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16TH SEPTEMBER, 1942.

WAR CABINET

OFFICIAL COMMITTEE ON POST-WAR INTERNAL ECONOMIC PROBLEMS

DEPARTMENTAL STUDIES

Note by the Secretary.

By direction of the Chairman I circulate herewith a covering note and memorandum on "Post-War Agricultural Policy" by the Agricultural Departments. This paper is in fulfilment of Item III (a) of the Programme of Work appended to I.E.P.(42) 19.

(Signed) A. BASTER.

4/5, Richmond Terrace, S.W.1. 16th September, 1942.

POST-WAR AGRICULTURAL POLICY

Note by Agricultural Departments

The attached memorandum prepared by the Agricultural Departments formulates the lines of a permanent Post-War Agricultural Policy on the basis of certain principles provisionally laid down by Ministers as set out in paragraph 3 of the memorandum.

Long-term agricultural policy has to cover important technical and other matters, such as agricultural research and education, which hardly perhaps come within the purview of the Committee on Post-War Internal Economic Problems. Some of them indeed are under consideration by other Committees. It has been thought necessary to include references to these matters in the memorandum in order to give a fairly complete picture of what is proposed. In the main, however, the memorandum deals with those aspects of agricultural policy which affect other Departments and general economic policy. This has had the effect of destroying the balance of the document but this appeared unavoidable if it was to be kept to a reasonable length.

It will of course be necessary to ascertain representative views of the various sections of the industry before a permanent agricultural policy can be worked out in full detail. It is desirable that those discussions should take place as soon as possible and the object of the memorandum is to secure a Ministerial decision on the general lines of policy in order that such discussions can be opened.

POST-WAR AGRICULTURAL POLICY.

Memorandum by Agricultural Departments.

INTRODUCTORY.

ON the 26th November, 1940, the Government announced that it had decided to guarantee that the present system of fixed prices and an assured market for agricultural products would be maintained for the duration of hostilities and for at least one year thereafter. The announcement went on to say: "The Government, representative as it is of all major political parties, recognises the importance of maintaining after the war a healthy and well-balanced agriculture as an essential and permanent feature of national policy. The guarantee now given is meant to secure that stability shall be maintained not only during hostilities but during a length of time thereafter sufficient to put into action a permanent postwar policy for home agriculture."

- 2. The continuance of the present system of fixed prices and an assured market will involve as a corollary the retention of the present system of control over the use of agricultural land and over farming operations. As soon, however, as hostilities cease a number of urgent questions will arise, e.g., at what rate and to what extent and by what means the war-time acreage of wheat is to be reduced, the answers to which will depend upon long-term policy.
- 3. It has been laid down by Ministers that for the purpose of formulating the lines of a permanent post-war policy for agriculture, the following principles should be provisionally accepted:—
 - (i) That all reasonably good agricultural land should be maintained in a state of fertility and productivity.
 - (ii) That we should desire to adopt a policy to secure to the utmost practicable extent:—
 - (a) proper standards of upkeep of the farm and buildings;
 - (b) proper standards of farming; and
 - (c) measures for the economic stability of the industry.
- 4. The purpose of this memorandum is to set out the considerations which arise in connection with long-term agricultural policy and on the basis of the principles laid down in the preceding paragraph to put forward positive proposals for "maintaining after the war a healthy and well-balanced agriculture as an essential and permanent feature of national policy" with as little interference as possible with other aspects of national economic policy and with due regard to what appear to be the probable trends of social policy.

In this connection it has been found necessary to make the following assumptions:—

(a) The Government's statement of November 1940 has generally been taken to mean that the Government intend as an act of policy to promote measures under which agriculture would occupy a more important place in the national life and economy than it did before the war. On the other hand, it is assumed that it will be unnecessary and undesirable to aim at an increase in domestic agricultural production of a higher order of magnitude than that contemplated in the Treasury Memorandum on External Monetary and Economic Policy. That memorandum appears to contemplate an increase compared with prewar of something like £60 millions at assumed post-war prices or say £40 millions at pre-war levels.

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(b) There will be a larger measure of Governmental control than existed before the war, both in the sphere of international trade and over the internal according life of this country.

internal economic life of this country.

(c) High rates of direct taxation will continue after the war, and for this and other reasons a number of owners of agricultural estates, both large and small, will be unable to maintain them, and action by the State may in certain cases become urgently necessary.

