

Africa¹

Data both on population and agricultural production are fragmentary, and scarcely exist for such basic tropical foods as sweet potatoes and cassava. The estimates below are therefore highly tentative and may be over-weighted by export crops. Those for 1956/57 are mainly FAO projections based on recent trends and what is known of governments' production plans.

From 1948-50 to 1952/53 production appears to have increased more rapidly than had been expected and to have exceeded the increase in population by about 1½ percent. There was a considerable expansion in oilseeds, sugar and ci-

¹ Excludes Egypt, Anglo-Egyptian Sudan, Eritrea, Ethiopia, Libya, and the Somalilands.

trus fruit, and some increase in cereals, especially wheat and rice, though these form a relatively small part of the total cereal production. The production of bananas, dried fruits and wine seems to have slowed down.

In regard to export and industrial crops, the output of tea and coffee, though still relatively small, has increased sharply, but cocoa production is still restricted by disease. The production of cotton and hard fibers increased considerably, and there has been a sharp expansion of rubber and jute, though both are still produced on a very small scale.

In general the same trends are expected to continue, though a somewhat slower rate of progress than in the recent past is likely.

U.S.S.R.

Before passing to the food-importing regions, a brief note may be included on the outlook in the U.S.S.R., though available data remain scanty. The highly tentative current and future estimates in Table 9 are based primarily on the official data assembled in the ECE "Economic Survey of Europe since the War" (1953), and reference may

TABLE 8. — AFRICA (EXCLUDING NEAR EAST COUNTRIES): ESTIMATED AGRICULTURAL PRODUCTION 1956/57
AND ANNUAL PERCENT INCREASE

ITEM	1948-50 (Average)	1952/53 (Provisional)	1956/57 (Estimated)	1948-50- 1952/53	1952/53- 1956/57
..... Indices: 1934-38 = 100 .....					.. Annual percent increase ..
Total agricultural production	124	137	152	13.2	2.7
Food only	123	134	150	13.1	2.8
Per caput food production	105	109	114	—	—

NOTE: Mainly FAO projections based on available information on production plans and recent trends.

¹ Projected annual rate of increase in estimates assembled in October 1951 for the Sixth Session of the Conference: 1.9 percent for total agricultural production and 1.7 percent for food only.

TABLE 9. — U.S.S.R. : PLANNED AGRICULTURAL PRODUCTION 1955
AND ANNUAL PERCENT INCREASE

ITEM	1950	1952 (Provisional)	1955 (Estimated)	1950-1952	1952-1955
<i>Indices : 1934-38 = 100</i>					
Total agricultural production	119	131	180	4.8	11.1
Food only	118	128	176	4.5	11.0
Per caput food production	110	115	147	—	—

NOTE: Based on official U.S.S.R. estimates assembled by ECE, Geneva.

be made there for a discussion of the difficulties of interpretation which arise. The 1955 targets imply very high increases in the yields and production of grain, potatoes, sugar beet, cotton, flax and oilseeds, together with a rapid expansion of livestock numbers, and the ECE Survey points out the unlikelihood that such a rate of progress can be achieved. Recent statements of dissatisfaction with the progress of agriculture, including the official statement on agriculture of 7 September 1953, support this view. They suggest also, however, that agriculture may now receive greater encouragement.

Europe¹

In spite of the major shift in the pattern of world trade in agricultural products discussed in Part I of this report, Europe remains overwhelmingly the world's largest importer. This is especially the case for foodstuffs, where European imports account for some 60 percent of the world total, and about 90 percent of net inter-regional shipments, though for natural fibers and rubber, as well as for coffee and other beverages, North America is becoming an increasingly large importer. The food and agricultural situation in Europe thus directly affects the prospects for agricultural producers in nearly all other regions.

¹ For the purposes of this report, Europe has been subdivided as follows :

North Western Europe :

- (i) Western Europe : Belgium, France, Ireland, Luxembourg, Netherlands, Switzerland, United Kingdom.
- (ii) Northern Europe : Denmark, Finland, Iceland, Norway, Sweden.
- (iii) Central Europe : Austria, Western Germany.

Southern Europe : Greece, Italy, Portugal, Spain, Yugoslavia.

Eastern Europe : Bulgaria, Czechoslovakia, Eastern Germany, Hungary, Poland, Romania.

The years 1948-50 covered the main period of postwar reconstruction in North Western and Southern European agriculture when the annual increase reached the very high rate of 7-8 percent. By the end of this period production was about 11 percent higher than before the war. Since then progress has been slower, and the estimated expansion from 1948-50 to 1952/53 in Table 10 tends to overstate recent development, since the base period is in effect the mid-point of the period of rapid recovery.

A main urge to expand production since reconstruction was completed has come from Europe's currency difficulties and increased dependence on dollar food imports in consequence of dwindling supplies from soft-currency areas. If non-dollar supplies become more abundant in future there may be for some products less incentive to achieve the rate of expansion projected for 1952/53 to 1956/57.

The population of North Western and Southern Europe is increasing slowly in comparison with other areas, and is expected to rise by only 3-4 percent from 1952/53 to 1956/57. In this area, therefore, the general expansion of requirements due to the increase of population is liable to be overshadowed by the effect on demand of changes in the level of economic activity; this is especially the case for the preferred foods, such as livestock products and fruit.

The targets for Eastern Europe included in those for the continent as a whole have been prepared from data assembled from official sources by ECE at Geneva and are less surely based. They suggest an annual expansion of about 5 percent from 1948-50 to 1952/53 (but this figure is of limited significance as it covers the main period of postwar recovery, and is also complicated by the drought in the Danube basin which led to serious food shortages in 1952/53), and a planned expansion

TABLE 10. — EUROPE: ESTIMATED PRODUCTION 1956/57
AND ANNUAL PERCENTAGE INCREASE

REGION	1948-50 (Average)	1952/53 (Provisional)	1956/57 (Estimated)	1948-50- 1952/53	1952/53- 1956/57
.....Indices: 1934-38 = 100.....					.. Annual percent increase ..
EUROPE					
Total agricultural production	97	107	119	3.4	2.5
Food only	97	107	118	3.5	2.5
Per caput food production	91	99	106	—	—
NORTH WESTERN AND SOUTHERN EUROPE					
Total agricultural production	104	113	122	2.9	1.8
Food only	104	114	122	3.0	1.8
Per caput food production	95	101	106	—	—

NOTE: Based on reports by governments to FAO and OEEC, data on official production targets of Eastern European countries supplied by ECE, Geneva, and FAO projections.

¹ Projected annual increase according to data assembled in October 1951 for the Sixth Session of the Conference; 5.8 percent for all agricultural products and 5.9 percent for food only.

at about the same rate to 1956/57. If the targets are reached, production would rise from an estimated 78 percent of the prewar level in 1948-50 and 90 percent in 1952/53 to 110 percent. The effect of the low levels of current production is mitigated by the loss of population through war and emigration, and even by 1956/57 the population is expected to be little greater than before the war.

Far East¹

Though now a large net importer of food, the Far East is still the world's largest exporter of rubber, jute, tea and many other non-food agricultural products. Because of the slow recovery of the war-devastated countries and a series of poor crops in India, which has the largest area under cultivation, both food production and total agricultural production remained at or below the prewar level until 1952/53, though the population of the region (excluding China) had increased by about 24 percent. The better rice harvest of 1952, which extended also to China, brought some relief. But it was partly offset by the failure of the wheat crop in Pakistan, and per caput food production appears from available data to remain some 15 percent less than before the war.² Although all

governments in the region now give increasing priority to agriculture in their development programs, production has tended to lag behind plans and even since 1948-50 has little more than kept pace with population. With its immense population, and acute poverty and undernourishment, the Far East remains the center of the world's food problem.

Far-reaching plans have been made for the next few years, and in some countries they are closely integrated with plans of general economic development. Most countries aim at a production in 1956/57 of the order of 15-20 percent higher than in 1952/53, and for the region as a whole (excluding China) present plans and estimates imply an increase over 1952/53 of 16 percent for rice, 18 percent for all cereals, 16 percent for pulses, and 13 percent for oilseeds. Even larger increases are planned for some export and industrial crops because of the urgent need for foreign currency, though here progress must be conditioned by world market conditions. No detailed information is available to FAO of objectives in China, though according to a recent official statement the intention is to raise the production of "food grains" by 30 percent by 1957 and nearly to double it in 10 years. The term "food grains" probably includes also the grain equivalent of pulses, roots and tubers.

¹ The situation and outlook are discussed more fully in the Report of the FAO Regional Meeting held at Bangalore in August 1953 and the working paper prepared for that meeting, published as *Agriculture in Asia and the Far East, Development and Outlook*.

² There has been much discussion recently on the accuracy of the Far Eastern grain production estimates. In the working paper prepared for the Regional Meeting at Bangalore it is suggested, on

the basis of estimates by the Indian Planning Commission, that current statistics may overstate the decline in per caput supplies since the war, but at the most by not more than about 6 percent. This is quite apart from the view held by some statisticians that both prewar and postwar estimates may substantially underestimate Far Eastern grain and total agricultural production.

TABLE II. — FAR EAST: ESTIMATED PRODUCTION 1956/57
AND ANNUAL PERCENTAGE INCREASE

REGION	1948-50 (Average)	1952/53 (Provisional)	1956/57 (Estimated)	1948-50- 1952/53	1952/53- 1956/57
<i>Indices: 1934-38 = 100</i>				<i>Annual percent increase</i>	
FAR EAST ¹					
Total agricultural production	94	101	118	2.5	4.0
Food only	94	101	118	2.4	3.9
<i>FAR EAST EXCLUDING CHINA</i>					
Total agricultural production	98	102	119	1.6	3.8
Food only	99	103	118	1.3	3.7
Per caput food production	83	83	90	—	—

NOTE: Based on reports by governments to FAO, data assembled by staff visits in preparation for the 1953 Regional Meeting and information supplied at the Meeting. Official estimates account for about 75 percent of the estimated 1956/57 production of the region (excluding China); the balance has been covered by FAO projections. Official estimates have been drawn on as far as possible in compiling estimates for China.

¹ The figures have been slightly revised as compared with those in Part I of this report, on the basis of recent estimates by the Chinese authorities.

² Projected annual increase according to data assembled in Oct. 1951 for the Sixth Session of the Conference: 2.7 percent for total agricultural production and 2.4 percent for food only.

It would be reasonable to expect a considerably faster rate of expansion in the next few years than in the past. Most countries now have more experience of implementing production programs. Large-scale projects of irrigation, drainage and land reclamation are gradually coming to fruition, though some may be delayed by the unfavorable turn in the terms of trade of Far Eastern countries. Prices of food crops, though not of raw materials, are more favorable to producers in a number of countries than in the period of strict price control. Moreover a beginning has been made, though not yet on an adequate scale, in the provision of farm credit and of technical advice to farmers, e.g., through co-operatives and community-development plans. These developments are discussed more fully in Chapter III.

Taken together, the present 1956/57 estimates represent a rate of progress in the next few years between two and three times as fast as was achieved from 1948-50 to 1952/53. While technically possible, so sharp an increase in tempo clearly cannot be achieved without immense efforts in the countries themselves. Most delegates at the Regional Meeting at Bangalore thought that, given reasonable weather, the objectives would be reached, but they cannot be taken as assured.

Even if all the programs are fully realized, however, per caput food production will rise from 83 percent to no more than 90 percent of the prewar average, and will remain at little more than half the average level for the world as a whole. It is evident, therefore, that the present plans are in no way in excess of the needs of

the region. The essential problem is not whether the plans can be fully implemented, but rather how to ensure that everything possible is done, both within the region and by maximizing financial and technical help from abroad, to bring food production and consumption levels in the Far East closer to the basic needs of its peoples.

General

Though changes of detail may prove necessary, the estimates and plans for 1956/57 correspond reasonably in their broad outline with the needs of the different regions. The highest rate of expansion, somewhat above the over-all maximum suggested by the FAO Conference, is projected in the Far East where at present per caput supplies are depressed far below the already low prewar level. The rate is only slightly lower in Latin America and the Near East, but in these regions the growth of population is high and the expected expansion is nearer the minimum level recommended by the Conference, as is also the case in Africa. If achieved, these increases in production might check or even reverse the decline in exportable supplies of food from the less developed regions discussed in Part I of this report. In Europe too, where heavy dependence on imported food has contributed largely to postwar payments difficulties, the expected expansion slightly exceeds the recommended minimum rate. On the other hand, in North America, where past expansion has been greatest and problems of excess stocks are most acute, a slower rate of expansion is foreseen in

the next few years. The expected development in Oceania seems rather low and falls well below the expected increase in population, but as already noted the level of production achieved in 1952/53 suggests that in fact the 1956/57 estimates may be exceeded.

It was noted earlier that 1956/57 was to be considered as an approximate rather than a precise date, and if it took somewhat longer to reach the present production objectives than is now expected the picture in Table 12 would be considerably modified. For example, if it took one more year to attain the "1956/57" level of production, the average annual increase in excess of the growth of population would be not 0.8 but 0.3 percent in the area excluding the U.S.S.R., Eastern Europe and China. In Latin America, the Near East, Africa and North Western and Southern Europe, the average annual gain of production over population would be of the order of 0.5 percent, and only the Far East would come within the recommended range at 1.6 percent. This emphasizes how narrow is the margin between the production plans and the steady increase of population, and one or two bad harvests could clearly wipe out much of the expected improvement in food supplies.

The figures in Table 12 show the relative development of production and population, but give no indication of the actual level of food production in each region, which must also be considered in relation to the agricultural programs. In fact the range is very wide. Per caput food production in the Far East is only

about half the world average, while at the other extreme per caput production in Oceania and North America is some three times the average level (Table 13). Realization of the 1956/57 production estimates would only narrow this range to a very limited extent. Since Oceania and North America are food-exporting regions and the Far East is a net importer of food, the disparities between regions are smaller for food consumption than for food production, but they are none the less very large. Because of the many uncertainties it would be premature to attempt any detailed assessment of likely changes in food consumption levels if the 1956/57 production objectives are reached. In general, the estimates suggest a gradual improvement, especially in the less developed regions, but at a slower rate than the targets suggested in the FAO "Second World Food Survey."

Though the 1956/57 plans and estimates themselves seem reasonable at first sight, some uncertainty must arise as to how far they will be implemented, and it is natural that this should be greatest in areas where the highest rate of expansion is contemplated; in the Far East where the projections show a sharp upturn from the past rate of progress; in Latin America where they depend so heavily on the efforts of a few countries; in the Near East where the current rapid progress may always be interrupted by drought; and in North Western and Southern Europe where livestock development has slowed down in the last few years. Since the beginning of the war the largest increases in world production have

TABLE 12. — RECAPITULATION: PRODUCTION OBJECTIVES
IN RELATION TO POPULATION GROWTH

REGION	Annual Increase in Population 1948-51 1952/53	Annual Increase in Agricultural Production		Per Caput Food Production	
		1948-50-1952/53	1952/53-1956/57 (Expected)	1952/53 (Provisional)	1956/57 (Estimated)
..... Percent				1934-38 = 100	
Far East (excl. China)	1.3	1.6	3.8	83	90
Latin America	2.4	2.3	3.6	96	100
Near East	2.2	5.2	3.2	107	113
North Western and Southern Europe	0.8	2.9	1.8	101	106
Africa	1.7	3.2	2.7	109	114
Oceania	2.8	2.0	1.0	94	89
North America	1.8	1.7	0.6	118	115
All above regions	1.5	2.3	2.3	100	103
World ¹ . . . . .	...	2.7	3.3	...	...

¹ Including tentative estimates for U.S.S.R., Eastern Europe and China (see comment on these estimates in discussion of Table 3, pages 14-15).

... Not available.

TABLE 13. — RELATIVE LEVEL OF PER CAPUT FOOD PRODUCTION
IN DIFFERENT REGIONS

REGION	1934-38 (Average)	1948-50 (Average)	1952/53 (Provisional)	1956/57 (Estimated)
<i>Indices: World average¹ 1934-38 = 100</i>				
Oceania	388	372	364	345
North America	237	281	281	272
North Western and Southern Europe	131	125	133	139
Latin America	114	111	109	114
Near East	81	78	87	92
Africa	64	67	70	74
Far East (excl. China)	58	48	48	52
World average ¹	100	98	100	103

¹ Excluding U.S.S.R., Eastern Europe and China.

come from North America, and there are bound to be difficulties in entering a new phase in which the tempo of agricultural expansion in that continent is slowing down and the main task of expansion shifting to other regions.

On the technical side the outlook is probably more favorable than before. With the gradual strengthening of extension services in many countries, improved methods of agriculture are slowly becoming more widely known. Supplies of agricultural machinery, fertilizer and other requisites are more abundant, and there are already signs that their prices and other production costs are beginning to follow the general downward trend, though outside the more developed regions few countries are yet using them in increasing quantities. The long-term developments put in hand in many countries are increasingly showing results, particularly large-scale irrigation, drainage and land settlement projects which inevitably take some years to come to fruition. These aspects are discussed more fully in Chapter III.

But agricultural progress also depends largely

on the economic climate, and here the situation is already very different today, with a downward trend of prices and unsold stocks piling up in some areas, than it was during the postwar shortages when every ton of additional food was eagerly sought. Although in the long run the steady growth of population, together with rising standards of living, must raise the total requirement for food, there is always a danger of serious dislocations if for a time supplies in a particular sector run ahead of effective demand. Today a more selective approach to agricultural expansion is becoming necessary, and careful consideration must be given to whether a satisfactory market is likely to be found for any increase in production, especially when it is intended principally for export. Equally, increasing attention must be given to ways of expanding the market, particularly where present consumption levels are inadequate.

There can be no ready answers to such problems, but they are examined in greater detail in the next Chapter, commodity by commodity.

FIGURE II. Estimated Trend of Agricultural Production if 1956/57
Programs and Estimates are Realized

1934-38 = 100

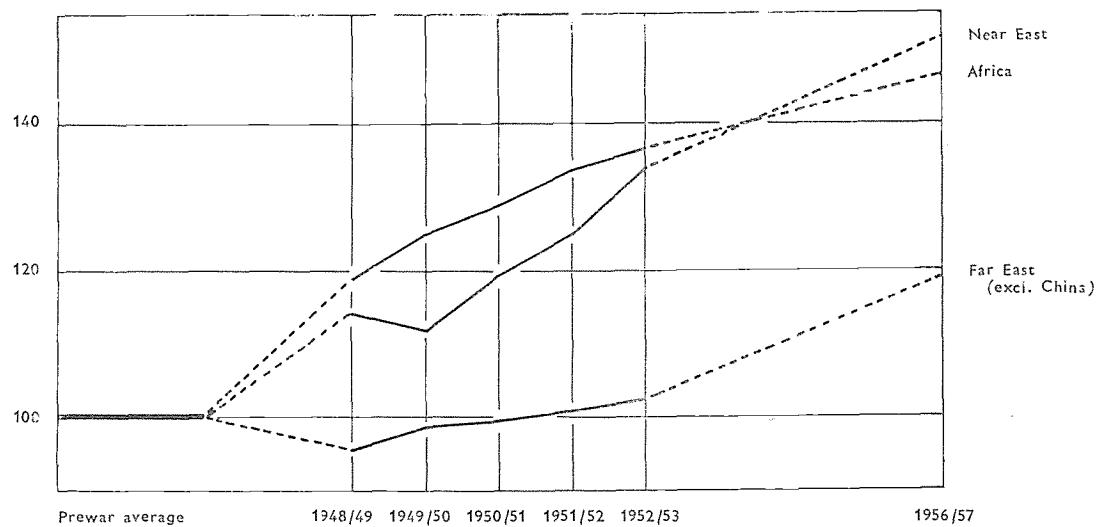
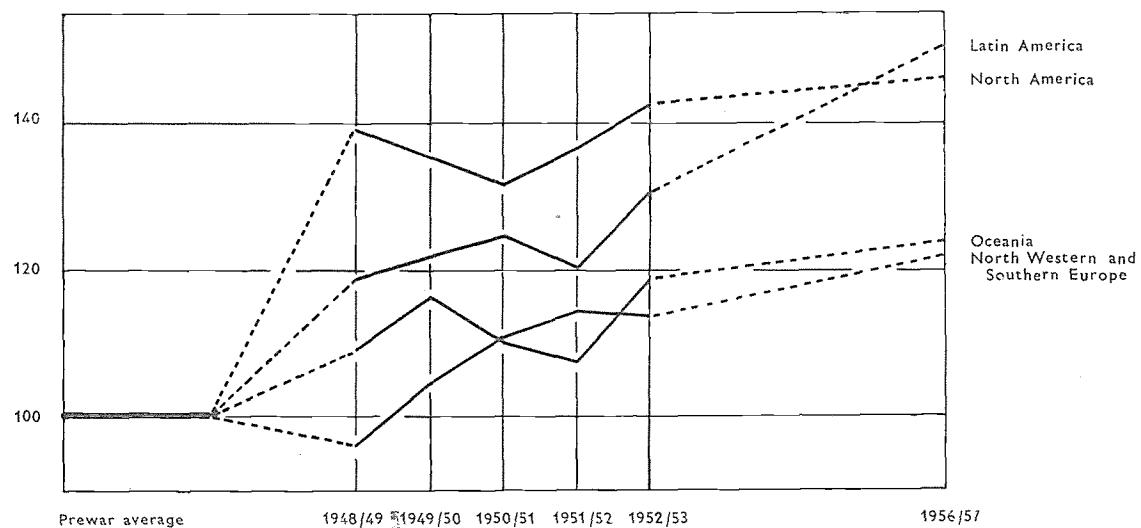
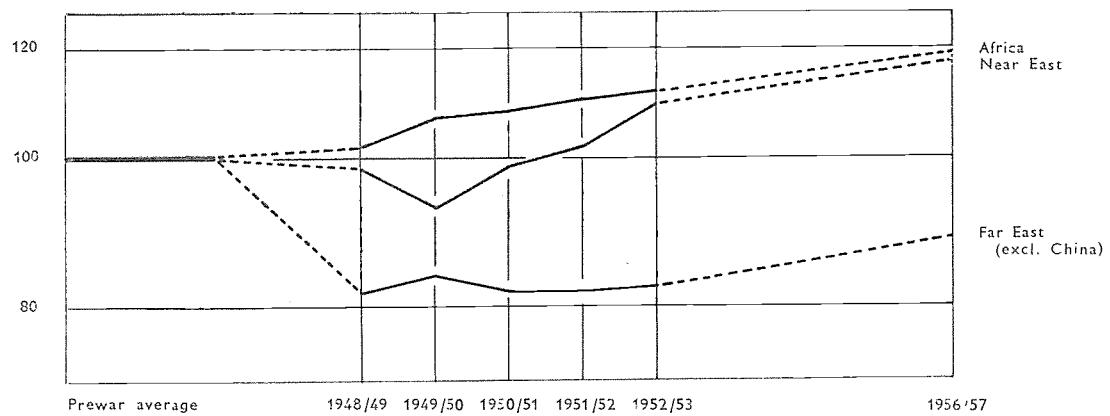
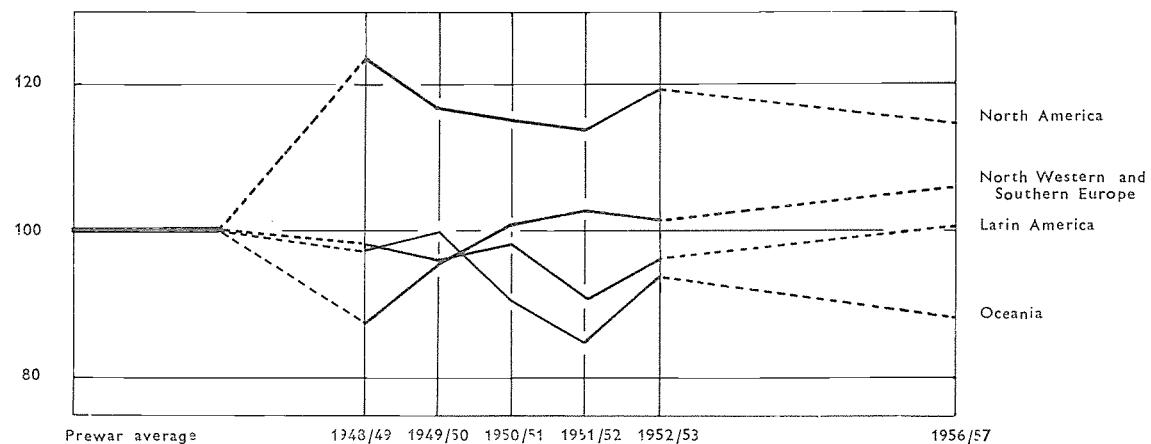


FIGURE III. Estimated Trend of Per Caput Food Production if 1956/57
 Programs and Estimates are Realized
 $1934-38 = 100$



Chapter II

TRENDS FOR SOME MAJOR COMMODITIES

Chapter II - TRENDS FOR SOME MAJOR COMMODITIES

From 1934-38 to 1948-50 world food production, both crops and livestock, increased more rapidly than the production of non-food products (natural fibers, rubber, beverages and tobacco), and among foodstuffs plant products rather more rapidly than livestock products. Under the influence of the Korean boom, non-food products, and especially raw materials, had caught up much of the leeway by 1952/53, though the relative position of the three main groups of commodities compared with prewar production remained unchanged. For the immediate future, the estimates and plans for 1956/57 suggest a fairly even rate of progress in all three groups, though there are some differences between regions. For ex-

ample, in North America the production of both food and non-food crops is expected to decline slightly and the whole expansion comes in the livestock sector, while in the Near East and the Far East the main emphasis is on crops (Table 14).