- 5. On the basis of the provisional principles laid down by Ministers and on the assumptions in the preceding paragraph, the problems of post-war agricultural policy can conveniently be considered under four heads:—
 - I.—The General Objective. II.—Economic Stability. III.—Land Utilisation.
 - IV.—Promotion of Efficiency in Production and Marketing.

To some extent, of course, these sets of problems are interlocked: land utilisation, economic conditions and farming efficiency react upon one another. They can, however, be most conveniently examined in separate groups provided that it is realised that one set of problems cannot be satisfactorily tackled without attention being paid to the others.

I.—THE GENERAL OBJECTIVE.

- 6. The general character of the main objective is indicated in the first of the principles provisionally laid down by Ministers, namely, that all reasonably good agricultural land should be maintained in a state of fertility and productivity. In considering what is involved in this principle, the following questions arise: What does "all reasonably good agricultural land" connote? What would be the character of British agriculture, i.e., what types or systems of farming would be appropriate for keeping all reasonably good agricultural land in a state of fertility and productivity? What would be the amount and character of the resulting production, having regard to the probable trend of public demand as influenced by social policy and to the fact that we shall continue to import a large proportion of the agricultural products we require? Lastly, what measures would be required and what would it cost to maintain all reasonably good agricultural land in a state of fertility and productivity under appropriate and efficient systems of farming?
- 7. What does "all reasonably good agricultural land" connote?

 Before the war the agricultural land of the United Kingdom comprised 48,285,585 acres, consisting of:—

Cultivated land—	England and Wales. Acres.	Scotland. Acres.	Northern Ireland. Acres.	Total. Acres.
Arable	8,934,598	2,935,487	1,036,045	12,906,130
Permanent grass	15,708,663	1,622,724	1,441,581	18,772,968
	24,643,261	4,558,211	2,477,626	31,679,098
Rough grazings—				
(Mainly mountain and hill land)	5,607,912	10,465,016	533,559	16,606,487
Totals	30,251,173	15,023,227	3,011,185	48,285,585

This country is remarkable for a great variety and inter-mixture of soils. This fact taken in conjunction with the wide difference in rainfall in the eastern and western parts of the country and our uncertain weather has led to a great diversity of types or systems of farming producing a wide range of food and other products. It should be noted that these systems were developed or maintained during the period of 60 years of international free trade after British agriculture was subjected to the full force of competition from overseas countries in the 1870's. There is a *prima facie* presumption, therefore, that, based as they are in

the main on geophysical factors, these types of farming are those which are most appropriate for an agriculture which does not have to aim at self-sufficiency, but is complementary to an economic system which relies on a large importation of agricultural products. In any case it can be said that different kinds of land can be and are used for different purposes, and land which is not "reasonably good" for one form of production may be very suitable for another.

- 8. It should also be noted that the different uses to which different types of land may be put and the different systems of farming that prevail throughout the country are to a large extent interdependent and interlocked. The grass that grows on the mountain or hill farms of Scotland, Wales and Northern Ireland is very suitable for the rearing of cattle and sheep, but it is not good for milk production, and it will not fatten cattle or sheep. The grass that grows on the soils of Cheshire is very good for milk production. The grass on the strong pastures of the Midlands is unsuitable both for rearing young stock and for milk production, but is admirable for fattening mature cattle of certain breeds. Consequently, Welsh hill farms are appropriately used for producing young heifers for the dairy farms in Cheshire or beef stores for fattening on the Midland pastures, and hill sheep farms all over Great Britain are producing lambs to be fattened on lowland pastures or on arable farms. Thus fertile lowland farms and poor hill farms depend on each other. Many other illustrations could be given to show the interdependence of varied uses of different kinds of soils and the advantages that follow from it.
- 9. It is suggested, therefore, that if "all reasonably good agricultural land" is to be maintained in a state of fertility and productivity the great bulk of the land which was being used for agriculture before the war should be so maintained. Some agricultural land will of course be required for industry, building and other forms of non-agricultural use, and there are considerable areas of land—mainly rough hill and mounting grazings—which could, if necessary, and perhaps with advantage, be devoted to afforestation. But an agricultural policy designed to maintain a healthy and well-balanced agriculture in this country could hardly be regarded as satisfactorily fulfilling its objective if it resulted in any districts in which agriculture had been carried on during the period of free international competition becoming unproductive or infertile or still further depopulated. What would appear to be desirable and necessary would be a policy directed to maintain the bulk of the agricultural land of this country in appropriate productive use and fertility, while stopping, though it may not be possible to reverse, the tendency for the drift of the agricultural population from the land.

10. What would be appropriate productive use, i.e., what should be the general character of British agriculture, and what systems of farming are required to maintain our agricultural land in productivity and fertility?

It has been suggested in some quarters that with the development of mechanisation which has taken place in recent years and been greatly extended during the war, it would be possible by the establishment of large farm units to restore arable farming to the position it occupied in the 1870's, when both cash crops like wheat and arable fodder crops for livestock occupied in the midlands and other parts of England the same place that they occupied before the war in the eastern counties. It is true that the development of mechanisation has led to a marked improvement in efficiency and has revolutionised what can be done in our uncertain climate, particularly on heavy clay soils. It is also true that to make full economic use of modern machinery larger farming units are required. Having regard, however, to the climatic conditions which exist in the midlands, west and north of the country, a system of agriculture in those areas predominantly devoted to the large-scale growing of cereal crops would not appear to be making the most appropriate use of the land. It is only in districts of low rainfall or where the soil is especially suitable for arable cultivation that large-scale mechanised farming would be suitable.

11. Another school of thought has suggested that, in view of the importance of protective perishable foods such as milk, vegetables, fruit and eggs, this and other European countries should concentrate their agriculture on the production of these particular commodities and rely on the overseas exporting countries for cereals and meat. On this it may be said, first, that modern science is

discovering new ways by which milk and vegetable and other foods can be dried and preserved and retain their nutritive value, and it would therefore be unwise to found an agricultural policy on the assumption that domestic agriculture in this and other countries will retain a natural monopoly of perishable protective foods. Secondly, at a time of rapid scientific discovery and rapid changes in public demand, it would be dangerous to frame a long-term agricultural policy directed to producing a few special products. Any policy formulated to-day should be one which will provide the utmost possible flexibility and adaptability to meet changing conditions. Thirdly, it would be impossible under an agricultural policy of this kind to maintain more than a small proportion of land in this or other European countries in productivity and fertility. Only a very small fraction of our agricultural land would be needed to produce the maximum amount of potatoes and vegetables required for an optimum diet for the whole population. In our climate fruit is an uncertain crop in any particular year. While milk production can be extended yet, for the reasons given in paragraph 13 below, the all-grass dairy farm largely relying on imported concentrates is not a form of farming under which large areas of this country could in practice be maintained in productivity and fertility. Unless a wide range of products is produced, including a considerable acreage of cereals, and crop production can be combined with grass production on ordinary as well as on exceptionally fertile land, the greater part of the agricultural land of this country (and of most European countries) would consist of deteriorating grassland used for dairy cows or for ranching cattle and sheep. This would mean not only a heavy decline in the agricultural population, but a calamitous decrease in the fertility of our land and in the knowledge of how to cultivate the land. Not only would the absence of arable farming over a large part of the country render us till more he

12. The view of the best agricultural opinion, both scientific and practical, is that the only way of maintaining the greater part of our agricultural land, excluding rough grazings, in productivity and fertility is under varied systems of mixed farming varying by reference to the diversity and intermixture of soils, the difference in rainfall between east and west and other geophysical factors, and producing the wide range of food and other products which have been produced over the last 70 years. By reason of our soil and climate and for economic reasons British agriculture should continue to be predominantly devoted to the production of livestock and livestock products over the greater part of the country. Grass has been, and should continue to be, our most important crop in the west, north and midlands; and a large part of the arable acreage should continue to produce crops for feeding to livestock rather than crops for direct human consumption. On land which is particularly suitable for arable cultivation or in those parts of the country where the rainfall is low, mixed farming systems should continue to be mainly devoted to cash crops like potatoes, wheat, malting barley, &c., but in those systems, too, the production of livestock should generally continue to be an important item in the farm economy and the temporary grass or clover ley an essential part of the rotation. There is, of course, land which is particularly suitable for intensive horticultural production and market gardening and some development of farms and holdings of this kind should be anticipated. There will also be farms or holdings which for one reason or another will remain all grass. But over the greater part of the agricultural land of this country, excluding rough grazings, varied systems of mixed farming with appropriate proportions, varying by reference to geophysical factors, between grass and arable, livestock and crops, are the best and indeed the only way to maintain our agricultural land in productivity and fertility.