For individual commodities the differences in the rate of expansion since 1934-38 are very striking. Thus, per caput production of rubber is now 50 percent and of citrus fruit 30 percent greater than before the war, while on the other hand the production per head of rice is 10 percent and of coffee 20 percent less. The grouping in Table 15 gives a general impression of recent production

TABLE 14. — ESTIMATED PRODUCTION IN 1956/57
BY GROUPS OF COMMODITIES

REGION	Food Crops	Live-stock Products ¹	Non-Food Products
...Indices : 1934-38 = 100...			
North Western and Southern Europe			
1952/53	125	107	105
1956/57	133	116	119
North America . . .			
1952/53	149	144	121
1956/57	146	153	118
Latin America . . .			
1952/53	133	135	116
1956/57	154	157	132
Far East (excl. China) . . .			
1952/53	105	92	102
1956/57	122	106	124
Near East . . .			
1952/53	141	119	143
1956/57	164	130	151
Africa . . .			
1952/53	133	...	159
1956/57	148	...	170
Oceania . . .			
1952/53	114	119	123
1956/57	119	124	126
All above regions .			
1948-50	116	114	105
1952/53	124	122	116
1956/57	136	133	127

¹ Food products only.

² Gross production with no allowance for imports of animal feeding stuffs.

... Not available.

TABLE 15. — PER CAPUT PRODUCTION OF CERTAIN PRODUCTS, 1952/53 AND PLANNED OR ESTIMATED FOR 1956/57 (WORLD EXCL. U.S.S.R., EASTERN EUROPE AND CHINA)

ITEM	1952/53	1956/57 (Estimated)
. Indices : 1934-38 = 100..		
FOODSTUFFS		
Citrus fruit.	131	141
Eggs ¹	124	128
Bananas	113	118
Sugar	109	115
Wheat	109	100
Vegetable oils and oilseeds	103	116
Coarse grains.	102	105
All cereals	101	102
Meat.	96	100
Milk.	92	92
Dates	91	92
Rice.	89	98
Pulses	88	101
Potatoes	88	91
Figs	86	84
Raisins.	74	74
AROMATICS AND RAW MATERIALS		
Rubber	148	164
Tea	105	110
Tobacco	98	102
Cotton.	95	95
Wool (clean basis)	96	91
Jute.	94	88
Cocoa	84	84
Coffee	80	83

¹ Europe, North America and Oceania only.

² 118 in 1951/52.

trends, and shows also where the main changes in per caput supplies are to be expected by 1956/57 if current plans and estimates materialize. The indices for 1952/53 reflect on the one hand changes in world demand, and on the other the relative difficulties (economic, social and agricultural) of expanding production.

Trade Prospects

In dealing with prospects for the main commodities if the 1956/57 production objectives are realized, it seems necessary not only to compare expected increases in production and population, but also to consider possible effects on the volume of international trade. Moreover the analysis throws some further light on the significance of the production objectives and the likelihood of their being achieved. This is not of course to imply that changes in production are the only factor determining the volume of trade.

For many commodities the main production is for export. Thus while only about 10 percent of the world's production of food is exported, for some individual foods, e.g. sugar and oilseeds, the proportion is as high as 30-40 percent. In the case of "aromatics" and raw materials something like two thirds of the world's output moves into international trade. Exports of wool, coffee and tea exceed 80 percent of world production, and for cocoa and rubber the proportion approaches 100 percent. In all cases these exports are directed overwhelmingly towards two regions, Europe and North America, and a simple comparison of the estimated increases of production and population for the producing region or for the world may give a misleading impression of how future supplies are likely to compare with demand.

Some countries (the U. S. A. is a notable example) have themselves made estimates of their domestic consumption, or of their exportable supply or import requirements in 1956/57. In general, however, countries' estimates of consumption or trade in 1956/57 were much less complete than their estimates of production and the projections which follow are mainly those of FAO. To fill the gap rough estimates have been made by FAO to give a tentative indication of broad global and regional trends. The method followed was to estimate for each region the probable total domestic requirement (for all purposes and not only human consumption) on the basis of the expected population and the recent trend of per caput supplies. The difference between this figure and the expected production was taken as

the supply available for export, or in deficit regions as the required import. The available data seldom justified any attempt to examine intra-regional trade, and in general only the broad movement of agricultural products between regions has been considered, except for livestock products where shipments between neighboring countries in the same region account for a large proportion of world trade.

In making these estimates, it has been assumed that there is likely to be a continuing slow increase in most countries in per caput national incomes. The impact of possible cyclical changes has been deliberately ignored, and it has been assumed that demand will not be sharply changed up to 1956/57 either by a boom or a depression. On these assumptions, the upward trend of the production estimates themselves suggests a further slow downward movement of prices of agricultural products, but it has not been possible at this stage to make any detailed studies of price developments, or of the influence of national policies, currency difficulties, the increasing use of near substitutes for agricultural raw materials, and other factors which may influence consumption trends over the next few years, even in the absence of cyclical change. The relative importance of such factors varies from product to product and from region to region. They are generally less important for basic food-stuffs such as grains, where predictions of requirements can therefore be made with somewhat greater confidence than for commodities with a more elastic demand, notably non-food products. Further work may thus modify some of the present estimates of future requirements, which in any case can give no more than a rough indication of the likely position. The results, tabulated in Annex II, have therefore usually been shown as a range, and the trends which they suggest are to be considered of greater significance than the absolute figures.

Apart from the imperfections of the consumption data, another reason for caution, perhaps even more important, lies in the probable upward bias of the basic production estimates themselves. Experience suggests that the estimated levels of future production are more likely to be high than low. It may well be that not all plans will be fully implemented, and that many developments may take longer to show results than at first expected. Unless this upward bias is borne in mind the result may be dangerously misleading, particularly for commodities where at first sight the figures suggest an ample supply in 1956/57, or even a

possible surplus. Care has been taken in the text to point out where the upward bias may turn out to be large.

Cereals

Although per caput world production (excluding U.S.S.R., Eastern Europe and China) in 1952/53 exceeded the prewar average by only one percent, the supply was unevenly distributed. Large unsold stocks of wheat and maize accumulated in North America, following bumper crops, while in the Far East per caput supplies, after allowing for imports, remained some 10 percent less than before the war.

The estimates and objectives for 1956/57 suggest some decline in the world production of bread grains, and a considerable expansion of rice and coarse grains. The reduced bread grain production results from a decline in the United States estimates, which assumed that the very high yields of the last two years would not continue and that the acreage under wheat would be reduced, though not to the level recently decided for 1954. If the latter acreage were still maintained in 1956/57, the total production of bread

grains in North America at normal yields may be estimated as in the neighborhood of 40 million tons, or some 3-4 million tons less than the present estimate in Annex I. If all objectives were realized, world per caput production of cereals (excluding the U.S.S.R., Eastern Europe and China) would be about 2 percent higher than before the war, and there would be a slight reduction in the disparities which have arisen in some regions between the growth of population and cereal production. Even so, production per head would remain well below the prewar level in the Far East, Europe and Latin America, and substantially higher in North America and the Near East.

The current five-year plan for the U.S.S.R. proposes an increase of 45 percent in grain production from 1950 to 1955, most of which depends on an increase of 38 percent in yields per hectare. While the target crop area had been slightly exceeded by 1952 there had been no increase in yields and recent official statements indicate that progress is still slow. An estimate from ECE, Geneva, based on official data, suggests that by 1955 bread grain production in Eastern Europe may increase by 22 percent compared with 1948, and coarse grain production by 32 percent. In

TABLE 16. — ESTIMATED TOTAL AND PER CAPUT PRODUCTION OF CEREALS IN 1956/57

PRODUCTION 1948-50			TOTAL PRODUCTION			PER CAPUT PRODUCTION		
Million tons	Kg. per head		1948-50	1952/53	1956/57 (Estimated)	1948-50	1952/53	1956/57 (Estimated)
Indices : 1934-38 = 100								
172.0	1044	North America.	152	160	153	130	130	117
100.9	137	Far East (excl. China)	97	100	119	82	81	91
70.9	235	North Western and Southern Europe.	93	101	108	85	90	94
28.5	179	Latin America.	94	115	140	72	82	91
23.1	187	Near East.	112	141	165	95	114	123
21.0	141	Africa.	115	122	133	98	99	101
6.8	561	Oceania.	124	131	127	106	105	92
423.2	257	All above regions (A)	115	124	132	98	101	102
121	605	U.S.S.R.	119	129	179	112	115	149
39	438	Eastern Europe.	90	96	108	94	98	107
89	...	China.	91	109	131	...	...	...
672	302	World.	110	120	138	99	102	109
		ANALYSIS OF SUB-TOTAL (A)						
118.3	72	Bread grains.	111	130	128	94	106	98
73.8	45	Rice (Milled).	105	110	128	89	89	98
231.1	140	Coarse grains.	122	126	137	103	102	105

¹ This estimate is likely to be reduced if recently introduced acreage restrictions in U.S.A. are continued.

² World excluding China.

... Not available.

China the index of production of food grains in 1952 is given as 109 (1936 = 100) and according to a recent official statement production is to be raised in the next ten years to 300 million tons, "nearly double the present level"; these estimates probably include the grain equivalent of pulses and tubers. The same statement, however, emphasizes the rapidly growing needs of the urban population and the increased production seems essentially for domestic consumption. Requirements are also expanding in the U.S.S.R., particularly with the recent emphasis on improved standards of living, while in Eastern Europe an ECE estimate suggests that probably not more than some half million tons of bread grains (mainly rye) will be available for export, and that the rapidly growing livestock population is likely to absorb all the coarse grains available. No marked increase in exportable supplies of grains from these regions therefore seems likely by 1956/57 though exports could of course be increased by government action.

Nevertheless, the estimates for 1956/57 suggest that some major shifts in the pattern of world trade in cereals may be in prospect. The main conclusions, necessarily highly tentative, which seem to emerge are summarized below but there remain very large elements of uncertainty. Some of the data on which they are based are given in greater detail in Annex II.

The Far East. The Far East (excluding China) seems likely to remain a net importer of cereals as, even if all production targets are reached, per caput production will attain only 91 percent of the prewar level. The size of the net import requirement, however, presents perhaps the greatest element of uncertainty in the cereal outlook, depending both on the success in reaching planned production objectives and future levels of consumption.

The production objectives represent a sharp change from the static trend of production in recent years, broken only by the good rice crop of 1952, though prospects for 1953 are also generally favorable. In many countries they imply a big increase in yields per hectare. The prospects of achieving these gains were discussed briefly in Chapter I and are considered further in Chapter III.

From a net exporter of 2.8 million tons of grain in 1934-38, the Far Eastern region has become a heavy net importer, to the extent of some 8 million tons in both 1951 and 1952. A comparison of the 1956/57 export targets given to FAO by the rice-exporting countries (5.4 million tons)

with the import targets (6.0 million tons) supplied by the deficit countries, where strong efforts are being made for greater self-sufficiency in cereals, suggests that net import requirements of grain from outside the region would be reduced by that date to little more than half a million tons. Some doubt must arise whether so sharp a fall will in fact materialize. Even if all production objectives are reached such a net import would provide only 94 percent of the low prewar per caput supply and give relatively little improvement over the unsatisfactory postwar level of consumption. Moreover, since consumption has risen in rice-exporting countries, the decline from prewar consumption levels in the deficit countries is greater than the average. It may be difficult to restrict consumption to this extent without an inflationary effect on food prices, especially if general economic development increases purchasing power.

Because of these uncertainties of production and consumption, it was suggested in the working paper prepared for the Regional Meeting, where the problem is analyzed in more detail, that it would not be surprising if in fact net imports from outside the region in 1956/57 fell little short of the current level, a view from which the Meeting did not dissent. Very tentatively a net import of some 5-6 million tons of grain in 1956/57 may be suggested as a possible upper limit; this would imply (a) rather higher consumption levels than are suggested by the countries' present objectives, and (b) some shortfall in the production estimates, and therefore both smaller rice export availabilities in the surplus and larger import requirements in the deficit countries.

Any large Far Eastern net import requirement would have to be met mainly by wheat or coarse grains, as only small exportable supplies of, say, a million tons of rice seem likely to be available from outside the region or from China. There may be up to three quarters of a million tons of rice available (on a net basis) from North America and the Near East, while a continuation of Chinese exports might raise the total to about one million tons, but of this quantity about half is likely to be absorbed by Africa, Latin America and Europe. In effect, therefore, any large import requirement in the Far East can be regarded as falling primarily on wheat, which is likely to be generally preferred to coarse grains.¹

¹ If substantial rice exports from the Far East to Europe are resumed the net import requirement of wheat of the Far East would be increased but would probably be partly offset by some fall in European wheat requirements.

Other Wheat-Importing Countries. The probable variation in requirements in other wheat-importing areas is smaller. In North Western and Southern Europe the production objectives imply an increase of only 1.6 million tons (4 percent) over the good 1952/53 crop and should not be difficult to reach. Consumption, particularly for animal feeding, may rise slightly, however, if imported wheat becomes less expensive and more readily available from the non-dollar area, and on the whole import requirements seem unlikely to change very greatly from the present level of 13-14 million tons. A continuing rise may be expected in imports into Latin American countries (excluding Argentina) where consumption is increasing even more rapidly than production. Net imports have risen from about 1½ million tons before the war to 2½ million tons in 1949-52 and seem likely to approach 3 million tons by 1956/57. Net imports of wheat into Africa, recently about half a million tons annually, may also increase slightly.

Exportable Supplies of Wheat. Realization of the 1956/57 production targets would mean little change in exports from Oceania, but would increase exportable supplies of wheat from the Near East and Argentina. The export from Argentina,

where the 1956/57 estimates represent no increase over the good crop of 1952/53, would be roughly balanced, however, by the import demand from other Latin American countries. In the Near East the ambitious production plans are in line with recent rapid progress, though allowance must be made for the great variation in yields from year to year in this region. But the rate of development of exports will depend also on how much of the increased production is used in the region, on price factors, and on the success achieved in overcoming the transport and other organizational difficulties inseparable from the establishment of a new enterprise. The magnitude of the probable exportable supply from the Near East is yet another large element of uncertainty in the cereal outlook.

These possible increases in exports from the non-dollar area seem likely to be offset by a decline in exportable supplies from current production in North America, particularly in view of the recently introduced acreage restrictions in U.S.A., though additional quantities for export may well be available from stocks.

Bread Grain Supplies and Requirements. A possible balance sheet for 1956/57 if the production

TABLE 17. — BREAD GRAINS: POSSIBLE TRENDS IN NET EXPORTABLE SUPPLIES AND NET IMPORT REQUIREMENTS IF THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED ¹

REGION	1934-38	1949-52	1956/57 (Estimated)
<i>Million metric tons</i>			
<i>Net Exports</i>			
Oceania	2.7	2.8	2.2-2.5
Argentina	3.5	1.9	2.6-3.2
Near East	—	—	0.8-1.5
U.S.S.R. and Eastern Europe	2.6	1.1	1.0-1.5
Total (non-dollar area)	8.8	5.8	*6.6-8.7
North America	5.2	17.9	*12.3-14.2
GRAND TOTAL	14.0	23.7	*19-23
<i>Net Imports</i>			
North Western and Southern Europe	11.2	14.0	13-15
Latin America (excl. Argentina)	1.6	2.6	2.6-3.0
Africa	0.2	0.5	0.4-0.6
Near East	—	1.2	—
Total (excl. Far East)	13.0	18.3	16-18.6
Far East ³	1.0 (0.4)	5.1 (6.4)	nil-5.5
GRAND TOTAL	14.0	23.4	16-24

¹ For further detail see Annex II.

² Estimated exportable supply from current production only.

³ Net imports of bread grains and coarse grains combined are shown in brackets for comparability with the figures in the final column, as for 1956/57 it has been assumed that all import requirements would be met in wheat if rice were not available. Total net imports of grain (including some half million tons of rice) rose to 7.8 million tons in 1951 and 8.7 in 1952.

— Nil or negligible.

estimates are realized is shown above solely to illustrate the trends already discussed. From this it appears that if net import requirements in the Far East fall as sharply as the countries' own estimates suggest, world exportable supplies from current production may be well above import requirements, whether or not the projected increase in non-dollar exports materializes.

If, and this seems more probable, the decline in Far Eastern requirements is more moderate, there may be a rough balance between exportable supplies from current production and import requirements. But this assumes that the recent acreage restrictions in the U.S.A. are continued and are effective in reducing export availabilities from North America.

Coarse Grains. For coarse grains the prospect if the 1956/57 estimates are achieved would be one of abundant supply. Although the level of production expected in North America would leave little margin for export, except from stocks, much larger supplies would become available in Argentina and the Near East. Altogether, there might be an exportable supply of some 10-12 million tons from outside the dollar area, which would make possible shipments to North Western and Southern Europe, the only regular importing regions, on the same scale as before the war.

Whether imports on this scale could be absorbed is another question. In the last few years net European imports have averaged about 8 million tons, and requirements seem to have been permanently reduced by the declining number of horses and by economies in the use of cereal feeding stuffs, particularly the better use of grassland. Moreover, European targets provide for an increased production of some 4 million tons of coarse grains compared with 1952/53, which should still further reduce import requirements. Thus if all the production plans materialized a surplus might arise (Table 18).

Whether a surplus situation is in fact likely to arise depends on a number of possible developments. For example, a more abundant supply of feed grains from outside the dollar area might weaken the drive to expand production in Europe, especially if prices continue downward, and might considerably stimulate demand if lower prices for feed grains were reflected in the prices of livestock products. Lower prices might also open large markets outside Europe and lead to higher utilization in the exporting countries. On the export side, too, progress may be slower than is planned. In Argentina the difficulties

TABLE 18. — COARSE GRAINS: POSSIBLE TRENDS IN NET EXPORTABLE SUPPLIES AND NET IMPORT REQUIREMENTS IF THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED¹

REGION	1934-38	1949-52	1956/57 (Estimated)
<i>.... Million metric tons</i>			
<i>Net Exports</i>			
Argentina	7.4	1.1	6.0-6.5
Oceania	0.1	0.5	0.6-0.7
Near East	0.4	0.5	2.1-2.8
Africa	0.8	0.9	0.8-1.0
Far East	0.6	—	—
U.S.S.R. and Eastern Europe	1.6	1.1	0.5-1.5
Total (non-dollar area)	10.9	4.1	10.0-12.5
North America	0.1	4.9	nil-+0.5
GRAND TOTAL	11.0	9.0	10.0-13.0
<i>Net Imports</i>			
North Western and Southern Europe	11.0	8.1	7-10
Far East	—	1.3	—
	11.0	9.4	7-10

¹ For further detail see Annex II.

² Exportable supply from current production only.

³ Included under bread grains on the assumption that, if available, wheat would normally be preferred to coarse grains.

— Nil or negligible.

of reaching the production targets (e.g. difficulties of harvesting) will be greater for coarse grains than for bread grains. The problems which may arise in rapidly expanding wheat exports from the Near East apply equally to coarse grains. But even if exports from these areas develop more slowly than expected, there seems no likelihood of any shortage of supplies apart from serious crop failures, against which the heavy stocks in North America appear for the time being to provide a cushion.

Sugar

Per capita sugar production is already substantially greater than before the war, and the exceptionally high crop of 1951/52 necessitated the restriction of production in Cuba and the establishment of a Cuban Stabilization Reserve of 1.8 million tons. The targets and estimates for 1956/57 indicate a further marked increase in world production.

Production in North America (including Hawaii) is not expected to increase as sharply as in other regions and import requirements seem likely to rise

by up to 0.7 million tons over the average postwar level. On the other hand, the projected expansion in North Western and Southern Europe, the other major importing region, would, if achieved, leave import needs at little more than their present level, even if the United Kingdom regains its pre-war consumption after the end of rationing. Net

TABLE 19. — SUGAR (RAW EQUIVALENT)¹ : ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 (Provisional)	1956/57 (Estimated)
..... Million metric tons				
Latin America . . .	7.2	12.2	12.4	13.3
Far East (excl. China)	6.6	5.3	6.8	7.9
North Western and Southern Europe	4.0	4.8	5.5	6.2
North America . . .	2.8	3.0	3.0	3.3
Africa	1.0	1.3	1.4	1.7
Oceania.	1.1	1.1	1.1	1.4
Near East	0.2	0.4	0.5	0.6
All above regions . .	22.9	28.1	30.7	34.4
World.	27.9	33.1	36.0	42.8
..... Kg. per caput				
Per caput production ²	16.4	17.1	17.9	18.9

¹ Including raw equivalent of non-centrifugal cane sugar.
² 14.6 million tons in 1951/52.