It is also believed that an agricultural policy directed to this end is one which would least interfere with other economic interests and would prove the most adaptable to new scientific developments and changes in public demand (e.g., increased demand for liquid milk) and in other economic circumstances.

13. The need for systems of mixed and balanced farming for maintaining soil fertility and the health of crops and livestock and the economic stability of farmers has been increasingly realised in this and other countries as a result of experience in the inter-war period and since the outbreak of the present war. It is well known that the United States have in recent years directed their agricultural policy and devoted immense sums of money to establishing better

balanced systems of farming in their country under which soil conservation crops (e.g., leguminous crops) would be alternated with the growing of cereals, and livestock production would be combined with crop production. The chief symptoms of the decay of agriculture in this country in the inter-war period were the steady decline in the tillage acreage and the slow deterioration of much of our permanent grassland. Both were, of course, due to the low world prices of cereals. Land was laid down or tumbled down to grass and because grass of a kind will grow easily in this country little attention was given to maintaining its feeding Farmers came to rely more and more on cheap imported feeding stuffs not merely, as in the case of Danish agriculture, as a supplement to what they could grow on their own farms but as a substitute for arable crops and even for good grass and hay. Whole districts came to consist of all-grass farms. Much of the grassland had very little feeding value for grazing or hay and was little more than an exercise ground for dairy cows or a ranch for cattle and sheep. In a survey of the grassland of England and Wales undertaken before the war it was found that out of some 16 million acres of permanent grass, excluding rough grazings, only 250,000 acres could be classified first class from the point of view of its feeding value and only 950 000 as second class, the remainder was third of its feeding value and only 950,000 as second class; the remainder was third of its reeding value and only 950,000 as second class; the remainder was third and fourth class. The difference between the feeding value of a first class and a fourth class pasture is very great. A first class pasture has thirteen times the feeding value of a fourth class pasture measured in terms of starch equivalent. An acre of first class pasture will provide 350 gallons of milk, compared with only 54 gallons provided by a fourth class pasture. It is generally known that permanent grassland, if not properly stocked and managed, will quickly deteriorate. It is not, however, generally realised that even when reasonably managed the grass growing on many soils will deteriorate over a period of years managed the grass growing on many soils will deteriorate over a period of years, weeds and inferior grasses taking the place of the grasses of high feeding value. The Ministry's survey showed how far this process of deterioration had gone. Modern grassland science has also shown that temporary grass, i.e., leys, lasting for periods of one to ten years, which has always been a common practice in certain parts of the country, will, if proper fertilisers and seed mixtures are used, be of first class feeding value carrying a far heavier head of stock and producing far more milk or meat than the ordinary third or fourth class pastures which, as shown above, represented nearly the whole of our permanent grassland before the war.

14. This modern knowledge is obviously of the highest importance to a country like this whose principal crop is grass, and it is contemplated that agricultural policy should be directed to promoting a wide extension of what is known as "alternate husbandry" or "ley farming" as the basis of mixed farming greaters. The system is already well tried and proved as is shown by its fairly systems. The system is already well tried and proved, as is shown by its fairly widespread adoption in the north and west. Alternate husbandry means the alternation of grass and crops, the grass being in the form of leys varying in duration from one to ten years, according to the soil and the purpose for which they are required. On a farm where this system is operating, the plough would be taken round the form and every years a contain proportion of the land would be taken round the farm and every year a certain proportion of the land would be under arable crops. The bulk of the land on such a farm would no longer be under permanent grass and there would no longer be a rigid division between permanent grass and arable.

Alternate husbandry means a great improvement in grassland and a tantial increase in the arable acreage. Besides maintaining the land in a Besides maintaining the land in a substantial increase in the arable acreage. substantial increase in the alable acreage. Desides maintaining the land in a high state of preductivity and fertility, alternate husbandry has the further advantages that it provides a high degree of flexibility and adaptability for advantages that it enables larger numbers of grass-eating animals, mixed farming systems; that it enables larger numbers of grass-eating animals, it is and shown to be known as given acreage of land and that it mainly cattle and sheep, to be kept on a given acreage of land and that it provides not only more grass for grazing and hay but fodder crops for winter keep. It is the best way of securing a marked increase in milk production, if that should be required. It would also reduce animal diseases and promote a higher standard of general health in our flocks and herds—a matter of great economic significance in view of the very heavy losses at present caused by disease,

especially among dairy cattle and sheep.