³ 1935-39.

⁴ Australia 1936-39.

⁵ Excluding U.S.S.R., Eastern Europe, and China.

import requirements of all regions in 1956/57 are likely to be somewhat less than 9 million tons.

On the other hand, if all the production targets are realized more than 11 million tons may be available for inter-regional export. The limitation of Cuban production is largely offset by projected expansion elsewhere in Latin America. Australian and South African exports are expected to expand considerably, and the production estimates for the Far East imply a substantial recovery of the region's prewar level of exports. Eastern Europe may be able to export as much as a million tons.

These production targets, however, are likely to be considerably modified. The expansion of production in Europe, greatly stimulated by good weather in 1953/54, may be deterred by the increasing availability of cheaper cane sugar from non-dollar sources; the targets of some countries in this area have, in fact, already been reduced from their original levels. Eastern Europe's probable surplus may be largely absorbed

by the U.S.S.R., where the very high production target seems unlikely to be reached, though these two areas have between them a total export quota of nearly a million tons under the new International Sugar Agreement. As a result of this agreement, some production programs will probably be scaled down as participating exporters have agreed to adjust their production in accordance with domestic consumption, permitted exports and a specified level of stocks.

Oils and Oilseeds

World production of vegetable oils and oilseeds in terms of oil, including the oil equivalent of oilseeds used for purposes other than processing for oil, was about 20 percent larger in 1952/53 than before the war. This was a slightly greater increase than the growth of world population¹.

Nearly one half of the increase in the gross production of vegetable oils and oilseeds is due to a remarkable expansion in North America, especially of soybeans and linseed, while about one third is shared equally between the U.S.S.R. and Africa. In the Far East and Latin America, production is roughly at the prewar level, and on a per caput basis much lower (Table 20).

The targets and estimates for 1956/57 imply an increase of some 25 percent over the 1948-50 average gross production of vegetable oils and oil equivalent of oilseeds. This increase is shared fairly equally between the major producing regions, though the expected expansion is somewhat below the average in North America, and appreciably higher in the U.S.S.R. and also in the smaller producing areas of Europe and the Near East. World per caput production would rise to some 15 percent above the prewar level if these estimates are realized, though in the Far East and Latin America production per head would remain appreciably lower than the 1934-38 average.

If probable trends in animal and marine oils are also taken into account, the projected rise in per caput world production of all fats and oils would be approximately 10 percent instead of the 15 percent indicated for vegetable oils and oilseeds alone. World butter production probably will not increase as rapidly as world population. Production of whale oil is being restricted by international agreement to preserve the world whale stock, and

¹ If, however, allowance is made for oilseeds not crushed for oil, and with the inclusion of butter in terms of fat content, lard, tallow, greases, whale oil and fish oil, production of oils and fats per caput is slightly less than before the war.

an increase is not likely in the next few years in the number of whales permitted to be caught. On the other hand, world production of lard, tallow, and greases, which are by-products of livestock slaughter, may increase about as rapidly as is projected for vegetable oils and oilseeds.

TABLE 20. — VEGETABLE OILS AND OILSEEDS (OIL EQUIVALENT): ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 (Provisional)	1956/57 (Estimated)
<i>Million metric tons.....</i>				
Far East (excl. China)	3.9	3.8	4.2	4.8
Africa	1.5	1.9	2.1	2.5
North America . . .	1.3	2.6	2.7	2.8
Latin America . . .	1.1	1.1	1.1	1.5
North Western and Southern Europe .	0.8	0.8	0.8	1.3
Near East	0.4	0.5	0.6	0.7
Oceania.	0.1	0.1	0.2	0.2
All above regions . .	9.1	10.8	11.7	13.8
World	14.6	16.5	17.6	20.6
<i>Kg. per caput</i>				
Per caput production ^a	6.6	6.6	6.8	7.6

NOTE: The production figures are gross, and thus include oilseeds not actually crushed for oil but used for seed, fertilizer, feeding to livestock, and directly as human food.

^a 1935-39.

^b 1.6 million tons in 1951/52.

^c Excluding the U.S.S.R., Eastern Europe and China.

The expected expansion of vegetable oils and oilseeds is at the rate of about 4 percent per year. This would imply a considerable acceleration, as the increase from 1948-50 to 1952/53 was at the rate of about 2 percent annually.

North America and Europe together account for about 85 percent of world imports of all fats and oils, with a slightly lower percentage of animal and marine oils and fats and a slightly higher percentage of vegetable oils and oilseeds. Though there is evidence of a moderate downward trend in these percentages, the import demand of these areas in 1956/57 will still play the leading role in total world import demand.

Since European countries are aiming at an increase in per caput milk and meat production, an increase in European per caput production of butter, lard and tallow is implied. It may well be, however, that a decreasing proportion of the milk produced will be used for butter and that import supplies of butter from other areas will fail to

rise. This could mean a fall in the European per caput butter supply, with a consequent rise in the demand for vegetable oils to be used in margarine manufacture. However, the increasing use of synthetic detergents is eating into the market for fats and oils for soap making and in Europe this will tend to diminish the demand for palm and coconut oils in particular, as well as for inedible tallow.

In North America, as a result of the large increase in production over prewar, import demand for fats and oils for food products, soap and paints has become relatively small, except for reduced quantities of coconut oil for soap and of "quick-drying oils" such as tung oil. U.S. import demand for oils having special qualities for various industrial uses may rise, to the benefit particularly of coconut and castor oils, but this increase in demand is not likely to be of major proportions by 1956/57.

The targets for increased production of vegetable oils and oilseeds in 1956/57 in areas outside Europe and North America exceed the increase that seems likely in consumption in these areas, after allowing for a restoration of the prewar consumption level in the Far East and a continuation of the rising trend elsewhere. Hence an increase in the world exportable supply is indicated which is not matched by an equal increase in the probable import demand. It should be noted, however, that this conclusion rests on many assumptions. The 1956/57 targets are generally ambitious and may not be achieved, especially if the market weakens. Again, domestic consumption in exporting countries may rise more sharply than has been assumed, while new industrial uses in North America and Europe may expand more rapidly than can be foreseen at present.

Livestock Products

Although meat, milk and milk products and eggs account for roughly 40 percent by value of world agricultural production, rather few countries outside North America, Oceania, Europe and some parts of Latin America have established definite objectives for livestock numbers or livestock production, as they have for crops. The four regions named, however, are estimated to account for some 80 percent of world production excluding U.S.S.R., Eastern Europe and China. The widely different share of livestock production in the agriculture of the different regions is very striking (Table 21), and has changed little from before the war except for some decline in Europe.

TABLE 21. — ESTIMATED SHARE BY VALUE OF LIVESTOCK PRODUCTION IN THE AGRICULTURAL OUTPUT OF EACH REGION, 1948-52

REGION	Livestock Products ¹	Food Crops	Non-Food Products
..... Percent			
North Western and Southern Europe	257	40	3
North America	55	34	11
Oceania	52	23	25
Latin America	39	41	20
Near East	30	59	11
Africa	22	68	10
Far East (excl. China)	17	70	13
All above regions	42	47	11
World	39	51	10

¹ Food products only. Wool is included under non-food products.

² Gross production with no allowance for imported feeding stuffs.

Data presented earlier (Table 14) reflected this lag in livestock production in Europe compared with other branches of agriculture, but suggest that in the other main producing regions it has

kept fairly closely in line. For the future, the 1956/57 estimates and objectives indicate somewhat greater emphasis on livestock production.

Outside the main producing regions livestock production is still limited, though there are signs that it is now beginning to receive greater attention. The rough estimates of per caput production of meat and milk in "other regions" (Table 22) give some idea of the disparities which still exist between these and the main livestock areas.

In North America and Oceania milk production has not kept pace since the late thirties with the growth in population, and the 1956/57 estimates show that this decline is expected to continue, a development which may be linked with the downward trend in the consumption of butter under competition from margarine. The same trend is to be found in most European countries, but has been partly offset by some rise in the consumption of liquid milk. Here the 1956/57 estimates suggest a restoration of the prewar per caput production.

Per caput meat production is substantially higher than before the war in North America, and is

TABLE 22. — ESTIMATED PER CAPUT PRODUCTION OF LIVESTOCK PRODUCTS IF THE 1956/57 PLANS AND ESTIMATES ARE ACHIEVED

REGION	1934-38	1948-50	1952/53	1956/57 (Estimated)	1948-50	1952/53	1956/57 (Estimated)
..... Ky. per caput							
..... Indices : 1934-38 = 100							
<i>Milk</i>							
Oceania	949	882	862	792	93	91	83
North America	435	383	364	337	88	88	78
North Western and Southern Europe	296	255	283	297	86	96	101
Other regions	47	47	47	49	99	100	104
World ¹	142	124	128	127	88	90	90
<i>Meat</i>							
Oceania	136	132	131	124	94	93	92
North America	58	66	66	67	114	114	116
Latin America	41	36	33	34	89	81	83
North Western and Southern Europe	32	24	28	30	75	89	94
Other regions	5	4	5	5	92	95	102
World ¹	20	18	19	19	92	96	99
<i>Eggs</i>							
North America	17	23	23	23	140	137	139
Oceania	11	12	11	11	106	97	98
North Western and Southern Europe	8	7	8	8	93	105	109
All above regions	11	13	13	14	120	124	128

¹ Excluding the U.S.S.R., Eastern Europe and China.

estimated to increase slightly by 1956/57. In the other main producing regions per caput production is well below the prewar average, but is expected to regain some ground by 1956/57. For eggs too the position in the main producing regions is similar. In North America there has been a remarkable increase in production, and the 1956/57 estimates suggest that the output may now be stabilized at about the present high per caput level. Current per caput production in Oceania is somewhat below and in North Western and Southern Europe somewhat above the prewar average, and in the latter region the 1956/57 estimates and objectives indicate a slow upward trend.

In the U.S.S.R. livestock numbers have recovered slowly and the number of cows has not yet reached the prewar level; the recent official statement on agriculture also speaks of low yields. Increased incentives have been decided on to encourage the keeping of livestock and to increase the supply of fodder, and targets have been established for a greatly increased livestock population by the end of 1954. The projected increases are so great, however, that they can hardly be reached unless slaughterings are greatly reduced.

In Eastern European countries, on the other hand, livestock numbers, especially of pigs, have tended to run ahead of plans. In Poland, Czechoslovakia and Hungary large numbers of pigs had to be slaughtered in the winter of 1950/51, when they already exceeded the numbers planned for 3-5 years later, as supplies of feeding stuffs were inadequate. Similarly, pig numbers in Eastern Germany in 1952 were higher than had been planned for 1955. Poland has already exported large supplies of pigmeat, and if, as is not unlikely, the meat production targets are reached, domestic consumption levels could be raised and still leave a large exportable surplus. Any considerable increase in exports to Western Europe would tend to increase the possible marketing difficulties in that area, discussed below. The Eastern European countries also plan important increases in the production of milk and eggs, which may well lead to larger supplies for export. Some 20 thousand tons of eggs have been sent annually from Eastern to Western Europe in the last few years, and exports of at least this order of magnitude seem likely to continue to be available.

International trade in meat turns largely on the supply to the United Kingdom. The expected increase in pork and bacon production in that country suggests that by 1956/57 import requirements for pigmeat may decline substantially even if, on the expected end of rationing, pork and

bacon consumption regains the prewar level. Present production estimates for the three main suppliers (Denmark, Holland and Ireland) suggest, however, a small increase in exportable supplies. For beef and mutton the increases expected in United Kingdom production will still leave total supplies well below the prewar level if imports do not increase. In fact, some increase in exportable supplies from Oceania seems likely if the 1956/57 estimates are realized, and possibly from Latin America as well, but it is doubtful if taken together they would permit consumption at the prewar level. The main deficiency would be in beef. It remains to be seen therefore whether the consumption of meat in the United Kingdom will remain less than before the war, or whether there will be a shift towards pigmeat in default of beef. If such a shift led to a higher per caput consumption of pork than before the war, the possible marketing difficulties for European pigmeat discussed above might be considerably eased. Questions of price and currency, for both meat and feeding stuffs, are likely to determine the outcome. The production estimates for other countries do not suggest any major shift in the pattern of international trade in meat.

For eggs too the estimates for 1956/57 suggest a decline in the import requirements of the two main importers (the United Kingdom and Germany), even if prewar consumption levels are restored, and a small increase in exportable supplies from the main European exporters. If there is no increase in per caput consumption in North Western Europe the area as a whole would have a small export surplus, compared with the present net import of some 100 thousand tons. If, however, prices of feeding stuffs and thus of eggs become lower a considerably increased consumption seems likely. Shipments to North Western Europe and intra-regional trade in that area seem likely to continue to constitute nearly the whole of international trade.

The same is largely true of the international trade in milk products, though shipments of dried and condensed milk to the less developed regions are increasing. The 1956/57 production estimates suggest a higher per caput production of milk in Europe, though butter consumption continues to decrease in most countries. On the other hand there is ample room in many countries for a further rise in the consumption of liquid milk, though there has been little progress recently, except in Italy. The apparent decline in per caput production in Oceania will not necessarily reduce the supply for export. The alternative uses for

milk, however, make it impossible to obtain any clear indication from the production estimates of likely trends in world trade.

Fisheries Products

The annual production (catch) of fish, crustaceans, and mollusks, which was about 22 million tons before the war, increased from 20 million tons in 1948 to some 26 million tons by 1952 as a result of the postwar rehabilitation programs, expansion of existing fisheries and the development of new fisheries.

The pattern of utilization of catches for human food reflects greater emphasis on canning and especially on modern methods of freezing. The bulk of the postwar increases has been absorbed by the tremendous expansion of the reduction industry producing meals for animal feeding and oils.

Domestic and international marketing conditions, the weakness of the effective demand, the increased availability of competitive foods, and programs of consolidation, retrenchment, etc., will possibly retard the annual increment rate during 1953-57 as compared with 1948-52 in Europe, North America, Southern Africa, and Japan. In the less developed areas, such as Latin America, Central Africa, the Near East and South East Asia, improved market, transport and handling facilities, together with mechanization and other technical improvements of craft and gear and cultural operations in inland waters, might bring about relatively large increases in production.

Under scientific and rational management and with a general heightening of economic activity, production might increase to some 30 million tons by 1957 and 34 million tons in 1960. Unless, however, the many deterrents are overcome the current levelling and even decline of production among major producers will probably offset any possible increases among the small-scale producers, with the result that the total world output will remain at the current level.

Coffee

World production of coffee has not yet regained its prewar level, but the estimates suggest that by 1956/57 it may be some 9 percent greater than before the war. This, however, would imply only a slight increase over present per caput production. In Brazil, the largest producer, the present estimates suggest a production in 1956/57 somewhat lower than before the war, and prospects may be affected by recent frosts which are reported

to have damaged new plantings. On the other hand, unofficial reports suggest that new plantings may be heavier than the present estimates would indicate. In other Latin American countries and Africa the recent expansion is expected to continue and some recovery of production is likely in the Far East.

TABLE 23. — COFFEE: ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 (Provisional)	1956/57 (Estimated)
..... Million metric tons				
Latin America	2.12	1.85	1.98	2.18
Africa	0.12	0.23	0.28	0.30
Other regions	0.18	0.11	0.12	0.15
World	2.42	2.19	2.38	2.63
..... Kg. per caput				
Per caput production ¹	1.74	1.33	1.39	1.45

¹ Excluding the U.S.S.R., Eastern Europe and China.

Per caput consumption in North America is considerably greater than before the war, but in Europe is only about two thirds of the prewar level though there was a large increase in imports in 1952. Further large increases in European imports seem unlikely, however, especially if prices remain firm, and it is more probable that most of the increased production by 1956/57 will be absorbed in other parts of the world, including North America, where coffee consumption is increasing steadily. In general the supply situation may be somewhat easier by that time, the more so if, as seems possible, some of the production estimates are exceeded.

Tea

World production (excluding that of China and the U.S.S.R.) has increased steadily since the war, though in 1952/53 there was a slight fall from the level of the previous year. The record crop of 1951/52 represented an increase of 30 percent over prewar, or about 8 percent on a per caput basis. Small increases in most of the major producing countries together with a continued rise in the relatively small African output might give a world crop of as much as 640 thousand tons in 1956/57, or about 10 percent greater than prewar per caput production. This figure is tentative,

however, as India, the largest producer, has not established an official target, and as in practice production can be adjusted to market conditions by varying the fineness of plucking.

Production in China may return close to the prewar level of about one quarter million tons by 1956/57, but any increase in exports would probably go largely to the U.S.S.R. and Eastern Europe and seems unlikely to affect the supply position in the rest of the world. No recent information is available on production in the U.S.S.R., though it is believed to be increasing.

TABLE 24. — TEA: ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 (Provi- sional)	1956/57 (Esti- mated)
..... Million metric tons				
Far East (excl. China)	0.44	0.50	0.55	0.61
World ¹	0.45	0.52	0.58	0.64
..... Kg. per caput				
Per caput production ¹	0.32	0.32	0.34	0.35

¹ Excluding the U.S.S.R., Eastern Europe and China.

If this level of production is reached by 1956/57 the exportable supply from the Far East (excluding China) might be as high as 400 to 450 thousand tons, compared with recent shipments of the order of 370 thousand tons annually. Actual exports are likely to be determined mainly by the demand. Per caput consumption in the United Kingdom, which absorbs nearly half the world's export, is still some 8 percent lower than before the war, and has so far shown little apparent response to the winding up of controls and rationing at the end of 1952. It is not unlikely that the prewar per caput consumption may be restored by 1956/57, but even so the increased supply which, from the above estimates, seems potentially available, could hardly be absorbed unless consumption is considerably expanded outside the traditional markets.

Cocoa

The production of cocoa has not kept pace with the growth of population, the peak in 1950/51 being only 8 percent above the prewar level. Production declined sharply in the following year and recovered only partially in 1952/53. In several recent years the combined production of

the three major producers has been less than before the war, and any increase has been due mainly to the smaller producers.

Future prospects are difficult to assess. Estimates received from the Gold Coast and Nigeria indicate a slight decline from the postwar average production, but this should be more than offset by a planned increase in French Africa so that the total African production may rise slightly to about 520 thousand tons in 1956/57. The Latin American position is more obscure, as no official estimate is available of Brazilian production and estimates from different sources vary by as much as 50 thousand tons. The very tentative estimates in Table 25 suggest a world crop of some 800 thousand tons in 1956/57, only 10 percent above the prewar average. This would imply little change from the present per caput production.

TABLE 25. — COCOA: ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 (Provi- sional)	1956/57 (Esti- mated)
..... Million metric tons				
Africa	0.48	0.51	0.51	0.52
Latin America	0.24	0.26	0.24	0.28
World	0.73	0.78	0.76	0.81
..... Kg. per caput				
Per caput production ¹	0.53	0.47	0.44	0.44

¹ Excluding the U.S.S.R., Eastern Europe and China.

² Revised from an earlier estimate in *Prospects for Agricultural Development in Latin America*.

At this level of production, export supplies roughly maintain North American and European per caput consumption at their postwar average levels, which are much lower than before the war. If, however, the estimated production is exceeded the additional supply could probably be readily absorbed at a somewhat lower price.

Tobacco

Tobacco production (excluding the U.S.S.R., Eastern Europe and China) reached a peak in 1951/52, when it was about 25 percent above the prewar average. Although Far Eastern production is still much less than before the war, this has been outweighed by large increases in all other regions. Thus the United States crops in

1951 and 1952 averaged nearly 60 percent above the 1935-39 level, and large gains have also been registered by many of the smaller producers.

For the future, the estimates for 1956/57 indicate a crop in North America at about the same level as in 1952. Some further expansion is likely in Latin America, while production in the Far East may almost regain its prewar level. Elsewhere no great change is expected from the high levels of recent years. World per caput production would be about 4 percent greater than in 1952/53, but only about 2 percent higher than before the war.

TABLE 26. — TOBACCO : ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 (Provi- sional)	1956/57 (Esti- mated)
..... Million metric tons				
North America	10.70	0.93	1.07	1.08
Far East (excl. China)	0.79	0.62	0.60	0.75
Latin America	0.21	0.30	0.32	0.35
North Western and Southern Europe	0.19	0.24	0.21	0.28
Near East	0.08	0.12	0.13	0.12
Africa	0.06	0.12	0.13	0.14
World ^a	2.04	2.33	2.47	2.73
..... Kg. per caput				
Per caput production ^a	1.47	1.42	1.44	1.50

^a 1935-39.

^b 0.28 million tons in 1951/52.

^c Excluding the U.S.S.R., Eastern Europe and China.

If these estimates are realized net export availabilities in 1956/57 are likely to be somewhat above the recent level, but assuming a continuation of the increase in consumption of the last few years, mainly of cigarette tobacco, they may not in aggregate run ahead of the demand. There may, however, be surpluses or shortages of particular types of tobacco (native types, cigarette types, cigar types, etc.) due to shifts in the nature of the demand and the difficulty of substituting one type for another in production as well as in manufacturing. Tobacco growing is generally subject to control by governments or by growers' organizations, and production of the various types can thus usually be adjusted if too large stocks accumulate in producing countries.

One further point may be noted, though it may not affect the situation in 1956/57. Since the war imports of tobacco have been kept down

to current requirements, mainly because of balance of payments problems, and in many countries the manufacturing industry's working stocks are below their normal level. If currency problems become easier the import demand is likely to increase for a time while these stocks are rebuilt.

Cotton

During the 1930's and again in the 1950's cotton production tended to outstrip requirements and acreage restrictions have been imposed from time to time. Such restrictions were in force in the U. S. A. in 1950/51 and are likely to be re-introduced in 1953/54. They were applied in other countries, notably Egypt and Pakistan, in 1952/53.

The 1956/57 estimates show some decline from recent high production levels in U.S.A., but this is more than offset by a substantial expansion in most other major producing regions, which suggest that no restrictions on production are expected. Per caput production for all areas combined (excluding the U.S.S.R., Eastern Europe and China) would show little change from the 1952/53 level if the 1956/57 objectives and estimates are realized. Large increases in production are also planned in the U.S.S.R. and China.

TABLE 27. — COTTON (LINT) : ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 (Provi- sional)	1956/57 (Esti- mated)
..... Million metric tons				
North America	12.85	2.97	3.26	3.04
Far East (excl. China)	1.21	0.80	0.95	1.24
Latin America	0.63	0.79	1.08	1.25
Near East	0.56	0.61	0.79	0.85
Africa	0.14	0.21	0.24	0.25
World ^a	5.42	5.40	6.36	6.66
..... Kg. per caput				
Per caput production ^a	3.89	3.28	3.71	3.67

^a 1935-39.

^b Excluding the U.S.S.R., Eastern Europe and China.

The estimates from U.S.A. show a smaller exportable supply than in recent years, but in other producing regions the production estimates seem to imply a much larger exportable supply even after allowing for a continuing expansion of domestic consumption (Annex II). How rapidly such expansion can take place will in turn depend on

the funds available for investment in textile industries, and also on price factors, especially where (as in some Latin American countries) imported textiles have already been very largely replaced by those produced locally. The question thus arises whether the market can absorb additional export supplies which may be available.

Year to year trade in raw cotton is variable, but over the past quarter century a distinct downward trend has been evident with the growth of textile industries in producing countries and the inroads of rayon into the markets for cotton. If the price of cotton became more competitive with rayon this trend might be checked or even reversed, but it seems doubtful whether this could take place to an extent which would absorb the exportable supply likely to be available if the 1956/57 production estimates are fully realized. The more probable conclusion is thus that production may have to be held at a lower level than at present estimated.

Jute

Jute production remained well below the prewar level until 1951/52, mainly owing to dislocations arising from the partition of India and Pakistan. During this period of shortage and high prices, efforts were made to economize the use of jute and to substitute alternative packing materials, e.g. paper. Production recovered sharply in 1951/52, when it exceeded the prewar level by 10 percent, and rose even higher in 1952/53. With the consequent fall in prices, demand also increased, but nevertheless large stocks accumulated in Pakistan and for the current year production has been sharply restricted.

TABLE 28. — JUTE (RAW): ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 (Provi- sional)	1956/57 (Esti- mated)
..... Million metric tons				
Far East	1.87	1.42	2.13	2.10
World	1.89	1.46	2.19	2.17
..... Kg. per caput				
Per caput production ¹	1.35	0.89	1.28	1.19

¹ Excluding the U.S.S.R., Eastern Europe and China.

A continuing expansion of production is planned in India, but no objective appears to have been fixed in Pakistan and the tentative 1956/57 esti-

mate for that country is based on her expected mill capacity by that date and possible exports, including exports to India under the recent agreement. Whether the level of world production tentatively estimated above is attained depends primarily on the continuing recovery of export markets for jute fiber and jute products.

Wool

Wool production did not keep pace with population from 1934-38 to 1950, but thereafter expanded rapidly under the influence of the Korean boom. Even in the record 1952/53 season, however, per caput production was about 4 percent less than before the war.

The 1956/57 estimates indicate some fall in production in Oceania from the high level of 1952/53, but it seems likely that if a strong demand continues this target may be exceeded. Elsewhere no marked change is expected and no improvement seems likely in world per caput production.

TABLE 29. — WOOL (CLEAN BASIS): ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 (Provi- sional)	1956/57 (Esti- mated)
..... Million metric tons				
Oceania.	0.32	0.39	0.46	0.43
Latin America . . .	0.15	0.18	0.19	0.20
North Western and Southern Europe . .	0.10	0.10	0.10	0.10
North America . . .	0.10	0.06	0.06	0.07
Africa	0.07	0.06	0.07	0.07
Other regions	0.06	0.06	0.06	0.07
World ¹	0.80	0.85	0.94	0.94
..... Kg. per caput				
Per caput production ¹	0.57	0.52	0.55	0.52

¹ Excluding the U.S.S.R., Eastern Europe and China.

The strong postwar demand for wool was met to a great extent out of wartime accumulations of stocks, so that although production showed only a small increase the level of world trade has been much greater than the 1934-38 average. After a temporary recession in 1951/52, demand now appears to have returned to normal and production and consumption are roughly in balance.

The future import demand is likely to be increasingly affected by competition from synthetics, which made considerable headway during the pe-

riod of wool shortage, while the new types now coming into production may offer stronger competition and perhaps set a ceiling to wool prices which would affect the incentive to wool production. The somewhat low U.S. import estimate may reflect this trend, though it is not apparent in the estimate of domestic production. Apart from this still unpredictable influence, the estimates suggest that supplies in 1956/57 may be somewhat below requirements, unless production in Oceania turns out to be larger than is now expected.

Rubber

The postwar situation has been complicated by two factors: large-scale production of synthetic rubber and the strategic stockpiling of natural rubber. In 1948 and 1949 the production and consumption of natural rubber were roughly in balance at 1.4 to 1.5 million tons. From 1950 to 1952 production jumped to around 1.85 million tons, the additional supply being largely absorbed in strategic stockpiles, and at the same time prices of natural rubber rose to levels which were out of line with those for U.S. government produced synthetic rubber. The year 1953 has been one of readjustment; stockpiling is coming to an end and the production of both natural and synthetic rubber is declining. Prices of natural rubber have fallen to a level competitive with the synthetic product and efforts are in progress to secure international price stability.

The production estimates for 1956/57 imply a world production of 2.1 million tons, or some 45 percent more than the actual world consumption of 1.45 million tons of natural rubber in 1952 (after allowing for stockpiling) and about 33 percent more than the expected consumption of 1.6 million tons in 1953. The corresponding figures of total consumption, including synthetic rubber, are 2.3 and 2.5 million tons respectively. Consumption is expected to increase, and it is not impossible that it may expand at the high rate necessary to absorb the additional supply, but two important factors must be taken into consideration: (a) whether the strategic stockpiles will be released, and (b) the success of natural rubber in competition with the synthetic product, which is now to be turned over by the U.S. government to private manufacture. On the latter point it may be noted that actual U.S. consumption of synthetic rubber in 1952 was 0.8 million tons, compared with the minimum usage of 0.5 million tons required under national security provisions.

While, on the one hand, improved yields may be expected in some rubber growing areas, which should help to make natural rubber more competitive, on the other hand cost reductions due to technical improvements are characteristic of all synthetics and may well operate in the case of rubber. It is thus by no means certain that a production of the order of magnitude indicated by the 1956/57 estimates could be absorbed by the market at remunerative prices.

TABLE 30. — RUBBER (NATURAL): ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956/57

REGION	1934-38	1948-50	1952/53 ¹ (Provisional)	1956/57 (Estimated)
<i>Million metric tons</i>				
Far East	0.96	1.57	1.70	2.00
Other regions.	0.03	0.08	0.11	0.12
World	0.99	1.65	1.81	2.12
<i>Kg. per caput</i>				
Per caput production ²	0.71	1.00	1.06	1.17

¹ 1.9 million tons in 1951/52.

² Excluding the U.S.S.R., Eastern Europe and China.

Forest Products

World production of forest products (excluding the U.S.S.R., China and other non-reporting countries) kept pace with the increase in population from 1936 to 1948-50, and it is expected to continue to do so until 1956. Sawn wood production is likely to follow the increase in population rather closely, whereas production of wood pulp will rise more rapidly. World per caput production of sawn wood seems to have risen slightly from 0.102 cu.m. in 1936 to 0.104 in 1948-50, and will probably remain about the same until 1956. The per caput production of wood pulp, 13.6 kg. in 1936, rose to 16.6 kg. in 1948-50 and may increase further to about 19.3 kg. by 1956 if there is no general decline in economic activity.

Although the world production of the two most important forest products, sawn wood and wood pulp, has shown a steady increase from 1936, the development has varied greatly in different regions. In Europe, the per caput production of sawn wood has, in general, remained at the 1936 level, and is likely to show some decline by 1956. In North America, on the other hand, both the total and per caput production of sawn wood

showed a steep rise from the 1936 level. Per caput production has remained on about the same high level from 1948 to 1952, and will probably show little change by 1956. In Latin America, the output of sawn wood per caput has remained rather stable from 1936 to 1948-50 and, on account of the general industrial and economic expansion in this region, may show a minor rise by 1956. In the Far East the per caput production of sawn wood fell considerably from 1936 to 1948-50 and is not likely to regain the 1936 level by 1956. Production in the Near East also fell from 1936 to 1948-50; total production has since (in 1951) regained its former level, but per caput output remains lower and is not likely to show any rise by 1956. In Africa, and still more in Oceania, both total and per caput outputs have shown a marked rise since 1936 and this trend is likely to continue to 1956, although at a slower rate.

World production of wood pulp has shown a spectacular rise since 1936 both on a total and per caput basis. This increase was entirely due to developments in North America, where the out-

put more than doubled from 1936 to 1948-50 and has since shown a further rise. Total production is likely to continue to rise to 1956, although at a slower rate. In Europe, the production of wood pulp fell considerably from 1936 to 1948-50, but in 1951 the total, though not the per caput, output regained the prewar level. Total production is likely to exceed the prewar production by 1956, but per caput output is likely to remain unchanged. In Latin America, the production of wood pulp has shown a rapid increase since 1936, although the volume of production is small compared with the main producing regions, and a further increase is likely by 1956. The per caput production of wood pulp in the Far East fell considerably to about half the 1936 level in 1948-50, but had recovered by 1952. While the total output is likely to rise somewhat by 1956, the per caput production will probably remain stable. In the Near East, the output of wood pulp is very low; it rose slightly from 1936 to 1948-50, and a small further increase is likely by 1956. Development in Africa is similar, though no wood pulp was produced before the

TABLE 31. — SAWN WOOD: ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956

REGION	1936	1948-50	1952	1956 (Esti-mated)	1936	1948-50	1952	1956 (Esti-mated)
..... Million cu. m. ....					..... Cu. m. per caput			
North America	73.23	102.25	106.94	112.00	0.52	0.62	0.62	0.61
Europe	51.95	54.80	52.80	56.00	0.14	0.14	0.13	0.13
Far East excl. China.	18.50	13.20	15.80	16.00	0.03	0.02	0.02	0.02
Latin America.	4.00	4.90	5.00	6.10	0.03	0.03	0.03	0.03
Oceania.	2.50	3.78	4.30	4.60	0.24	0.31	0.33	0.33
Africa	1.00	1.54	1.70	2.20	0.008	0.010	0.011	0.013
Near East.	0.30	0.23	0.25	0.30	0.003	0.002	0.002	0.002
World ¹	151.5	180.7	186.8	197.2	0.102	0.104	0.103	0.103

¹ Excluding the U.S.S.R., China and other non-reporting countries.

TABLE 32. — WOOD PULP: ESTIMATED TOTAL AND PER CAPUT PRODUCTION IN 1956

REGION	1936	1948-50	1952	1956 (Esti-mated)	1936	1948-50	1952	1956 (Esti-mated)
..... Million metric tons.....					..... Kg. per caput			
North America	9.18	19.14	22.87	24.00	65.4	116.2	132.2	130.4
Europe	10.21	8.82	9.71	11.00	27.6	22.5	24.3	26.7
Far East (excl. China)	0.92	0.56	1.17	1.25	1.5	0.8	1.5	1.5
Latin America.	0.03	0.11	0.20	0.30	0.2	0.7	1.2	1.6
Oceania.	—	0.14	0.16	0.25	—	11.5	12.6	17.3
Africa	—	0.02	0.03	0.05	—	0.16	0.22	0.30
Near East.	0.01	0.02	0.02	0.02	0.07	0.12	0.12	0.14
World ¹	20.3	28.8	34.2	37	13.6	16.6	18.9	19.3

¹ Excluding the U.S.S.R., China and other non-reporting countries.

In Oceania, too, no wood pulp was produced before the war, but by 1948-50 the per caput output ranked third after North America and Europe. Both total and per caput production are expected to increase further by 1956.

The estimates for 1956 production in Europe and in North America have been made in the light of two comprehensive studies of the future requirements in these regions: *European Timber Trends and Prospects* and the "Paley Report." Both indicate a long-term substantial rise in the requirements for wood pulp. The above estimates for 1956 are based on past trends, and assume that industrial activity will continue to expand, although at a slower rate than during the past four or five years. Production and consumption of both sawn wood and wood pulp depend greatly on the level of industrial and economic activity, although other factors such as technical progress in the utilization of wood and the increasing liquidation of illiteracy also affect the long-term trends in consumption of sawn wood and pulp (paper). The period from the present day to 1956

is, however, so short that substantial changes in the pattern of requirements are hardly possible, and estimates based on present trends may be considered as fairly accurate provided that there are no major changes in general economic activity. While natural resources, particularly in Latin America and Africa, still allow for substantial expansion in the output of forest products, the possibility of a marked long-term expansion is greatly limited in Europe and Asia, and to some extent also in North America. In these regions efficient measures, now under discussion, to conserve forest reserves are necessary if adequate supplies are to be secured in the future. In regions with limited resources, competition for raw materials between sawn wood and wood pulp is likely to increase, probably with the effect of a fall in raw material supplies for sawn wood. These, however, are rather long-term prospects. It should also be noted that raw materials other than wood (bamboo, bagasse, straw, etc.) are being used increasingly in the production of pulp.

Chapter III

**TECHNICAL AND OTHER FACTORS AFFECTING THE
ACHIEVEMENT OF THE PRODUCTION OBJECTIVES**

Chapter III - TECHNICAL AND OTHER FACTORS AFFECTING THE ACHIEVEMENT OF THE PRODUC- TION OBJECTIVES

The production objectives and forward estimates of governments, together with the trade implications, if these objectives are reached, have been set forth in Chapters I and II. What is the likelihood that the objectives will be reached?

It is not, of course, possible to evaluate with any degree of accuracy to what extent technical and other conditions permit the attainment of specific production objectives. It is, however, possible to set forth the principal elements in the situation and, in some cases, make rough quantitative judgments. Among the principal factors involved one may recognize (a) the probable rate of progress in the development of basic resources of land and water; (b) the success which farmers may achieve in raising yields per unit of area and per animal, and (c) the economic factors, such as markets and prices for the products the farmer sells and the availability and cost to him of his production requisites. To these one might add the institutional factors, such as land tenure, co-operative organization, credit and marketing facilities. However, these are not covered in this document since information on current or prospective developments is too scanty to permit of any analysis of its significance for achieving the 1956/57 estimates.

At the outset one must recognize a rather basic difference between the more developed and the less developed regions. In North America, Oceania and Europe, because of longer established and better organized research, education and extension services, as well as more favorable institutional conditions, farmers are relatively responsive to advances in technical knowledge if conditions are favorable. Technical progress, measured in terms of yields per hectare and per animal, goes ahead at a relatively steady rate, provided that farmers can secure the "tools" to do the job and have sufficient economic incentive. Consequently,

the availability and cost of production requisites, and the economic climate, will have a bigger influence on the attainment of the 1956/57 goals than specific programs for irrigation or drainage or for promoting wider use of fertilizers or improved seed.

In the under-developed regions, on the contrary, governments are looking to large-scale irrigation programs, to the opening up and settlement of new areas and to specific technical programs for promoting fertilizers, improved seed, etc., to contribute a large, sometimes a major, part to the attainment of the production objectives. The success or failure of these particular projects will be a major factor in determining whether goals are reached. Economic incentives and availability of production requisites will, of course, also be important in the under-developed regions, but they will not in themselves permit achievement of the objectives.

For these reasons the examination of technical programs in this chapter is heavily slanted towards the Far East, Near East and Latin America. Unfortunately, FAO does not have information for Africa comparable to that gathered for the pre-conference meetings in the above three regions.

PROGRAMS FOR THE DEVELOPMENT OF LAND AND WATER RESOURCES

The most striking feature of current agricultural development in a considerable portion of the world is the concentration upon projects for development of the basic resources of land and water, through irrigation, drainage, reclamation of saline or other waste lands, flood control, soil conservation, clearance of jungle and deep-rooted weeds, organized settlement and use of power-machinery. In Latin America, the Near East, the Far East, including China, and also in the U.S.S.R., such programs loom large. The preliminary work of preparing

plans, and arranging, financing and strengthening the services, which occupied the early postwar years, is beginning to bear fruit and in the last year or two an acceleration in the rate of progress is to be noted, especially in the Far East.

Generally speaking, land and water development programs in Latin America and the Near East relate mainly to irrigation, while in the Far East flood control, drainage, reclamation of waste lands and land clearance are also major features. In Latin America and the Near East, too, the areas concerned are for the most part land not at present cultivated, while in the Far East a great part of the programs involve existing arable land.

Irrigation

The magnitude of the irrigation programs in three of the under-developed regions is summarized in the following table.

It will be seen that governments in these three regions are hoping to increase the area under irrigation by 20-30 percent within a few years. These programs, even though there should be some lag in their execution, promise to make the largest single contribution to the production objectives of the newly-developing countries.

In the first five or six years after the war very little expansion in irrigated area was achieved in the *Far East*, but progress began to be evident in 1951/52. The dominant feature is the program of India, which is in fact engaged in one of the biggest irrigation programs in the world, with no less than 8 million hectares to be added to the irrigated area during the course of the Five-Year Plan¹. While extensive areas in the northwest

¹ Of these just over half a million hectares were completed in the first year of the Plan and are therefore included in the figure for area already irrigated in 1952, and excluded from Col. 3, Table 33.

will be made arable for the first time, it is probable that the greater part of the land to be benefited is already under cultivation. Irrigation projects, ranging from such large-scale multipurpose works as Bhakra, Nangal, which will ultimately bring water to 1,500,000 hectares of semi-arid lands in the north-west through medium size dams and tubewells, to small wells capable of irrigating a few acres each, are expected to make possible an increase in production of 4.4 million tons of cereals as well as substantial amounts of sugarcane, cotton and oilseeds. In fact, irrigation is planned to contribute 55 percent of the objective for additional production of food grains.

Pakistan also has a large irrigation program, including the Thal, the Lower Sind and the Ganges-Kobadak projects. The whole program is to benefit more than one million hectares by 1956/57. Most of the area is desert and semi-desert land in Western Pakistan, so that the additional production per hectare may be relatively high. Irrigation, along with some drainage and soil conservation work, is expected to contribute 800,000 tons of cereals and 200,000 tons of other crops during the period under review, or approximately 30 percent of the target for overall increase in production. A very large irrigation program in Thailand, involving over 400,000 hectares by 1956/57, is expected to make the principal contribution to the target for rice production. Large programs for new irrigation, ranging from 220,000 to 56,000 hectares, exist in Indonesia, the Philippines, South Korea, Malaya, Japan and Ceylon.

Except in certain peripheral areas, agricultural progress and irrigation development are more intimately associated in the *Near East* than in any other region. Irrigation works under construction will add about 850,000 hectares to the cultivated area and 1,250,000 additional hectares

TABLE 33. — AREA COVERED BY CURRENT IRRIGATION PROGRAMS IN CERTAIN REGIONS

REGION	Arable area (1)	Area irrigated in 1952 (2)	Additional area expected to be irrigated by 1956/57 (3)	Area of projects under construction or scheduled for early implementation ¹ (4)	% Increase of Col. 3 or 4 over Col. 2
<i>Thousands of hectares</i>					
Far East (excl. China)	208,000	39,900	9,870	...	24.7
Near East	70,000	11,000	...	2,100	19.0
Latin America	87,000	6,700	...	2,430	30.0

¹ Owing to absence of precise time schedules in some instances, totals for the Near East and Latin America cannot be definitely tied to 1956/57 as in the case of the Far East.

... Not available.

may come from projects scheduled for early implementation. However, developments in the past have been slow and most irrigation programs go far beyond 1956/57 so that a considerably smaller area than the figure given in Table 33 will have been brought under water by that time. In Turkey an important project for irrigation of 144,000 hectares in the Sayhan Valley is near completion and another for 78,000 hectares is under construction. Several important projects, including those in the Zayandeh Rud and Karkheh Valley, are well advanced in Iran. In Iraq the second stage of the Habbaniya project will bring substantial areas of new land under irrigation within a few years. About 120,000 hectares are scheduled to be added to the Gezira scheme in the Anglo-Egyptian Sudan within five years. In Egypt preliminary surveys have begun for the Higher Aswan Dam which, when completed, will eventually add 800,000 hectares to the cultivated area. Additions to the irrigated area may also be expected in Syria, Lebanon, Jordan, Afghanistan and Israel. In many instances financial provisions for these developments remain inadequate and therefore no firm time limits can be established. Assuming, rather arbitrarily, that 60 percent of the projects under construction are completed by 1956, the additional production may be of the order of one million tons of grain or about 20 percent of the target for additional production of cereals.

Latin America has under construction, or scheduled for early execution, projects to irrigate more than 2 million hectares, and while schedules are not sufficiently precise, in some cases it would appear that approximately 1.5 million hectares are programmed to be brought under irrigation by 1957. However, consideration of the rate of achievement during the past three years suggests that the area which may be brought under irrigation by that date may not exceed one million hectares. By far the most important of these programs is in Mexico where projects already under construction will, when completed, newly irrigate or improve the irrigation upon an area exceeding one million hectares. Large irrigation programs ranging from 312,000 to 95,000 hectares are also under way in Peru, Chile, Argentina, Venezuela, Brazil and the Dominican Republic. An irrigation program of one million hectares appears capable of contributing only about 10 percent to the attainment of the regional production objectives, but may be responsible for about 20 percent outside Argentina. In Mexico, irrigation may

contribute from 40-50 percent to the achievement of the objectives.

Other countries with very large irrigation programs under implementation are the *U.S.S.R.* and *China*. Information is inadequate, but it is possible that the scope of irrigation development planned for the next few years in each of these countries is comparable to the Indian program. The five major projects in the *U.S.S.R.* scheduled for completion at dates ranging from 1952 to 1957 are to irrigate 6 million hectares.¹

In *North America* and *Oceania* a number of important irrigation projects are under construction or scheduled for early implementation. The program of the U.S. Bureau of Reclamation, outlined in 1948, called for 830,000 additional hectares under irrigation by 1954, that is over 130,000 hectares per annum. Supplemental water was to be supplied to nearly 250,000 hectares a year. However, this program has been slowed down by lack of funds. Some land is also being irrigated through private initiative, principally by pumping from wells. In Canada the St. Mary Dam and extension of the Bow River project will eventually irrigate 235,000 hectares. Proposals for irrigation development covering 200,000 hectares in Saskatchewan are under study. In Australia the Blowering Dam, the Snowy River Scheme and the development of the Burdekin are major schemes, but are not likely to make a substantial contribution to the production objectives of the present agricultural program ending in 1957/58. In neither of these regions will the rate of progress in irrigation or other programs for basic resource development be a major factor bearing on increased production within the period under review in this report.

The principal irrigation projects in *Africa* appear to be in Morocco, Algeria and Tunis. These involve some tens of thousands of hectares and, while important locally, do not rank with programs in other parts of the world.

Aspects of Land Reclamation and Settlement Other than Irrigation

Other forms of land reclamation appear likely to make their chief contribution also in the *Far East*, but there is great variety in the type of program from country to country. In West Pakistan is to be found perhaps the most serious

¹ See UN *Economic Survey of Europe in 1951*, page 132.

problem of waterlogging and salinity in the world, affecting with varying degrees of severity several million hectares. Experimental work, with technical assistance from FAO, on lowering the water level by pumping and using this water for leaching the salts began finally in early 1953. By 1956/57, if all goes well, this program will begin to make an impact on production, though the task will be by no means finished. In Ceylon attention centers on development of the so-called "dry zone," where 1.3 million hectares are estimated to be available. Although water conservation, including some irrigation, is an essential element in the success of this venture, it involves also jungle clearance, control of malaria, development of dry-farming techniques and organized settlement. Colonization schemes now under way cover 69,000 hectares. In land reclamation also, the largest program is in India, where 3 million hectares are to be reclaimed by 1955/56 through eradication of kans grass, jungle clearance and plowing up of other land which for various reasons has remained uncultivated for long periods. In addition, land improvement operations, including drainage and bunding, are to be carried out on 1.2 million hectares. These programs are planned to yield 1.5 million tons of grain. The principal objective of the land program in Burma is to get back into use about a million hectares which went out of cultivation during the war, principally by subsidizing private efforts at rehabilitation.

In Indonesia and the Philippines the programs center around the development of more or less virgin land in the outer islands and the organized but voluntary transfer of population there from the overpopulated districts. The migration program in Indonesia calls for the transfer of 500,000 people from Java, at first chiefly to Sumatra, during 5 years beginning August 1952. The land, including some for paddy, is partly developed by the government beforehand. If such a large scheme can be fully implemented it would mean the development of about one million hectares. Pilot areas will be developed in the Kalimantan scheme which is eventually to reclaim and irrigate 500,000 hectares. Large-scale operations for development and settlement of Mindanao and Palawan islands in the Philippines were resumed in 1949, having been initiated originally in 1939. The aim is the development of 440,000 hectares, of which 125,000 have so far been settled.

Japan, despite the intensity to which the use of the land has already been carried, has initiated a complex program involving irrigation, drainage,

tidal and marshland reclamation and many other aspects of land improvement, mostly on existing farmland, though preliminary work will be done on the reclamation of extensive peat soils in Hokkaido. This program is aimed at increasing production over the period 1953-57 by 1.6 million tons of cereals, an increase of more than 10 percent over present production levels. The most important aspect of work in China is flood control, where substantial progress has already been made in protecting large areas flooded annually or intermittently along the Hwai, Yangtze, Pearl and Yellow Rivers. Present plans for continuation of flood control, including some drainage, would affect several million hectares.

In the *Near East* important land reclamation programs other than irrigation are apparently confined to Egypt, Israel, Iraq and Syria. In Egypt it is planned to drain swamp areas along the Mediterranean coast, prior to irrigation. Work is proceeding in Israel on the drainage of the Huleh marshes. Iraq is reported to have completed the Habbaniya project for control of the flood waters of the Euphrates as a preliminary to irrigation and a similar scheme on the Tigris, started recently, is to be finished by 1956. Work has begun on improvement of drainage on 1.2 million hectares of existing irrigation areas, though completion of this scheme will probably take rather a long time. Preliminary surveys have been made for drainage (prior to irrigation) of the Ghab swamps in Syria, while the Rudj drainage project is scheduled for completion in 1954.

In *Latin America* interest is centered on projects for land clearance and colonization rather than on drainage, although Venezuela is carrying out two projects for drainage of 110,000 hectares by 1957 and several minor ones are under way in the Caribbean area. With a few exceptions, attempts to open up new areas in Latin America by establishing nucleus settlements at selected points, often far removed from the frontiers of effective settlement, have been a failure. However, recent colonization programs show evidence of organization on a more realistic basis, including attention to the need for agricultural guidance, especially in Brazil, Peru, Venezuela, Colombia, Paraguay and Chile. Most of the Andean countries have projects aiming at settlement of the lowlands east of the mountains. These are particularly important in Colombia and Venezuela where large tracts of land (over 1.2 million hectares in Colombia) are involved. As most of

these programs are still in the early, and sometimes experimental stages, they are not likely to make a great impact on production within the next few years but their importance in the long run may be considerable. A more immediate effect may be expected in Argentina and Uruguay where "colonization" programs involve mainly the expropriation and subdivision into smaller farming units of inadequately exploited land, and are therefore more comparable with the "closer settlement" policies of Australia. In Argentina a program of Indian resettlement involves 1,740,000 hectares of which 500,000 have already been distributed. In Uruguay 140,000 hectares have been selected for expropriation, of which one quarter have been distributed.

In *North America* and *Oceania* land reclamation and settlement schemes appear likely to be of minor importance in determining the level of production by 1956/57, though many projects are of local importance. In Canada a plan is being prepared to relieve 100,000 hectares from flooding in Manitoba and flood protection and drainage are being considered for 55,000 hectares in Saskatchewan. New settlement is limited in scope and confined to a few areas such as the Peace River district. In Australia land subdivision for settlement of ex-servicemen continues on a limited scale. Its effects will be felt in dairying, fat-lamb raising and horticulture, but the contribution to aggregate production will not be large compared with possible intensification of production on existing farm units.

Various projects for drainage and flood control in southern *Europe* (Greece, Italy) and northern *Africa*, principally the Sebti river scheme in Morocco, are worthy of note but their contribution to production on a regional scale will be very small.

Farm Mechanization

The kind of contribution made by tractors and power-drawn implements to agricultural production, as well as the magnitude of the contribution, is likely to differ greatly from region to region over the next few years.

In those parts of the world where mechanization has come to provide a substantial or major part of farm draft power — North America, Oceania, Europe and U.S.S.R. — the replacement of existing machinery, and some expansion to offset the movement of population to urban employments, has become a necessity for

increasing or even maintaining agricultural production. In recent years tractor numbers have increased at the rate of about 2 1/2 percent per annum (about 100,000 a year) in North America and at rates of 12 percent and 13 percent per annum in Europe and Oceania respectively. A recent study in Australia concludes that tractor numbers may increase by nearly 20 percent between 1952/53 and 1956/57. In the U.S.S.R. numbers are officially stated to be 64 percent higher than in 1940 and a further 500,000 (about a 50 percent increase) are to be supplied to agriculture between 1953 and mid-1957. In North America and Oceania at least, the availability of tractors and equipment and the continued ability of farmers to afford to purchase them, will be of considerably greater importance than any progress which may be achieved in irrigation and other forms of land development.

Except perhaps in the U.S.S.R., greater use of machinery on farms will not lead to any appreciable increase in the cultivated area in these regions, but it will make a further contribution to production by assuring that a greater proportion of the operations is carried out at the most favorable periods, so that average yields will be somewhat raised. Furthermore, where mechanization has advanced sufficiently to lead to a decline in numbers of draft animals, every further advance also brings a gain in land freed from feeding work animals to feeding productive livestock or growing crops for food or industrial uses.

The *Far East* presents an entirely different pattern. The rate of increase in tractor numbers has been higher than in most of the more developed regions, but for the most part, the impetus has not come from scarcity or cost of labor. Tractors have, however, come to play an important part in jungle-clearance, eradication of deep-rooted grasses and initial ploughing of newly-opened lands. For instance, in India the Central Tractor Organization is to reclaim 500,000 hectares during the Five-Year Plan, while substantial areas are to be ploughed by the State tractor services. Tractors appear likely to remain of minor importance in ordinary farming operations, except on some types of estates. In certain areas where it is possible to work the land only within a limited period (e.g. "haor" lands of East Pakistan) or labor and draft animals are scarce, as in Malaya, the outer islands of Indonesia, the dry zone of Ceylon and the Southern Philippines, increasing numbers of farm machinery pools are being established. It may be said, therefore, that

the availability of farm machinery will be important also for this region, but chiefly as a means of land reclamation.

In Turkey tractors are already playing a major role in bringing substantial new areas under cultivation, and, to a lesser extent, in Syria and Iraq they appear likely to make a significant contribution toward achieving the production objective. There is no evidence that machinery is likely to become an important factor in the near future elsewhere in the *Near East* or in *Africa*, except in South Africa. Introduction of mechanized farming on the rainlands of the Sudan is always a possibility, but a substantial contribution cannot be expected at an early date. In parts of Africa, as in the Far East, machinery will be important for land clearance operations.

In respect of farm mechanization, *Latin America* is coming to occupy an intermediate position between the so-called developed and the undeveloped regions. Striking progress has been made in recent years, with tractor numbers rising from under 100,000 in 1949 to 170,000 in 1952. They are no longer confined to a few countries or to large estates with extensive agriculture. Among the countries where machinery is already important, at least in certain types of farming, are Argentina, Uruguay, Peru, Mexico, and Cuba. The trend towards mechanization appears likely to continue, since migration of manpower to the cities from certain areas appears to have been an important causal factor, even though in certain countries in Latin America agriculture is still characterized in some areas by the pressure of population on land. In this region one may say that machinery is likely to be important both in substituting for labor in certain areas and in facilitating an expansion of the arable land.

PROGRAMS FOR CROP AND LIVESTOCK IMPROVEMENT

Under this head are considered programs for raising soil fertility, for improving plant varieties and seed quality, for protection of plants against diseases and pests and for improving animal husbandry through disease control, better feeding and breeding. Such programs are closely associated with improvement in facilities for and organization of research, education and extension.

Fertilizers

One of the most promising feature of postwar agricultural development is the upward trend in fertilizer consumption in countries where farmers

were generally fertilizer-conscious before the war. Generally speaking, consumption of inorganics had reached prewar levels by 1949/50 in Europe, Japan and Egypt, while it was far ahead of it in the United States and in the two countries in Latin America where fertilizer consumption per hectare is substantial, namely Peru and Cuba. Since then consumption has risen year by year in all these areas until in 1952/53 the increase over 1949/50 amounts to 30 percent in the U.S.A., 20 percent in Europe, 30 percent in Japan, 50 percent in Egypt, 45 percent in Peru and more than double in Cuba. Most governments have indicated that they expect the trend to continue into 1953/54.

Since the steady increase in fertilizer consumption has held, over a period during which considerable changes have occurred in farm prices, there is reason to believe that it reflects an actual change in farmers' attitudes towards use of fertilizers. In brief, in those parts of the world where the basic educational work has already been done, and where a complete network for commercial distribution exists, there is a natural spread of fertilizer practices. But even though this be true, one must bear in mind that at all times in postwar years prices have been generally favorable. It seems reasonable to conclude that, provided there is no agricultural depression, the consumption of fertilizers in the U.S.A., Europe and the U.S.S.R., (where there is also an upward trend in production and consumption), will continue to rise, though probably more slowly, and will make a substantial contribution to the achievement of the production objectives in these regions. Any shortage in supply of fertilizers would have an immediate effect on production.

In the *Far East* the prospect for increased production through greater use of fertilizers varies greatly from one part of the region to another. Japan, where consumption is already high, may find that only limited further gains may be possible from use of more fertilizers, but Korea, where use of organic and inorganic fertilizers is also well understood, is relying heavily on fertilizers to reach the goal of doubling rice production by 1959. The FAO/UNKRA Mission report envisages an increase in consumption from 67,000 to 244,000 tons of nutrient between 1952/53 and 1956/57. In a second category are countries where significant use of fertilizers on food crops has begun only since the war, and is expanding year by year, to wit India, the Philippines and Ceylon. Here a beginning has been made in the task of education

ing farmers and establishing a system of distribution, with the result that consumption should continue to increase. The Indian Five-year Plan calls for an increase of nearly 150 percent in consumption of inorganic fertilizers during the period, while production and use of composts from town and village wastes is also to increase greatly. The fertilizer program is counted on to produce an additional 1.1 million tons of grain or 14 percent of the target. However, trends in consumption raise a question as to whether the goal for fertilizer use will be met. It is to be doubted whether fertilizers will make any appreciable contribution to the attainment of the 1956/57 production targets in other Far East countries, though just recently there is some evidence that as a result of research, together with government programs to popularize use of fertilizers, their use on food crops may be on the point of expansion in Pakistan, Indonesia, Thailand and Malaya. The Working Party on Fertilizers of FAO's International Rice Commission is directing attention toward the practical possibilities.

In the *Near East*, Egypt belongs to the same category as the more developed countries in respect of fertilizer use and it is probable that consumption will continue to rise. There is a trend towards increasing consumption of fertilizers in the rest of the region and further increases may be expected. However, the areas treated are so small that they are unlikely to have a significant impact on average crop yields, except perhaps in Israel and Turkey. At present this situation appears unlikely to change greatly within three or four years.

In *Latin America* also the amounts consumed per hectare of cultivated land are very small, with the notable exceptions of Peru and Cuba. Considering the region as a whole, the situation has not changed significantly since the last FAO Conference in 1951, and, other than Peru and Cuba, only a few countries, (e.g. Brazil and Mexico) show a substantial increase over the last two or three years. However, in contrast to the situation in the Far East, where the increased use of fertilizers in a few countries appears to be mainly the result of patient and well-coordinated programs to secure their use on rice and other basic food crops, the somewhat erratic changes in consumption in many Latin American countries appear to be associated partly with large-scale fluctuations in the prices of a few crops such as cotton, sugar and coffee, on which most of the

fertilizer is used. There is already some evidence, though not yet too decisive, that fertilizer consumption may be falling in certain countries.

The achievement of the Australian production goals, and of increased output in New Zealand, will depend greatly on the superphosphate position. The fact that the supply of both rock phosphate and sulphuric acid appears likely to continue satisfactory is one of the most encouraging factors for an expansion of production in *Oceania*, where expansion is looked for mainly in livestock products (also sugar in Australia) and particular interest attached to prospects for improvement in pastures and fodder conservation. The fact that consumption of superphosphate has risen very little in Australia and not at all in New Zealand since 1949/50 may be principally due to supply difficulties, but more top-dressing of pastures will be one of the most important factors in securing increases in output of livestock products.

Production and Distribution of Improved Varieties

Varietal improvement offers, undoubtedly, one of the most promising opportunities for raising crop production to entirely new levels, with relatively small expenditures, but it is at the same time one of the most complex forms of agricultural improvement. It has to have a solid basis in the form of adequate facilities and well-trained personnel for selection and breeding of the new varieties, and for their multiplication, certification, and distribution, and can become economically effective only after creating interest among farmers. In many countries in under-developed regions good work has been done in plant breeding, but this has often had little practical effect.

It is not proposed even to attempt to summarize here the significance for the next few years of the enormous amount of plant breeding carried out in Europe, North America or *Oceania*. Generally speaking, the results of research are utilized by farmers in these regions. The process of improvement is a continuing one and the benefits are likely to be felt gradually, though in some instances, such as hybrid corn, dramatic results ensue.

In *Europe* the potential contribution of hybrid maize to increased grain production in the region is still far from realized. In the 1952 season the increased production from use of hybrids is estimated at 270,000 tons, while the increase if the full area under maize were sown to hybrids

would be of the order of 6 million tons. Since the foundation work has been done in many countries substantial gains in maize output may be made in Europe before 1956/57. This would be an important contribution to the goals for livestock products.

In Latin America, the Far and Near East and Africa the possibilities inherent in selection and breeding have as yet been little utilized, except for selected countries (e.g. Argentina, Japan, Egypt) and for a few commercial export crops (e.g. sugar-cane, coffee, tea, rubber, cacao) which have long been the subject of intensive work, the results of which have been rather fully put into practice. Prior to the war, basic food crops such as maize, rice, millets and sorghums, wheat and barley, root crops and pulses, have been relatively neglected in these regions, although considerable work had been done on rice. Where superior varieties had been found, their use was very limited, either because of lack of information and extension services, or because facilities for seed distribution or even multiplication were poor or because the varieties were suitable only for limited areas. Usually all or several of these handicaps were present. Also facilities for testing and certification of seed were usually either lacking or quite inadequate. By and large these defects still exist in most under-developed countries. Nevertheless substantial progress is being made and the question is whether it is on a scale to produce significant results before 1956/57.

Since the war there has undoubtedly been an upsurge of interest in the *Far East*, not merely in rice breeding, but in how to get the results out to the farmer. India, already advanced in breeding in certain States, has made promising progress, and improved seed distributed now amounts to 5 percent of the total use. It is hoped, through the Five-year Plan, to secure by 1955/56 an additional 560,000 tons of grain (including other cereals besides rice) from increased use of improved varieties, mostly by wider utilization of existing varieties. In Ceylon, distribution of improved seed now accounts for 7 percent of the total. Long-term targets for production of pure seed of recommended varieties and annual targets for seed distribution exist. Here also a stage appears to have been reached where the use of improved varieties may spread. Indonesia is restoring or establishing enough multiplication farms to provide, after one year's further multiplication, the whole area under irrigated paddy with improved seed by 1959. By 1956 over one million hectares would be under improved seed.

Although the program fell a little behind schedule, 200 seed farms were in existence by the end of 1952. However, the reduction in the budget for this program has been severe and it is difficult to say how much this may arrest the development.

In Korea the greater part of the rice area used to be under improved varieties but conditions have naturally deteriorated. Here also it should be possible to make quick gains, if military and political conditions permit. The FAO/UNKRA Mission has recommended high priorities for the production and distribution of improved seed. Over 70 percent of the rice area in Japan is under improved varieties. Under plans drawn up in 1951, 60 percent of the area will be provided with certified pure seed every second year from 1953 onwards. Seed programs are to provide an additional 250,000 tons of cereals by 1957 — 11 percent of the total target.

In other countries in the Far East the prospects for substantial use of improved rice varieties before 1956/57 are not very bright. Either personnel and facilities for research on an adequate scale are still lacking or, as in Malaya, the new varieties will not be ready for distribution in time. Furthermore, in most countries in the region other than those mentioned in the preceding paragraphs, facilities for multiplication and distribution of seed of existing varieties are still extremely limited.

The FAO International Rice Commission is sponsoring a basic project for producing hybrids which would possess the ability of the Japonica rices to give high yields and respond to fertilizers and also have the adaptability of Indica types to the conditions of southern and southeast Asia. The results may be of very great importance, but naturally they cannot affect production before 1956/57.

The use of high yielding varieties in the *Near East* is confined to a few countries, principally Egypt and Turkey, and the best prospects for further improvement exist in these two countries. Egypt has a three-year program for the distribution of high-yielding rust-resistant wheat seed, whereby enough seed is to be multiplied by selected farmers to supply the whole 700,000 hectares under wheat by the third year. A three-year program has also been initiated for the production and distribution of hybrid maize. Turkey also has a wheat improvement program, distributing enough seed of improved varieties in 1952 to sow 10 percent of the total wheat area. The present goal is to raise this figure to 20 percent. A start toward the improvement of local wheat varieties

has been made in Iran. In most other countries there is little prospect of more extensive use of improved varieties in the next few years, but it is expected that the work of the Near East Committee on Wheat and Barley Breeding will stimulate the production and distribution of seed as well as research.

Argentina and Uruguay are non-typical of *Latin America* in that practically all the crops have been sown for some time with improved seeds. Here, as in the more advanced regions, one can expect a continuation of progress, though special mention should be made of hybrid maize. In both countries several commercial hybrids have been grown for a number of years and the portion of the area sown to them is increasing continuously. Improved varieties of maize, including hybrids, offer the best prospects in several other countries. In Mexico 400,000 hectares had been sown to three new varieties by 1951/52 and distribution had begun of good yielding hybrids adapted to areas with irrigation or high rainfall. The first hybrids adapted to the dry-farming areas of Mexico are expected to be ready by 1954. Colombia and Ecuador have also achieved good results in maize breeding and seed is at present being multiplied for wider distribution. Work on hybrid maize has reached the multiplication stage in Chile, Venezuela and Brazil.

Recent progress has been made in the breeding and distribution of improved wheat varieties in a number of countries. The Mexican Government is hoping to attain self-sufficiency in wheat, thanks to new varieties resistant to rust which will make possible a substantial enlargement of the wheat area. New rust-proof varieties are beginning to be cultivated on an extensive area in Chile. In Colombia, Ecuador, Brazil and Paraguay higher yielding varieties have recently been obtained and the seed is now being multiplied. Colombia, for instance, expects to have sufficient seed of its best varieties to sow about 350,000 hectares by 1955. In Paraguay the first seed of the new wheat variety will be available for the 1953/54 crop.

Plant Protection

In North America, Europe and Oceania actual plant protection operations are normally carried out by the farmers, with whom the initiative rests, while the government provides the research information and diagnostic facilities. Although losses from diseases and pests are substantial, plant protection work is on a high level compared

with the under-developed regions. In the latter no overall estimate of losses from these causes is possible but they certainly run into several tens of millions of tons of cereals and other products. Nevertheless, except in a very few countries, plant protection services are still in the early stage of development.

India established a centralized plant protection service in 1946 and similar organizations have now been set up in most of the larger States. Services are heavily subsidized and most of the field work is actually carried out by the governments. Since 1949 Pakistan has been able to reduce greatly losses to the fruit crop in the North-West Frontier Province by means of government teams (financed through a tax on exports of fruit from the Province), which themselves carry out the control measures on a compulsory basis. Similar schemes based on federal/provincial co-operation are being gradually set up in other parts of the country. Japan has a well-established plant protection service but is striving for further improvement. The agricultural program aims at an additional production of 140,000 tons of cereals by 1957 through better plant protection which would thus contribute 6 percent of the planned increase in production of cereals.

Until recent years the desert locust has been a major cause of crop losses in the Near East, but due to improved methods of fighting this pest and increased co-operation between the countries affected, any considerable destruction of crops has been prevented during the current outbreak. The situation, however, is still serious, necessitating the continuation of vigorous measures by all of the countries that are menaced by the plague. Some countries, notably Egypt, Turkey and Israel, have relatively well-established plant protection services, but in most there is wide scope for improvement. Since this depends upon the training of technicians and the establishment of the necessary organization, immediate progress in actual control of diseases and insect pests of field crops will be slow. However, there are grounds for hoping that the widespread attention given to plant protection services in this region under the Expanded Technical Assistance Program will have laid a basis for further work.

In Peru the work of the "Brigadas de Sanidad Vegetal" (plant protection teams), which are financed by the government, except for the cost of the pesticides, has greatly stimulated the initiative of farmers themselves in securing their own equipment, and has created

a demand for the establishment of pesticide manufacturing and formulating plants in the country. In Mexico a remarkable increase is to be noticed in the last two or three years in the imports of pesticides and equipment, suggesting that the fight against pests and diseases is being carried on much more intensively. Particularly important progress has been made towards control of the locust in Mexico and Central America, since the establishment in 1949 of the International Committee for Co-ordination of Locust Control. The centers from which locust invasion originate have been located and are now under permanent supervision.

Livestock Improvement

Advances in animal husbandry may well make the greater part of the contribution to the achievement of 1956/57 production objectives in Europe, North America and Oceania, while in the Far and Near East and Africa they are unlikely to be important in comparison with developments in crop production.

The experience of recent years suggests that both in the more advanced and the newly developing regions the greatest gains in livestock improvement are likely to be made in disease control. The use of antibiotics, including penicillin, for the treatment of certain infections has resulted in marked increases in production. Control of bovine mastitis, for instance, by these means gives an increase in milk output of 5 to 10 percent. More effective vaccines against brucellosis in cattle, foot-and-mouth disease, rinderpest, hog cholera and Newcastle disease are being increasingly used. More effective control of several parasitical infections such as liver fluke is now possible and, finally, progress is being made in various parts of the world against tickborne disease. With the exception of rinderpest and the tickborne disease, which are confined to certain climatic belts, these technical advances are being utilized in most parts of the world. During the years immediately ahead they may be expected to be more extensively applied.

While developments in disease control appear to be the most important element everywhere, progress in feeding and in upgrading of livestock have been important factors in the more advanced regions and continuation of such progress is to be expected. The three factors taken together have, under the stimulus of favorable conditions, led to marked progress in output of animal products per unit of livestock. In the U.S.A., for

instance, records show an unabated increase in production per breeding unit of more than 50 percent since 1920, with apparently a tendency towards acceleration in the rate of improvement. In 1950/51 the index of milk yield per cow, using a prewar base, was 108 in Northern and Western Europe, 122 in North America and 111 in Oceania. The wool clip per sheep in Australia continues to rise after 150 years of progress.

It is against this background, as much as any specific measures, that one must judge the prospects for achieving the 1956/57 estimates for livestock products in the more advanced regions. In the U.S.A. relatively small increase in livestock numbers, well within the feasibilities of the feed-base, combined with this upward trend in yields, should be able to produce without difficulty the quantities of meat, milk and eggs estimated as probable by 1956/57. In Australia, as already indicated, attainment of the livestock goals will turn primarily on efforts of farmers to improve the pastures and conserve fodder, but in the northern part of the country provision of a wider network of water supplies and continued progress in the fight against the cattle tick will be important. In Europe there appear to be no serious technical difficulties in reaching the production objectives, in view of gradually increasing livestock yields, the prospects for better control of disease, post-war advances in grassland management and fodder conservation, more abundant supplies of imported feeding grains and improved feeding practices. The development of a cheaper and more efficient vaccine against foot-and-mouth disease during the course of the recent severe invasion and the establishment of machinery for international collaboration through the European Commission for Food-and-Mouth Disease should prevent a recurrence of such heavy losses from this source. The level of production is more likely to be determined by the availability of markets than by technical limitations, though in so far as technical advances can reduce production costs, they may contribute to enlarging the effective demand. Consumption and production could be greatly stimulated by improvements in marketing efficiency, reducing the spread between prices paid by the consumer and received by the farmer.

In Latin America, with a well-established livestock industry, government policy in providing improved veterinary and livestock extension services, better credit facilities, and taxation concessions to livestock producers, and assisting in giving more adequate economic returns will be

among the most important factors. Recently several Latin American countries, particularly Peru, Argentina and Uruguay have drawn up overall programs for expansion of the livestock industry. The Peruvian Government is importing a large number of improved sires for sale or hiring out to breeders, and the number of centers for artificial insemination is being increased. Veterinary services are being improved and facilities for production of biologics expanded. In Uruguay the Government is improving the water-supply and livestock extension services. Argentina, as well as the other two countries, is granting improved credit facilities and taxation concessions to livestock raisers. In other countries government activities are more limited, usually with the stress on disease control. Mexico, Argentina, Venezuela and Paraguay have been carrying out intensive campaigns against foot-and-mouth disease. The attention given to control of tickborne disease will be of great importance also in this region.

The most important developments in the *Far East*, *Near East* and *Africa* will certainly be in disease control. Governments and FAO have given top priority since the war to the major killing diseases such as rinderpest and Newcastle disease (rauikhet) which are now being tackled by various governments. Progress is being made in several countries in the organization of veterinary services, in the training of veterinarians, in the production of vaccines and in field programs for the control or eradication of these diseases, for the most part with the assistance of technical advice from FAO. One of the features of current national programs is the progress in the production of vaccines. In the Far East India, Pakistan, Burma and Thailand have sought the assistance of FAO in the manufacture of biologics for the control of rinderpest, and the supply of equipment, facilities and technical knowledge in this field is being developed rapidly. A training center on the manufacture of biologics with particular reference to rinderpest control was organized by FAO in India early in 1953. Egypt and Turkey, the most advanced of the countries in the Near East in disease control, are expanding their facilities for vaccine production and laboratories for this purpose are being established in Iran, Syria and Iraq.

The introduction of the new freeze-dried type of vaccine for rinderpest has made possible extensive campaigns to eradicate this disease or at least bring it under effective control. In Thailand it was brought under control in 1950. India has

formulated a comprehensive program for eradicating rinderpest, which is responsible for 60 percent of the mortality from disease in that country. Other control programs are now in operation in Pakistan, Burma, Afghanistan and Ethiopia and are about to be extended in most of these countries. The importance of controlling rinderpest in such countries cannot be over-emphasized. Not only is there a high death rate with consequent interruption of agricultural and other activities, but the possibilities of exporting animals and animal products to countries free from disease are greatly reduced. Furthermore, until heavy losses from the most lethal diseases can be avoided, efforts at better feeding and breeding are to a large extent nullified and even wasteful.

In poultry husbandry striking results have been achieved in bringing Newcastle disease under control by the use of freeze-dried attenuated virus vaccine. In Malaya and Singapore, for instance, inoculation programs began in a small way in 1947 and expanded rapidly, with the result that there has been a tremendous increase in poultry numbers and egg production. In Indonesia inoculations began in 1950, reached around 5 million in 1952 and are expected to reach 20 million annually within 5 years, a rate considered sufficient for effective control. Similar results have been achieved in Thailand and India, though precise statistics are lacking. One may, therefore, expect a considerable improvement in the supply of poultry products, provided that adequate feed supplies can be found without competing with the food needs of the human population.

PROGRAMS FOR EXPANSION AND IMPROVEMENT OF FISHERIES

Among existing fisheries there are some whose output could not perhaps be increased substantially but which might achieve some economy of effort and improvement in quality. Other fisheries could be extended in operation since species which are subject to exploitation in certain areas are neglected in others, despite knowledge of their presence. There are certain areas which are virtually neglected altogether.

Developed Commercial Marine Fisheries

In the countries of Western Europe, following rehabilitation, fleets were expanded through new construction. Attention is also being given, especially in the United Kingdom, the Netherlands

and France, to providing the funds required to improve the age-composition of the fishing fleets in various sectors of the fishing industry, in particular in those branches where the bulk of the fishing craft is quite old, i.e. 20-30 years and even more.

Large modern trawlers with increased horse-power and improved facilities for handling, preserving and processing the catch on board, increased mechanized handling of the fishing gear, higher speeds and greater operating radius, improved crew accommodation and the introduction of electronic devices for detecting fish, have all contributed to an increase in the fishing potential of the developed fisheries. Electrical fishing is still at the experimental stage and it is open to question whether this kind of fishing will have an appreciable effect on the output within the next five years. Promising results have been shown by the use of fishing nets made of synthetic fibers such as nylon.

Many of these technical innovations may not result in higher catches. Their introduction reflects rather the increasingly commercial and competitive nature of these industries.

Under-developed Commercial Marine Fisheries

In countries with under-developed fishing industries, the most notable advances have been in the field of increased mechanization, taking the form mainly of the installation of outboard and inboard motors in the traditional indigenous types of fishing craft, as well as improved versions to accommodate the mechanization requirements. This is especially noticeable in the fishing fleets of Bombay State, Malaya, Singapore and in Hong Kong.

In some instances modern types of boats, such as cutters and trawlers, were obtained from overseas to increase the fishing output as well as to encourage fishermen to become aware of new types of improved boats and gear. Activities of this kind have not yet produced spectacular results, but they are in operation in Bombay, West Bengal, Ceylon and on a fairly large scale in Indonesia where a number of Japanese fishing craft have been imported.

In the field of gear development the introduction of types and methods from developed countries into the under-developed areas has not yet reached the stage where any significant results may be expected.

Inland Fishing and Pond Fish Culture

The construction of irrigation works has a great influence on the availability of fish supplies from wild stocks. The reservoirs created by the schemes may increase the area of impounded water suitable for fish production, but, on the other hand, construction of barrages across rivers often prevents the migration of fish and unless adequate measures are taken to provide suitable fishways, existing stocks of fish might be drastically reduced. Improved land utilization and utilization of water for irrigation purposes will, undoubtedly, result in a decrease of the water area suitable for fish production and in the creation of conditions unfavorable for the full maintenance of fish life in the rivers, canals, swamps and lakes.

A decrease in fish production can, however, be eliminated by conservation methods, like protection of fish stocks, introduction of new species and stocking of fry of economically important indigenous species. Also, the construction of small reservoirs for livestock purposes and the watering of small gardens and lands will create opportunities for rearing fish which, in favorable conditions, may produce up to 2,000 kg. per hectare per annum.

However, the bulk of fish supplies from inland waters will not come from the incidental use of bodies of water provided by irrigation programs but from the full utilization of natural waters and of specifically constructed and well-operated fish ponds. Good results can also be expected from better utilization of rice fields for fish production and from the introduction of prolific and growing species suitable for the stocking of natural waters and efficient practices for pond management. Selection of highly productive strains of fish, artificial propagation, fertilization and rearing of species with different feeding habits in association in the same body of water will make it possible to increase considerably the production of already existing waters. Construction of new pond farms and hatcheries, and stocking of natural waters with pond-grown fish, might lead to greater yields from inland waters in many countries. All these developments could result in an appreciable increase in local food supplies in certain areas.

Handling, Preserving and Processing

Better handling facilities on board the fishing craft, refrigerated space, pumps for discharging the fish at factories, improved boxes and other containers for shipping fresh and frozen products

to markets, improved canning machines and other preserving and processing techniques are improving the quality, reducing waste and adding to the quantity available for human food.

Since the war noticeable advances have been made in frozen fishery products and in marketing frozen fillets to consumers, especially in North America. This is a growing trend in Western Europe. Improvement of the quality and palatability of fresh, frozen, cured and canned foods is essential in a program of increased fish consumption. For example, in the case of salted herring there has been a long-term downward trend in the overall demand for salted herring products as human food, and this trend can be changed, particularly by utilizing the herring in different ways. The establishment of more meal and oil reduction plants and the introduction of stick-water extraction plants, although not adding directly to the food supplies for human population, are making an appreciable contribution, through the supply of animal feeding-stuffs, to the output of livestock products.

ECONOMIC FACTORS

The rate of implementation of the technical programs summarized in the preceding sections will depend greatly on the general economic situation and government policies in the economic field. No attempt is made to deal with the economic aspects in the same detail as with the technical factors since economic conditions cannot be foreseen far ahead, while governments, while certainly keeping in mind the impact of many socio-economic factors, have usually not dealt with them specifically in setting out their agricultural policies and future production programs.

Apart from the general interconnection of all economic and social issues, three main avenues may be distinguished through which agricultural development is particularly influenced from outside its own sphere: (a) The outlook in respect of markets and prices for farmers' products as well as the prices paid by farmers, which affect both the volume and the composition of their production and also their willingness and ability to apply more advanced production methods;¹ (b) the financial and budgetary situation of a country,

¹ This matter, and partly also the two following, concern mainly farmers who produce for the market. Subsistence farmers will be less affected although they too are to a certain extent influenced by general economic developments.

which partly determines the implementation of governmental programs and also the possibility of importing those capital goods and farm requisites which are not produced domestically; and (c) the production and availability of such goods.

The situation and immediate outlook in respect of markets and prices has been dealt with in Part I of this report. It is not possible to look further ahead than was done there, and not therefore possible to foresee the strength of the economic incentives which farmers will face during the period of implementation of the programs. These incentives will have their strongest impact on the willingness of farmers to incur the expenses necessary for applying better techniques. In North America market limitations are already retarding production and, as was pointed out in Chapter I, the forward estimates of the United States indicate a further slowing down in the rate of agricultural development even though more rapid progress would certainly be possible from a technical point of view. In Europe also recent developments raise the fear that market limitations may be at least as important as technical progress in determining the rate of expansion, particularly for livestock production. In other regions market limitations are affecting production of a number of commodities, for example sugar, jute, and cotton. Furthermore, the relationship between the prices of farm products and agricultural requisites is generally less favorable than when many of the programs were prepared. Nevertheless, despite a general tendency for prices and net real income to fall, the market situation remains on the whole favorable to farmers.

Governments are, of course, aware of the dangers of the situation and many have introduced price support measures, though these may at times necessitate a restriction either in acreage or the volume to be marketed. To the extent that price and marketing schemes are in operation the impact of demand on production is often lessened, but continuing excess of production over demand must eventually have repercussions on production itself. Another factor in the situation is the declared policy of many governments to maintain full employment and rising national incomes. If this policy can be implemented on a wide enough scale, it would ensure a high demand for agricultural products generally, but there may still be imbalances between supply and demand for particular products, so that international understandings would be necessary in order to avoid wide price fluctuations on international markets.

In drawing up their technical programs most governments have naturally looked carefully at their ability to finance them, either from revenue and internal borrowing or from external loans or gifts. It has already become clear, however, that in some cases the financial possibilities were judged too much in the light of the rather extraordinary circumstances of the post-Korean boom, during which period many of the present programs were prepared. Particularly where government revenues are to a large extent dependent upon exports of agricultural commodities or minerals, recent price declines and smaller export volumes are creating greater difficulties in financing the programs than were originally foreseen. Such a fall in exports also affects unfavorably the balance of international payments of these countries and thus the availability of foreign currencies needed for the import of capital goods for developmental projects as well as of agricultural machinery and fertilizers.

Even if farmers and governments have the necessary foreign currencies to pay for imports of agricultural production requisites, there could still be — as there has sometimes been in the past — a physical scarcity of certain types of machinery, of fertilizers or pesticides, or of raw materials going into the production of such commodities. The programs are generally based on the assumption that such emergencies will not recur and in the absence of a sharp deterioration in the international situation this assumption appears likely to be fully borne out. The supply situation for agricultural requisites is one of the most promising features so far as attainment of the production objectives is concerned.

CONCLUSIONS

The analysis of this chapter suggests three main conclusions: first, that in the under-developed regions technical programs are probably inadequate to achieve the production increases envisaged in the targets and estimates; secondly, that considerable shifts in emphasis and realignment of investment may be desirable; and finally, that economic conditions may have a major influence on the rate of implementation of the technical programs and the achievement of the 1956/57 objectives. Nothing more need be added on the last point, but the first two are perhaps worthy of further discussion.

In Latin America (excluding Argentina) and the Near East, the highest probable rate of achievement in irrigation programs would hardly con-

tribute more than 20 percent towards the production objectives.

In a few countries in these regions greater use of machinery may facilitate expansion of area, but the contribution from this direction is extremely difficult to evaluate. In so far as can be judged from the government programs discussed in the section on raising crop and livestock yields and from recent trends in the use of modern agricultural requisites and techniques, progress over the next few years in such matters as fertilizer consumption, use of improved plant varieties, plant protection and control of animal diseases appears inadequate to bridge the gap. It would, therefore, seem that a large part of the increase, if achieved, would need to come either from expansion of area apart from irrigation and other specific land development programs or through improvements in utilization of labor and farming methods over and above those examined in this chapter. Substantial areas have in fact been opened up in certain countries in the Near East in the last few years and this process can continue. In Latin America the contribution of Argentina to an expansion in crop area will be the most important single factor in achieving the regional goals. The fact that technical programs appear to be inadequate does not by any means prove, therefore, that production will not increase at the rate indicated by the targets and forward estimates, but there is always a presumption against a substantial increase in output beyond that predicated upon prospects for expansion of area or progress in specific techniques which would influence yields.

In the Far East possibilities for expansion of area on the initiative of farmers are extremely limited. Hence it is the more necessary that government programs should be adequate to contribute a greater proportion of the increased production hoped for, as in fact they are. Irrigation and the land development programs are calculated to contribute over 70 percent of the total in both India and Japan and seem capable of contributing around 50 percent, and possibly even more, for the region as a whole. Programs for wider use of fertilizers and improved varieties suggest that these may make a greater contribution than in the other two regions. But here again the programs for crop and livestock improvement, taken in conjunction with recent trends in technical improvement, seem inadequate to fill the gap. There is room for doubt whether the rate of increase provided for in the programs of Far Eastern countries can be achieved without still greater investment

in agriculture, particularly in training of agricultural technicians, in extension services and in fertilizer, seed improvement and plant protection programs.

In nearly all countries in newly developing regions irrigation and related programs are securing the lion's share of public investment in agriculture. For the most part the value of these programs is beyond doubt, particularly where it is a matter of bringing a controlled supply of water to areas already in cultivation, which in turn is likely to facilitate other improvements. However, if total investment in agricultural development cannot be increased, it is possible that a little too much of the available resources is being devoted in many countries to programs for expansion of area, with insufficient attention to soil fertility, production and distribution of improved seed, control of plant and animal disease, livestock im-

provement and prevention of losses during and after harvest. The investment required for these programs is usually small compared with land and water development, while if effectively organized and followed through they influence a far greater number of farmers. Effective programs in these fields do however presuppose a core of well-trained technicians and effective government services, and it may well be that it is the recognition of weaknesses in these respects that underlies the apparent underestimation of such programs. This calls, however, for more emphasis on investment in facilities for training and extension than is evident in most countries. In fact, it may well be that, if sustained progress it is to be achieved, far more attention needs to be given to investment in the human resources, through whose will-power, knowledge and enthusiasm the physical resources must be developed.

Annex I - ESTIMATED AGRICULTURAL PRODUCTION 1956/57 IF CURRENT PLANS AND ESTIMATES ARE REALIZED

NOTE: The basis of these estimates and certain qualifications and reservations which should be borne in mind in examining them are set out in the Note on Methods. All indices have been calculated on unrounded figures.

TABLE I.1. — TOTAL WORLD ; ESTIMATED AGRICULTURAL PRODUCTION 1956/57 IF CURRENT PLANS AND ESTIMATES ARE REALIZED

COMMODITY	Total Production					Indices 1934-38 ¹ = 100		
	1934-38 ¹ Average	1948-50 Average	1951/52	1952/53 (Prov.)	1956/57 (Estim.)	1948-50 Average	1952/53 (Prov.)	1956/57 (Estim.)
..... Million metric tons					Indices			
Total : CEREALS	610.9	672.5	679.0	735.8	843.7	110	120	138
Potatoes	231.9	248.2	229.7	248.7	331.1	107	107	143
Sweet Potatoes	44.5	55.1	54.2	55.8	59.0	124	125	132
Cassava.	33.9	45.3	49.0	50.3	52.9	134	148	156
Total : STARCHY ROOTS.	310.3	348.6	332.9	354.7	443.0	112	114	143
Pulses	27.1	28.0	28.6	27.8	32.3	103	102	119
Sugar (raw equivalent ²)	27.9	33.1	38.4	36.0	42.8	119	129	153
Vegetable Oils and Oilseeds (oil equivalent) :								
Edible	12.91	14.80	16.37	15.84	18.58	115	123	144
Total.	14.59	16.52	17.92	17.56	20.63	113	120	141
Citrus Fruit ³	9.58	14.02	15.32	15.48	17.66	146	161	184
Bananas	7.69	9.56	10.01	10.69	11.86	124	139	154
Dates.	0.93	0.88	0.99	1.04	1.11	95	112	120
Figs (dried)	0.37	0.40	0.39	0.39	0.41	108	106	110
Raisins ⁴	0.65	0.58	0.59	0.60	0.64	89	91	97
Wine ⁴	19.47	18.22	19.48	19.05	20.16	94	98	104
Cocoa.	0.73	0.78	0.69	0.76	0.81	106	104	110
Coffee.	2.42	2.19	2.27	2.38	2.63	90	98	109
Tea ⁴	0.72	0.70	0.78	0.79	0.89	98	109	124
Tobacco ⁴	2.80	3.04	3.25	3.15	3.60	109	113	129
Jute	1.89	1.46	2.07	2.19	2.17	77	116	115
Hemp ⁴	0.35	0.39	0.39	0.38	0.41	111	108	117
Flax	0.79	0.99	1.05	1.15	1.46	126	146	186
Cotton (lint)	6.80	6.86	7.98	8.19	9.24	101	120	136
Hard Fibers.	0.61	0.59	0.62	0.67	0.80	97	111	131
Wool (clean basis) ⁴	0.86	0.90	0.90	0.98	0.99	105	114	115
Rubber	0.99	1.65	1.90	1.81	2.12	166	182	213
Milk ⁵	247.12	250.87	267.51	272.44	302.56	102	110	122
Meat ⁶	38.47	39.65	42.13	43.41	49.08	103	113	128
Eggs ⁷	4.56	6.09	6.55	6.54	7.07	134	144	155
Population ⁵ (millions)	1,676	1,935	1,988	2,017	2,138	115	120	127

¹ For some countries a slightly different prewar base has been used; see footnotes to subsequent tables in Annex I. In Annex II the 1934-38 average has been used throughout for uniformity with the data on trade.

² Including raw equivalent of non-centrifugal cane sugar.

³ Excluding U.S.S.R. and China.

⁴ Excluding U.S.S.R.

⁵ Excluding China.

⁶ Beef and veal, pigmeat, mutton and lamb.

⁷ North Western and Southern Europe, North America and Oceania only.

TABLE I. 2. — WORLD (EXCLUDING ESTIMATES FOR U.S.S.R., EASTERN EUROPE AND CHINA);
AGRICULTURAL PRODUCTION 1956/57 IF CURRENT PLANS AND ESTIMATES ARE REALIZED

COMMODITY	Total Production					Indices 1934-38 ¹ = 100		
	1934-38 ¹ Average	1948-50 Average	1951/52	1952/53 (Prov.)	1956/57 (Estim.)	1948-50 Average	1952/53 (Prov.)	1956/57 (Estim.)
	Million metric tons					Indices		
Wheat	97.3	109.7	108.6	130.2	127.1	113	134	131
Rye	9.5	8.6	8.2	8.8	9.6	90	92	101
Total : BREAD GRAINS	106.8	118.3	116.8	139.0	136.7	111	130	128
Rice (milled)	70.5	73.8	72.6	77.6	90.4	105	110	128
Barley	28.4	33.4	37.9	41.0	42.0	118	144	148
Oats	38.8	42.8	44.2	43.3	45.8	110	112	118
Mixed Grain	2.9	4.3	4.9	5.1	5.3	148	175	180
Maize	93.1	121.4	111.9	123.0	134.2	130	132	144
Millets and Sorghums	26.9	29.3	28.6	27.0	32.5	109	100	121
Total : COARSE GRAINS	190.2	231.1	227.6	239.4	259.8	122	126	137
Total : CEREALS	367.4	423.2	417.0	456.0	486.8	115	124	132
Potatoes	89.1	103.4	96.5	96.2	106.0	116	108	119
Sweet Potatoes	26.0	31.5	31.2	32.8	36.0	121	126	138
Cassava	33.9	45.3	49.0	50.3	52.9	134	148	156
Total : STARCHY ROOTS	149.1	180.3	176.7	179.3	194.9	121	120	131
Pulses	15.5	17.4	18.0	16.9	20.4	112	109	132
Sugar (raw equivalent) ²	22.9	28.1	32.7	30.7	34.4	123	134	150
Vegetable Oils and Oilseeds (oil equivalent) :								
Edible	8.10	9.71	11.27	10.55	12.44	120	130	154
Total	9.16	10.89	12.24	11.66	13.83	119	127	151
Citrus Fruit	9.58	14.02	15.32	15.48	17.66	146	161	184
Bananas	7.69	9.56	10.01	10.69	11.86	124	139	154
Dates	0.93	0.88	0.99	1.04	1.11	95	112	120
Figs (dried)	0.37	0.40	0.39	0.39	0.41	108	106	110
Raisins	0.65	0.58	0.59	0.60	0.64	89	91	97
Wine	17.99	17.23	18.42	18.05	18.96	96	100	105
Cocoa	0.73	0.78	0.69	0.76	0.81	106	104	110
Coffee	2.42	2.19	2.27	2.38	2.63	90	98	109
Tea	0.45	0.52	0.59	0.58	0.64	117	130	143
Tobacco	2.04	2.33	2.57	2.47	2.73	114	121	134
Jute	1.89	1.46	2.07	2.19	2.17	77	116	115
Hemp	0.30	0.33	0.31	0.30	0.32	110	102	108
Flax	0.10	0.12	0.15	0.16	0.17	125	162	171
Cotton (lint)	5.42	5.40	6.21	6.36	6.66	100	117	123
Hard Fibers	0.61	0.59	0.62	0.67	0.80	97	111	131
Wool (clean basis)	0.80	0.85	0.86	0.94	0.94	107	118	118
Rubber	0.99	1.65	1.90	1.81	2.12	166	182	213
Milk	191.89	203.63	216.20	218.13	231.06	106	114	120
Meat ³	27.14	29.63	31.24	32.06	35.45	109	118	131
Eggs ⁴	4.56	6.09	6.55	6.54	7.07	134	144	155
Population (millions)	1,394	1,645	1,691	1,715	1,818	118	123	130

¹ For some countries a slightly different prewar base has been used; see footnotes to subsequent tables in Annex I. In Annex II the 1934-38 average has been used throughout for uniformity with the data on trade.

² Including raw equivalent of non-centrifugal cane sugar.

³ Beef and veal, pigmeat, mutton and lamb.

⁴ N.W. and S. Europe, North America and Oceania only.

TABLE I.3. — NORTH WESTERN AND SOUTHERN EUROPE; ESTIMATED AGRICULTURAL
PRODUCTION 1956/57 IF CURRENT PLANS AND ESTIMATES ARE REALIZED

COMMODITY	Total Production					Indices: 1934-38 = 100		
	1934-38 Average	1948-50 Average	1951/52	1952/53 (Prov.)	1956/57 (Estim.)	1948-50 Average	1952/53 (Prov.)	1956/57 (Estim.)
	<i>Million metric tons</i>					<i>Indices</i>		
Wheat	30.7	29.3	30.1	32.4	33.3	95	106	108
Rye	7.5	6.7	6.4	6.7	7.4	89	89	99
Total: BREAD GRAINS	38.2	35.9	36.5	39.1	40.7	94	102	107
Rice (milled)	0.7	0.7	0.9	1.0	1.0	95	132	132
Barley	9.1	9.8	11.8	12.8	12.0	108	141	132
Oats	16.4	14.6	15.4	15.0	17.8	89	92	109
Mixed Grain.	2.1	2.8	3.2	3.4	3.6	137	166	176
Maize	9.7	7.0	9.0	5.9	7.5	72	60	77
Total: COARSE GRAINS.	37.3	34.2	39.4	37.1	41.0	92	100	110
Total: CEREALS	76.2	70.9	76.8	77.2	82.7	93	101	108
Potatoes	69.4	77.4	74.4	72.7	80.1	112	105	115
Pulses	2.3	1.9	2.3	2.0	2.2	81	84	94
Sugar (raw equivalent).	4.0	4.9	5.8	5.5	6.2	121	136	154
Vegetable Oils and Oilseeds (oil equivalent):								
Edible	0.79	0.77	1.58	0.80	1.27	98	101	162
Total.	0.81	0.83	1.62	0.84	1.34	102	104	165
Citrus Fruit.	2.00	1.86	2.28	2.44	3.00	93	122	150
Bananas	0.18	0.23	0.23	0.23	0.23	126	126	126
Raisins	0.21	0.12	0.12	0.12	0.13	58	57	62
Figs (dried)	0.23	0.23	0.23	0.23	0.23	100	100	100
Wine	14.08	12.55	13.28	13.34	13.60	89	95	97
Tobacco.	0.19	0.24	0.28	0.21	0.28	127	112	146
Hemp	0.15	0.14	0.11	0.10	0.12	93	69	79
Flax	0.08	0.10	0.13	0.13	0.14	118	154	160
Cotton (lint)	0.02	0.03	0.04	0.05	0.04	136	204	204
Wool (clean basis).	0.10	0.10	0.10	0.10	0.10	98	100	102
Milk	81.16	76.52	87.25	86.96	94.16	94	107	116
Meat ¹	8.77	7.19	8.68	8.71	9.46	82	99	108
Eggs	2.11	2.13	2.39	2.47	2.64	101	117	125
Population (millions).	275.4	301.5	305.8	308.4	317	110	112	115

¹ Beef and veal, pigmeat, mutton and lamb.

TABLE I.4. — NORTH AMERICA ; ESTIMATED AGRICULTURAL PRODUCTION 1956/57
IF CURRENT PLANS AND ESTIMATES ARE REALIZED

COMMODITY	Total Production					Indices : 1935-39 ¹ = 100		
	1935-39 ¹ Average	1948-50 Average	1951/52	1952/53 (Prov.)	1956/57 (Estim.)	1948-50 Average	1952/53 (Prov.)	1956/57 (Estim.)
	<i>Million metric tons</i>					<i>Indices</i>		
Wheat	29.2	42.6	41.9	54.1	43.1	146	185	148
Rye	1.4	1.0	1.0	1.0	0.9	71	75	65
Total : BREAD GRAINS	30.5	43.6	42.9	55.1	44.0	143	180	144
Rice (milled)	0.6	1.2	1.4	1.4	1.4	186	231	225
Barley	7.1	9.5	10.9	11.3	10.6	132	158	148
Oats	20.4	26.1	26.6	25.6	25.3	128	126	124
Mixed Grain.	0.8	1.3	1.4	1.3	1.3	172	169	171
Maize.	52.2	86.0	74.0	84.5	85.7	165	162	164
Millets and Sorghums	1.3	4.4	4.0	2.1	4.5	345	167	357
Total : COARSE GRAINS.	81.8	127.3	117.0	124.8	127.4	156	152	156
Total : CEREALS	113.0	172.0	161.3	181.3	172.8	152	160	153
Potatoes	11.4	14.3	10.0	11.1	11.7	125	97	102
Sweet Potatoes	1.7	1.2	0.7	0.7	0.8	71	43	47
Total : STARCHY ROOTS.	13.1	15.5	10.7	11.8	12.5	118	90	95
Pulses	0.8	1.1	1.0	0.9	1.0	143	118	124
Sugar (raw equivalent)	2.8	3.0	2.9	3.0	3.3	108	109	118
Vegetable Oils and Oilseeds (oil equivalent) :								
Edible	1.19	2.14	2.33	2.30	2.38	180	194	201
Total :	1.29	2.62	2.73	2.70	2.85	203	209	220
Citrus Fruit.	3.12	6.24	6.67	6.62	8.03	200	212	257
Raisins	0.20	0.20	0.22	0.22	0.23	99	111	116
Wine	0.54	1.48	1.65	1.52	1.62	275	282	302
Tobacco.	0.70	0.93	1.13	1.07	1.08	133	154	155
Cotton (lint).	2.85	2.97	3.28	3.26	3.04	104	114	107
Wool (clean basis).	0.10	0.06	0.05	0.06	0.07	59	60	70
Milk	55.31	62.56	62.84	62.70	62.00	113	113	112
Meat ²	7.95	10.73	10.80	11.31	12.34	135	142	155
Eggs	2.33	3.82	4.03	3.93	4.27	164	169	183
Population (millions).	140.4	164.7	170.6	173.0	184.0	117	123	131

¹ 1935-39 prewar base used for U.S.A. and Canada because of abnormal seasons in 1934-38 period. In Annex II, the 1934-38 average has been used throughout for uniformity with the data on trade.

² Beef and veal, pigmeat, mutton and lamb.

TABLE I.5: — LATIN AMERICA: ESTIMATED AGRICULTURAL PRODUCTION 1956/57
IF CURRENT PLANS AND ESTIMATES ARE REALIZED

COMMODITY	Total Production					Indices: 1934-38 = 100		
	1934-38 Average	1948-50 Average	1951/52	1952/53 (Prov.)	1956/57 (Estim.)	1948-50 Average	1952/53 (Prov.)	1956/57 (Estim.)
	<i>Million metric tons</i>					<i>Indices</i>		
Wheat	8.6	8.1	4.9	10.5	10.6	94	122	123
Rye	0.3	0.4	0.1	0.3	0.7	153	116	232
Total: BREAD GRAINS	8.9	8.6	5.0	10.8	11.2	96	122	126
Rice (milled)	1.3	3.0	3.1	3.3	3.6	224	245	272
Barley	0.9	1.2	1.0	1.6	1.8	132	174	196
Oats	0.9	0.9	0.7	1.0	1.2	93	105	126
Maize	18.0	14.6	15.3	17.7	24.2	81	99	135
Millets and Sorghums	0.2	0.3	0.4	0.4	0.4	169	216	216
Total: COARSE GRAINS	20.0	17.0	17.4	20.7	27.6	85	104	138
Total: CEREALS	30.2	28.5	25.5	34.8	42.4	94	115	140
Potatoes	2.9	4.8	4.6	5.0	6.4	166	170	219
Sweet Potatoes	2.0	2.6	2.5	2.5	2.8	132	127	142
Cassava	7.2	15.5	15.0	15.9	17.2	215	220	238
Total: STARCHY ROOTS.	12.1	22.9	22.2	23.4	26.4	189	193	218
Pulses	1.6	2.4	2.4	2.4	3.0	147	149	184
Sugar (raw equivalent) ¹	7.2	12.2	14.6	12.4	13.3	170	172	185
Vegetable Oils and Oilseeds (oil equivalent):								
Edible	0.42	0.77	0.79	0.75	0.95	183	179	226
Total.	1.10	1.14	1.09	1.14	1.52	104	104	138
Citrus Fruit	2.20	3.36	3.54	3.55	3.60	152	161	163
Bananas	4.82	6.48	6.90	7.49	8.38	134	155	174
Wine	1.12	1.23	1.47	1.30	1.50	110	117	134
Cocoa	0.24	0.26	0.23	0.24	0.28	111	103	116
Coffee	2.12	1.85	1.86	1.98	2.18	87	93	103
Tobacco	0.21	0.30	0.30	0.32	0.35	144	153	169
Jute	—	0.01	0.02	0.02	0.03	—	—	—
Cotton (lint)	0.63	0.79	0.93	1.08	1.25	126	171	198
Hard Fibers	0.15	0.25	0.24	0.24	0.28	170	166	194
Wool (clean basis)	0.15	0.18	0.18	0.19	0.20	115	124	131
Rubber	0.02	0.02	0.03	0.04	0.04	119	171	190
Milk	10.34	14.18	14.55	14.89	17.98	137	144	174
Meat ²	4.90	5.69	5.44	5.54	6.37	116	113	130
Population (millions)	121.5	159.1	166.5	170.1	188	131	140	155

¹ Including raw equivalent of non-centrifugal cane sugar.

² Beef and veal, pigmeat, mutton and lamb.

— Nil or negligible.

TABLE I.6 : — FAR EAST (EXCLUDING ESTIMATES FOR CHINA) ; AGRICULTURAL PRODUCTION
1956/57 IF CURRENT PLANS AND ESTIMATES ARE REALIZED

COMMODITY	Total Production					Indices : 1934-38 = 100		
	1934-38 Average	1948-50 Average	1951/52	1952/53 (Prov.)	1956/57 (Estim.)	1948-50 Average	1952/53 (Prov.)	1956/57 (Estim.)
	..... Million metric tons					Indices		
Wheat	12.1	11.2	12.2	10.7	15.0	93	88	124
Rice (milled)	65.5	65.5	64.2	68.7	80.5	100	105	123
Barley	4.7	5.2	5.7	5.4	6.2	109	114	131
Oats	0.2	0.1	0.2	0.2	0.2	67	78	95
Maize.	6.1	5.5	5.9	6.2	7.2	90	101	118
Millets and Sorghums	14.9	13.2	12.3	12.8	14.4	89	86	96
Total : COARSE GRAINS.	26.0	24.1	24.1	24.6	28.0	93	94	108
Total : CEREALS	103.6	100.9	100.6	104.0	123.5	97	100	119
Potatoes	4.1	4.7	5.0	4.8	5.2	116	118	127
Sweet Potatoes	6.9	11.6	10.7	11.8	12.2	168	171	176
Cassava.	8.5	8.4	8.9	9.3	9.6	98	109	113
Total : STARCHY ROOTS.	19.5	24.7	24.6	25.9	27.0	126	133	138
Pulses	9.1	9.9	10.1	9.3	11.8	109	103	130
Sugar (raw equivalent) ¹	6.6	5.3	6.6	6.8	7.9	81	104	121
Vegetable Oils and Oilseeds (oil equivalent) :								
Edible	3.71	3.59	3.85	3.95	4.56	97	106	123
Total.	3.93	3.80	4.02	4.15	4.77	97	106	122
Citrus Fruit.	1.00	0.98	0.95	0.99	1.00	98	99	100
Bananas	1.23	0.82	0.95	0.99	1.05	67	80	85
Dates.	0.06	0.06	0.05	0.05	0.05	93	83	83
Coffee.	0.15	0.06	0.08	0.07	0.10	41	47	67
Tea.	0.44	0.50	0.56	0.55	0.61	114	126	139
Tobacco.	0.79	0.62	0.61	0.60	0.75	77	75	94
Jute	1.87	1.42	2.02	2.13	2.10	76	114	112
Hemp.	0.13	0.16	0.17	0.17	0.17	124	133	136
Flax	0.01	0.01	0.01	0.01	0.01	100	180	200
Cotton (lint).	1.21	0.80	1.03	0.95	1.24	66	78	102
Hard Fibers.	0.30	0.12	0.11	0.16	0.21	40	54	72
Wool (clean basis).	0.02	0.02	0.02	0.02	0.02	92	92	96
Rubber	0.96	1.57	1.80	1.70	2.00	163	176	207
Milk	22.32	24.37	25.04	25.40	27.00	109	114	121
Meat ²	1.93	1.84	2.00	2.00	2.30	95	104	119
Population (millions).	615.0	735.1	752.9	764.8	808	120	124	131

¹ Including raw equivalent of non-centrifugal cane sugar.

² Beef and veal, pigmeat, mutton and lamb.

TABLE I.7: — NEAR EAST; ESTIMATED AGRICULTURAL PRODUCTION 1956/57
IF CURRENT PLANS AND ESTIMATES ARE REALIZED

COMMODITY	Total Production					Indices 1934-38 = 100		
	1934-38 Average	1948-50 Average	1951/52	1952/53 (Prov.)	1956/57 (Estim.)	1948-50 Average	1952/53 (Prov.)	1956/57 (Estim.)
	. . . . . Million metric tons					Indices		
Wheat	9.5	10.2	12.1	13.7	16.3	107	144	171
Rye	0.3	0.4	0.6	0.7	0.6	122	199	182
Total: BREAD GRAINS	9.8	10.6	12.7	14.4	16.9	107	146	172
Rice (milled)	1.2	1.7	1.2	1.3	1.7	146	114	146
Barley	4.2	4.8	5.5	6.4	7.9	114	153	188
Oats	0.2	0.3	0.4	0.4	0.4	128	177	158
Mixed Grains	0.1	0.2	0.3	0.4	0.3	205	420	357
Maize	2.4	2.3	2.6	2.6	2.8	97	111	119
Millets and Sorghums	2.7	3.3	3.6	3.5	4.0	122	130	148
Total: COARSE GRAINS	9.6	10.9	12.3	13.4	15.4	113	139	160
Total: CEREALS	20.6	23.1	26.3	29.1	34.0	112	141	165
Potatoes	0.3	0.9	1.1	1.3	1.2	301	439	399
Total: STARCHY ROOTS	0.5	1.0	1.2	1.5	1.3	232	323	297
Pulses	1.1	1.2	1.2	1.2	1.3	111	116	127
Sugar (raw equivalent)	0.2	0.4	0.5	0.5	0.6	168	206	265
Vegetable Oils and Oilseeds (oil equivalent):								
Edible	0.37	0.46	0.48	0.55	0.64	124	148	171
Total	0.38	0.49	0.50	0.58	0.67	127	151	174
Citrus Fruit	0.80	0.74	0.92	0.95	0.99	93	120	125
Bananas	0.07	0.09	0.11	0.10	0.10	121	139	130
Dates	0.74	0.66	0.81	0.85	0.90	89	114	121
Figs (dried)	0.06	0.07	0.06	0.06	0.07	125	98	136
Raisins	0.15	0.18	0.16	0.17	0.19	119	110	123
Wine	0.03	0.05	0.06	0.06	0.06	158	188	197
Coffee	0.03	0.04	0.04	0.04	0.05	136	157	175
Tobacco	0.08	0.12	0.12	0.13	0.12	138	152	140
Hemp	0.02	0.02	0.02	0.03	0.03	162	162	162
Flax	—	0.01	0.01	0.01	0.01	—	—	—
Cotton (lint)	0.56	0.61	0.69	0.79	0.85	109	140	152
Wool (clean basis)	0.03	0.04	0.04	0.05	0.05	141	144	147
Milk	10.42	11.58	12.25	12.60	13.69	111	121	131
Meat ¹	0.84	1.05	1.18	1.20	1.35	126	143	161
Population (millions)	104.3	123.6	127.7	129.2	140	118	124	134

¹ Beef and veal, pigmeat, mutton and lamb.

— Nil or negligible.

TABLE I.8 : — AFRICA ; ESTIMATED AGRICULTURAL PRODUCTION 1956/57
IF CURRENT PLANS AND ESTIMATES ARE REALIZED

COMMODITY	Total Production					Indices : 1934-38 = 100		
	1934-38 Average	1948-50 Average	1951/52	1952/53 (Prov.)	1956/57 (Estim.)	1948-50 Average	1952/53 (Prov.)	1956/57 (Estim.)
..... Million metric tons .....								..... Indices
Wheat	2.5	2.8	3.0	3.4	3.5	113	137	140
Rice (milled)	1.1	1.7	1.8	1.8	2.1	150	164	188
Barley	2.1	2.5	2.4	2.7	3.0	119	130	144
Oats	0.3	0.3	0.3	0.3	0.3	90	103	98
Maize.	4.5	5.8	5.1	6.0	6.5	128	134	144
Millets and Sorghums	7.8	8.0	8.1	8.0	9.0	103	103	116
Total : COARSE GRAINS.	14.7	16.5	15.9	17.0	18.8	113	116	128
Total : CEREALS	18.3	21.0	20.7	22.3	24.4	115	122	133
STARCHY Roots ¹	33.7	38.0	42.8	43.3	46.8	113	128	139
Pulses	0.6	0.9	1.0	1.0	1.1	158	170	189
Sugar (raw equivalent).	1.0	1.3	1.3	1.4	1.7	132	144	170
Vegetable Oils and Oilseeds (oil equivalent)	1.50	1.87	2.12	2.08	2.51	125	139	167
Citrus Fruits	0.34	0.67	0.81	0.78	0.85	195	227	248
Bananas	1.20	1.75	1.64	1.70	1.90	146	142	158
Dates.	0.11	0.14	0.11	0.12	0.14	129	107	130
Figs (dried)	0.06	0.07	0.07	0.07	0.07	125	127	127
Wine	2.14	1.76	1.82	1.66	2.00	82	77	93
Cocoa.	0.48	0.51	0.45	0.51	0.52	104	105	107
Coffee.	0.12	0.23	0.28	0.28	0.30	191	231	242
Tea.	0.01	0.02	0.02	0.02	0.03	200	233	289
Tobacco.	0.06	0.12	0.13	0.13	0.14	192	197	215
Jute	0.01	0.02	0.03	0.03	0.03	180	320	340
Cotton (lint).	0.14	0.21	0.23	0.24	0.25	148	170	180
Hard Fibers.	0.16	0.21	0.26	0.26	0.30	136	168	189
Wool (clean basis).	0.07	0.06	0.06	0.07	0.07	87	96	100
Rubber.	0.01	0.05	0.07	0.07	0.08	612	925	1000
Milk	2.20	3.88	4.20	4.30	4.80	176	196	218
Meat ²	1.29	1.56	1.59	1.59	1.82	121	123	141
Population (millions)	126.9	149.2	154.7	156.6	167	118	123	132

¹ Tentative estimate covering potatoes, sweet potatoes and cassava.

² Beef and veal, pigmeat, mutton and lamb.

TABLE I.9: — OCEANIA; ESTIMATED AGRICULTURAL PRODUCTION 1956/57
IF CURRENT PLANS AND ESTIMATES ARE REALIZED

COMMODITY	Total Production					Indices: 1936-39 ¹ = 100		
	1936-39 ¹ Average	1948-50 Average	1951/52	1952/53 (Prov.)	1956/57 (Estim.)	1948-50 Average	1952/53 (Prov.)	1956/57 (Estim.)
..... Million metric tons					Indices			
Wheat	4.7	5.5	4.5	5.4	5.4	119	115	115
Rice (milled)	—	0.1	0.1	0.1	0.1	173	173	195
Barley	0.2	0.5	0.5	0.8	0.6	210	330	246
Oats	0.4	0.5	0.7	0.8	0.6	142	227	178
Maize.	0.2	0.1	0.1	0.1	0.2	75	44	100
Total: COARSE GRAINS	0.8	1.2	1.4	1.8	1.6	154	223	195
Total: CEREALS	5.5	6.8	5.9	7.2	7.0	124	131	127
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Potatoes	0.5	0.6	0.6	0.6	0.6	119	119	131
Sweet Potatoes	0.1	0.1	0.1	0.1	0.1	85	96	96
Cassava.	0.1	0.1	0.1	0.1	0.1	137	108	108
Total: STARCHY ROOTS.	0.6	0.8	0.8	0.7	0.8	116	115	124
<hr/>								
Sugar (raw equivalent).	1.1	1.1	0.9	1.1	1.4	101	104	130
Vegetable Oils and Oilseeds (oil equivalent)	0.14	0.14	0.16	0.16	0.17	102	118	124
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Citrus Fruit.	0.12	0.16	0.15	0.15	0.17	134	126	143
Bananas	0.18	0.19	0.18	0.18	0.19	103	99	104
Raisins	0.07	0.06	0.07	0.07	0.07	86	95	95
Wine	0.08	0.15	0.14	0.16	0.16	180	197	197
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Hard Fibers.	0.01	0.01	0.01	—	0.01	136	168	189
Wool (clean basis).	0.32	0.39	0.39	0.46	0.43	122	144	134
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Milk	10.13	10.54	10.07	11.28	11.43	104	111	113
Meat ²	1.46	1.58	1.55	1.71	1.80	108	117	123
Eggs	0.12	0.14	0.13	0.14	0.16	122	122	136
<hr/>								
Population (millions).	10.5	12.2	12.9	13.1	14.4	117	125	133

¹ 1936-39 prewar base used for Australia and 1935-39 for New Zealand because of abnormal seasons in 1934-38 period. In Annex II, the 1934-38 average has been used throughout for uniformity with the data on trade.

² Beef and veal, pigmeat, mutton and lamb.

— Nil or negligible.

Annex II - POSSIBLE TRENDS IN EXPORTABLE SUPPLIES AND IMPORT REQUIREMENTS IF THE 1956/57 PRO- DUCTION ESTIMATES ARE REALIZED

Note: Except in relatively few cases where the countries themselves have provided estimates, the figures in the final column represent no more than the difference between (a) the production estimates and objectives and (b) the total domestic requirements as estimated in the case of foodstuffs and beverages from the assumed per caput utilization and the population estimates in Annex I.

They should on no account be regarded as forecasts, and are intended only to illustrate possible trends in export availabilities or import requirements if the 1956/57 production objectives and estimates are realized. It is to be stressed that any errors in either the production or consumption estimates for 1956/57 would be liable to give rise to proportionately greater errors in the residual figures in the final column.

No attempt has been made to reconcile any differences between the apparent exportable supplies and import requirements in 1956/57. Obviously the gap might be bridged by a lower production than has been estimated, or by a larger consumption in either the exporting or importing regions, but the alternative developments are so many that it would be fruitless to attempt more precise estimates.

TABLE II.1: — CEREALS; POSSIBLE TRENDS IN SUPPLIES IN THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED

R E G I O N	Per capita domestic utilization			Total domestic utilization			Production			Apparent net exportable supply or import requirement ^a		
	1934-38 (1)	1949-52 (2)	1956/57 (Assumed) (3)	1934-38 (4)	1949-52 (5)	1956/57 (Assumed) (6)	1934-38 (7)	1949-52 (8)	1956/57 (Estimated) (9)	1934-38 (Actual) (10)	1949-52 (Actual) (11)	1956/57 (Estimated) (12)
<i>Kg. per head</i>												
<i>NORTH AMERICA</i> ¹												
Bread Grains	4164	4144	140/150	22.9	23.8	25.8/27.7	27.8	43.4	340	5.2	17.9	12.3/14.2
Coarse Grains	4557	4605	692/4	78.6	115.5	127.4	80.8	124.7	127.4	0.1	4.9	0/0.5
Rice (milled)	4			0.6	0.7	0.8	0.62	1.16	1.4	0.1	0.5	0.6
<i>Total</i>	725	843	836/846	102.1	140.0	154/155.9	109.2	169.3	168.8	5.3	23.3	12.9/15.3
<i>Metric tons</i>												
<i>LATIN AMERICA</i> ²												
Bread Grains	4259	4208	220/250	3.4	3.6	4.4/5.0	6.9	4.9	7.6	3.5	1.9	2.6/3.2
Argentina	33	37	37/40	3.6	5.4	6.2/6.6	2.0	2.8	3.6	1.6	2.6	2.6/3.0
Other												
Coarse Grains												
Argentina	4144	4196	200/220	4.9	3.4	3.9/4.4	9.2	3.5	10.4	7.4	1.1	6.0/6.5
Other	160	93	100/102	10.7	13.6	16.8/17.2	10.8	3.6	17.2	0.1	...	0/0.4
Rice (milled)	13	19	20	1.6	3.2	3.8	1.3	3.0	3.6	0.3	0.2	0.2
<i>Total</i>	176	181	187/197	21.2	29.2	35.1/37.0	30.2	27.8	42.4	9.1	0.2	5.8/6.9
<i>OCEANIA</i> ²												
Bread Grains	4177	4208	200/220	4.9	2.6	2.9/3.2	4.4	5.3	5.4	2.7	2.8	2.2/2.5
Coarse Grains	70	58	60/70	0.7	0.7	0.9/1.0	0.8	1.3	1.6	0.1	0.5	0.6/0.7
Rice (milled)	6	5	5	0.1	0.1	0.1	...	0.1	0.1	...	...	...
<i>Total</i>	253	271	265/285	2.7	3.4	3.9/4.3	5.2	6.7	7.1	2.8	3.3	2.8/3.2
<i>NEAR EAST</i> ¹												
Bread Grains	96	99	110/115	9.8	12.3	15.4/16.1	9.8	11.1	16.9	...	1.2	0.8/1.5
Coarse Grains	89	85	90/95	9.2	10.7	12.6/13.3	9.6	11.2	15.4	0.4	0.5	2.1/2.8
Rice (milled)	11	12	11/12	1.1	1.5	1.5/1.6	1.18	1.72	1.72	0.06	0.2	0.1/0.2
<i>Total</i>	196	196	211/222	20.1	24.5	29.5/31.0	20.6	24.0	34.0	0.5	0.5	3.0/4.5
<i>Far East</i> ¹ (excl. China) ⁵												
Bread Grains	20	22	54/60	12.3	16.6	43/48.5	12.1	11.5	15.0	0.2	5.1	0/5.5
Coarse Grains	42	34	100	25.8	25.7	26.0	24.1	28.0	28.0	0.2	1.6	...
Rice (milled)	101	88	62.7	65.3	81.1	65.5	65.2	80.5	2.8	0.1	0.1	0.6
<i>Total</i>	163	144	154/160	100.8	107.6	124.1/129.6	103.6	100.8	123.5	2.8	6.8	0.6/6.1
<i>N. WESTERN and SOUTHERN EUROPE</i> ¹												
Bread Grains	180	166	170/175	49.4	50.1	53.9/55.6	38.2	36.1	40.7	11.2	14.0	13/15
Coarse Grains	176	144	150/160	48.3	43.7	47.5/51.0	37.3	35.6	41.0	11.0	8.1	6.5/10.0
Rice (milled)	6	3	3	1.6	0.9	1.0	0.7	0.8	1.0	0.9	0.1	...
<i>Total</i>	362	313	323/338	99.3	94.7	102.4/107.6	76.2	72.5	82.7	23.1	22.2	19.5/25.0

Note: In order to obtain the closest possible correspondence between the production and trade figures, the data for some regions are related to calendar and for others to July/June years.

¹ July/June years.

² Calendar years.

³ (+) = net import and (—) net export.

⁴ Adjusted for changes in stocks.

⁵ Adjusted from the original estimate in Annex I to allow for recent acreage restrictions in U.S.A.

⁶ Allows for the increased seed requirements for the larger projected crop area and for some increase in human and animal consumption.

⁷ Calendar years, but including the rice crop harvested at the end of the immediately preceding year.

— Nil or negligible.

TABLE II.2: — SUGAR (RAW EQUIVALENT)¹; POSSIBLE TRENDS IN SUPPLIES
IF THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED

REGION	Per caput domestic utilization			Total domestic utilization			Production			Apparent net exportable supply or import requirement		
	1934-1938	1948-1952	1956/1957 (Assumed)	1934-1938	1948-1952	1956/1957 (Assumed)	1934-1938	1948-1952	1956/1957 (Estimated)	1934-1938	1948-1952 (Actual)	1956/1957 (Estimated)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>... Kg. per caput ...</i> <i>Million metric tons</i>												
NET EXPORTERS												
Latin America	21	231	30-32	2.5	25.0	5.6-6.0	7.2	12.8	13.3	4.7	7.4	7.3-7.7
Far East (excl. China)	8	8	8-9	5.1	5.8	6.3-7.3	6.6	5.7	7.9	1.5	—	0.6-1.6
Oceania	44	54	50-55	0.4	0.6	0.7-0.8	0.9	1.0	1.4	0.5	0.4	0.6-0.7
Other exporting regions ⁴ . . . . .	...	...	...	5.1	6.0	8.2-8.7	5.8	6.3	9.7	0.7	0.6	1.0-1.5
										57.4	58.4	9.5-11.5
NET IMPORTERS												
North America	48	45	45-46	6.8	7.5	8.3-8.5	2.8	3.0	3.3	4.0	4.5	5.0-5.2
N. W. and S. Europe	24	26	27-29	6.6	7.9	8.5-9.1	4.0	5.2	6.2	2.6	2.7	2.3-2.9
Other importing regions ⁵ . . . . .	...	...	...	1.0	1.1	1.5-1.8	0.4	0.7	1.0	0.6	0.8	0.5-0.8
										7.2	8.0	7.8-8.9

¹ Including raw equivalent of non-centrifugal cane sugar. Trade figures include some refined sugar.

² After deduction of Cuban Stabilization Reserve of 1.8 million tons.

³ Net import into the Far East included under "other importing regions."

⁴ Africa, U.S.S.R. and Eastern Europe.

⁵ World gross exports 11.5 and 12.7 million tons respectively.

⁶ China and the Near East: net imports into the Far East and U.S.S.R. in 1948-52 are included in the import figure, column (11).

... Not available.

— Nil or negligible.

TABLE II.3: — VEGETABLE OILS AND OILSEEDS (OIL EQUIVALENT)¹; POSSIBLE TRENDS IN SUPPLIES
IF THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED

REGION	Per caput domestic utilization			Total domestic utilization			Production			Apparent net exportable supply or import requirement		
	1934-1938	1948-1952	1956/57 (Assumed)	1934-1938	1948-1952	1956/57 (Assumed)	1934-1938	1948-1952	1956/1957 (Estimated)	1934-1938	1948-1952 (Actual)	1956/57 (Estimated)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>... Kg. per caput ...</i> <i>Million metric tons</i>												
NET EXPORTERS												
Far East (excl. China)	4.2	3.8	4.0-4.2	2.5	2.8	3.2-3.4	3.9	3.9	4.8	1.4	1.1	1.4-1.6
Africa	4.7	6.4	6.5-7	0.6	1.0	1.1-1.2	1.5	2.0	2.5	0.9	1.0	1.3-1.4
Latin America	4.7	5.2	5.5-6	0.6	0.8	1.0-1.1	1.1	1.1	1.5	0.5	0.3	0.4-0.5
Other exporting regions ³ . . . . .	...	...	...	4.0	4.3	4.6-4.8	4.7	4.5	5.0	0.7	0.2	0.2-0.4
										23.5	22.6	3.3-3.9
NET IMPORTERS												
N.W. and S. Europe	12.0	10.8	11-12	3.3	3.3	3.5-3.8	0.8	1.0	1.3	2.5	2.3	2.2-2.5
North America	14.8	16.9	17-17.5	2.1	2.9	3.1-3.2	1.2	2.7	2.9	0.9	0.2	0.2-0.3
Other importing regions ⁴ . . . . .	...	...	...	1.4	1.9	2.6	1.3	1.9	2.6	0.1	—	—
										3.5	2.5	2.4-2.8

¹ Production figures are gross and thus include the oil equivalent of oilseeds not actually crushed for oil but used for seed, fertilizer, feeding to livestock and directly as human food.

² World gross exports 4.9 and 3.8 million tons respectively.

³ China, Oceania and the Near East.

⁴ U.S.S.R. and Eastern Europe.

... Not available.

— Nil or negligible.

TABLE II.4 : — COFFEE ; POSSIBLE TRENDS IN SUPPLIES IF THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED

REGION	Per caput domestic utilization			Total domestic utilization			Production			Apparent net exportable supply or import requirement		
	1934-1938	1948-1952	1956/57 (Assumed)	1934-1938	1948-1952	1956/57 (Assumed)	1934-1938	1948-1952	1956/1957 (Estimated)	1934-1938 (Actual)	1948-1952 (Actual)	1956/57 (Estimated)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Kg. per caput</i>												<i>Million metric tons</i>
NET EXPORTERS												
Latin America . . .	1...	2.0	2-2.2	1...	0.32	0.38-0.41	2.12	1.88	2.18	1.37	1.56	1.77-1.80
Africa	0.3	0.2	0.3	0.04	0.04	0.05	0.12	0.25	0.30	0.08	0.21	0.25
Far East . . . . .	...	...	...	0.08	0.07	0.08-0.10	0.15	0.01	0.10	0.07	—	nil - 0.02
										2 1.52	2 1.77	2.02-2.07
NET IMPORTERS												
North America . . .	5.8	7.6	7.6-7.8	0.80	1.26	1.40-1.44	—	—	—	0.80	1.26	1.40-1.44
N.W. and S. Europe	2.4	1.6	1.8-2.0	0.67	0.47	0.57-0.63	—	—	—	0.67	0.47	0.57-0.63
Other importing regions. . . . .	...	...	...	0.07	0.06	0.07-0.08	0.03	0.04	0.05	0.04	0.02	0.02-0.03
										1.51	1.75	1.99-2.10

¹ No reliable estimate is possible in view of large stock changes and physical destruction of surplus coffee.

² World gross exports 1.65 and 1.93 million tons respectively.

— Not available.

— Nil or negligible.

TABLE II.5 : — TEA ; POSSIBLE TRENDS IN SUPPLIES IF THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED

REGION	Per caput domestic utilization			Total domestic utilization			Production			Apparent net exportable supply or import requirement		
	1934-1938	1948-1952	1956/57 (Assumed)	1934-1938	1948-1952	1956/57 (Assumed)	1934-1938	1948-1952	1956/1957 (Estimated)	1934-1938 (Actual)	1948-1952 (Actual)	1956/57 (Estimated)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Kg. per caput</i>												<i>Million metric tons</i>
NET EXPORTERS												
Far East (excl. China) . . .	0.16	0.21	0.20-0.22	0.10	0.15	0.16-0.18	0.44	0.52	0.61	0.34	0.37	0.43-0.45
China. . . . .	...	...	...	0.23	0.18	0.23-0.24	0.27	0.19	0.25	0.04	0.01	0.01-0.02
										10.38	10.38	0.44-0.47
NET IMPORTERS												
N.W. and S. Europe . . .	0.82	0.73	0.75-0.8	0.23	0.23	0.24-0.26	—	—	—	0.23	0.23	0.24-0.26
North America . . .	0.39	0.38	0.38-0.4	0.05	0.06	0.07-0.075	—	—	—	0.05	0.06	0.07
Other importing regions. . . . .	...	...	...	2 0.10	2 0.13	0.13-0.15	2 0.01	2 0.03	2 0.03	0.09	0.10	0.10-0.12
										0.37	0.39	0.41-0.45

¹ World gross exports 0.41 and 0.43 million tons respectively.

² Excluding U.S.S.R. production, for which no recent data are available.

— Nil or negligible.

— Not available.

TABLE II.6: — COCOA ; POSSIBLE TRENDS IN SUPPLIES IF THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED

⁴ World gross exports 0.69 million tons in both periods.

— Nil or negligible.

... Not available.

TABLE II.7: — COTTON (LINT); POSSIBLE TRENDS IN SUPPLIES IF THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED

REGION	Total domestic utilization ¹			Production			Apparent net exportable supply or import requirement		
	1934-1938	1948-1952	1956/57 (Assumed)	1934-1938	1948-1952	1956/1957 (Estimated)	1934-38	1948-52	1956/57 (Estimated)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
. Million metric tons									
NET EXPORTERS									
North America	1.44	2.16	2.3	2.78	3.09	3.04	1.19	0.92	0.74
Near East	0.09	0.14	0.15-0.2	0.56	0.66	0.85	0.47	0.46	0.65-0.70
Latin America	0.30	0.49	0.6-0.7	0.63	0.88	1.25	0.33	0.34	0.55-0.65
Africa	0.01	0.03	0.04	0.14	0.22	0.25	0.13	0.19	0.21
U.S.S.R.	0.73	...	...	0.70	...	...	—	0.11	20.2-0.4
							2.12	2.02	2.35-2.7
NET IMPORTERS									
N.W. and S. Europe	1.63	1.44	1.4-1.6	0.02	0.03	0.04	1.61	1.38	1.36-1.56
Far East (excl. China)	1.44	1.10	1.4-1.6	1.21	0.88	1.24	0.23	0.25	0.16-0.36
Other importing regions ⁴ . . . . .	...	...	...	...	...	...	0.30	0.33	0.28-0.33
							2.14	1.96	1.86-2.25

¹ Adjusted for changes in stocks 1934-38 (U.S.A. only) and 1948-52.

² If the high target set in U.S.S.R. were reached, which seems doubtful, an even higher export availability would be possible.

³ World gross exports 3.1 and 2.5 million tons respectively.
⁴ Oceania, China and Eastern Europe; net imports into

* Oceania, China and Eastern Europe; net imports into the U.S.S.R. in 1934-38 are included in the import figure in column (7).

— Nil or negligible.
Net available

... Not available.

TABLE II.8 : — WOOL (CLEAN BASIS)¹; POSSIBLE TRENDS IN SUPPLIES IF THE 1956/57 PRODUCTION ESTIMATES ARE REALIZED

REGION	Total domestic utilization ²			Production			Apparent net exportable supply or import requirement		
	1934-1938	1948-1952	1956/57 (Assumed)	1934-1938	1948-1952	1956/1957 (Estimated)	1934-38 (Actual)	1948-52 (Actual)	1956/57 (Estimated)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Million metric tons</i>									
NET EXPORTERS									
Oceania	0.02	0.03	0.03	0.32	0.41	0.43	0.31	0.44	0.40
Latin America	0.04	0.06	0.07	0.15	0.18	0.20	0.13	0.12	0.13
Africa	0.01	0.01	0.01	0.07	0.06	0.07	0.06	0.05	0.06
Other exporting regions ³	0.04	0.04	0.05	0.06	0.07	0.07	0.02	0.01	0.02
							0.52	0.62	0.61
NET IMPORTERS									
N.W. and S. Europe	0.50	0.54	0.52-0.56	0.10	0.10	0.10	0.40	0.40	0.42-0.46
North America	0.17	0.27	0.23-0.24	0.10	0.06	0.07	0.07	0.19	0.16-0.17
Other importing regions ⁴	0.18	0.16	0.16-0.18	0.10	0.11	0.14	0.08	0.05	0.02-0.04
							0.55	0.64	0.60-0.67

¹ Including approximate clean equivalent of skin-wool.

² Adjusted for changes in stocks.

³ Near East and China.

⁴ World gross exports 0.70 and 0.76 million tons respectively.

⁵ Far East (excluding China), Eastern Europe and U.S.S.R.

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Sir Gerald Clauson, K.C.M.G., the author of this paper, was until recently a high official in the British Colonial Office in London. The paper is one of a group of connected studies on land tenure and related subjects to be published as part of the FAO program of agrarian reform.

CADASTRAL SURVEYS AND RECORDS IN RIGHTS IN LAND, 1953, vi + 68 pp. (ES) \$0.50, 2s. 6d.

Sir Bernard Binns, K.B.E., author of this paper, was for five years head of the Department of Settlements and Land Records in Burma, and was also for two years, as Financial Commissioner, responsible for the whole Land Records Administration of which the Land Records Department was an integral part.

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Sufficient of the techniques of soil classification and mapping are outlined so that the mode of operation, the type of equipment involved and the cost of the work can be accurately assessed. Maps in color. Good bibliography.

LAND CLASSIFICATION FOR AGRICULTURAL DEVELOPMENT, November 1952, iv + 38 pp. (ES) \$0.50, 2s. 6d.

This paper briefly describes several types of land classification needed as a foundation for national agricultural development.

FARM MANAGEMENT INVESTIGATIONS FOR AGRICULTURAL IMPROVEMENT, 1952, vi + 38 pp. (EFS) \$0.50, 2s. 6d.

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Primarily concerned with practical and administrative matters, this paper is based on the writer's experience in Burma, 1937-45.

COMMUNITY ORGANIZATION FOR IRRIGATION IN THE UNITED STATES, October 1952, iv + 40 pp. (ES) \$0.50, 2s. 6d.

The success of irrigation projects depends to a large degree upon the users of the water having their own organization. This short paper outlines the forms of organization which have been developed in the Western States of the U.S.A. to deal with this problem.

CO-OPERATIVE THRIFT, CREDIT AND MARKETING IN ECONOMICALLY UNDERDEVELOPED COUNTRIES, 1952, iv + 64 pp. (E) \$0.50, 2s. 6d.

Discusses the principles on which a sound credit system must be built.

LAND USE & CROPS

LAND UTILIZATION IN TROPICAL AREAS, 1952, vi + 10 pp. (EFS) \$0.25, 1s. 3d.

Report of an FAO Regional Meeting at Nuwara Eliya, Ceylon, 17-29 September 1951.

SOME ASPECTS OF SURFACE WATER DEVELOPMENT IN ARID REGIONS, 1952, vi + 46 pp. (EF) \$0.50, 2s. 6d.

An outline of the techniques of utilization of natural flow without storage by retarding surface runoff by drainage, and by the storage of flood water.

LEGUMES IN AGRICULTURE, 1953, xvi + 366 pp. (E) \$3.00, 15s.

Like the other successful FAO symposia (*Soil Conservation, The Efficient Use of Fertilizers and Improving the World's Grasslands*) this monograph is the result of FAO co-ordinated research.

CEREAL BREEDING PROCEDURES, 1952, viii + 124 pp. (EF) \$1.25, 6s. 3d.

This short handbook by Professor J.B. Harrington of the University of Saskatchewan deals with the practical operations of a breeding program for wheat, rice and other small grains.

ANIMAL BREEDING

ZEBU CATTLE OF INDIA AND PAKISTAN, 1953, viii + 256 pp. (ES) \$3.00, 15s.

Information has been assembled on each breed which is considered of sufficient importance to be of interest to breeders in countries other than India and Pakistan where zebu cattle might be used in improvement programs.

PULP & PAPER

RAW MATERIALS FOR MORE PAPER, PULPING PROCESSES AND PROCEDURES RECOMMENDED FOR TESTING, 1953, xii + 172 pp. English edition only. \$2.00, 10s.

This publication reports the findings of some thirty prominent personalities in the field of pulp and paper who attended an FAO consultation in Rome expressly to determine the feasibility and relative cost of making pulp and paper from tropical and sub-tropical woods and from agricultural residues.

NUTRITION

MAIZE AND MAIZE DIETS, A NUTRITIONAL SURVEY, 1953, iv + 96 pp., illustrated. In English. Spanish edition in preparation. \$1.00, 5s.

The nutrient content, the effect on its nutritive value of industrial processing and of domestic methods of preparation, and the facts bearing on the association of maize with pellagra are presented and analyzed. Possibilities of improving maize diets are discussed.

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COMMODITY STANDARDS FOR FISHERIES PRODUCTS, A DIGEST OF CURRENT LAWS AND REGULATIONS, prepared by Ernest Hess, April 1953, vi + 158 pp. (EFS) \$2.00, 10s.

A draft report containing detailed information covering 15 countries and 2 international organizations was prepared in English in 1950 in mimeographed form. Additional information received in 1952, including that from 9 additional Member Governments, has been incorporated to form the present publication.

Note : The letters, E,F,S, indicate editions in English, French, Spanish.

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