What would be the amount and character of the production that could be expected from the varied types of mixed farming and the extension of alternate husbandry suggested above given reasonably satisfactory economic conditions and having regard to the probable trend of public demand and to the fact that we shall continue to import a large proportion of the agricultural products that

we require?

It has already been indicated that under any agricultural policy designed to maintain the bulk of the agricultural land in this country in productivity and fertility there will continue to be a wide range of food and other products produced. The proportions will vary according to public demand and economic circumstances. It is, however, possible to give some general indication of the output of staple products which would follow from the policy proposed.

(A) Livestock.

Livestock and livestock products would continue to form a predominant part

of the output.

-The improved grassland would mean an increase in the number With the present trend of public demand stimulated and encouraged by nutritional policy this increase would mainly be in dairy cattle. Given a widespread extension of efficient systems of alternate husbandry, we could carry a much larger population of dairy cattle. The need for more milk production and for improved standards of milk production and the health of our dairy herds calls for some transfer of milk production from the specialist suburban dairy farms on unsuitable land to mixed farms operating systems of alternate husbandry. Assuming that we should continue to rely mainly on imports for our supplies of butter and cheese, it should be possible to increase our dairy herds sufficiently to meet any probable demand for liquid milk, using the surplus that would be needed to ensure any given demand for liquid milk for the higher-priced manufactured milk products. Numbers of beef cattle could be rather larger than at present.

(b) Sheep.—There should be some increase in the numbers of sheep over the

pre-war figure.

(c) Pigs and Poultry.—Restoration to pre-war figures. Specialist pig and poultry production is of little importance from the point of view of maintaining the agricultural land of this country in productivity and fertility, and it would not be possible on agricultural grounds to claim that such production should be given special protection or assistance. With the policy proposed steps should, however, be taken to secure a considerable increase in numbers of pigs and poultry on mixed farms.

(B) Crops.

A development of alternate husbandry would involve a substantially larger acreage under the plough in any given year than existed before the war. It is thought that it might amount to about 16 million acres in the United Kingdom (about 12 million acres in England and Wales), including leys of one or two years' duration. It is contemplated that a considerable part of the remaining grassland would be leys of three or more years' duration instead of permanent grass. This would mean an increase of about 3 million acres in the arable acreage compared with the pre-war figures. It would, however, be no larger than the arable acreage at the beginning of the century under conditions of complete laissez-faire, and in the main the increased arable acreage would be devoted to fodder crops for feeding to livestock and not to cash crops. The figure of 16 million acres can at present only be regarded as an indication of the extent of the acreage which it might be found necessary or desirable to keep under the plough. The actual acreage to be aimed at would depend on a variety of circumstances, both technical and economic, which cannot now be determined with precision.

(a) Potatoes.—We are normally self-sufficient in potatoes. The pre-war acreage in the United Kingdom was 700,000. In the light of modern nutritional requirements we shall probably eat more potatoes after the war. We may

anticipate growing, say, 800,000 acres, or more.

(b) Wheat.—It would be unwise to seek to make ourselves appreciably more self-sufficient in wheat than we were before the war, but a development of alternate husbandry would probably involve some increase over the pre-war wheat acreage. In connexion with the recent conference in Washington it was contemplated that the post-war wheat acreage in Great Britain would be about 2 million acres compared with 1,800,000 before the war.

(c) Sugar Beet.—The present sugar-beet acreage is determined by the The industry having been capacity of the existing sugar-beet factories. established, it should be continued because of the place the sugar-beet crop now occupies in arable farming in many districts and as an insurance in case of future wars. Post-war policy should aim at continuing production at the pre-war

(d) Malting Barley.—It would appear unnecessary and undesirable, especially in view of the prospective balance of payments, to import Californian or other malting barley or substitutes after the war. Brewers and distillers could depend on home sources for their supplies of malting barley. This would mean a considerable expansion over the pre-war barley acreage. Production would automatically be regulated by demands from brewers and distillers, and any surplus barley not taken for malting will go for feeding to livestock.

(e) Oats.—In Scotland and Northern Ireland oats is the principal cereal

crop and the extent of its production must be determined by the demand for oatmeal as well as its use for feeding to livestock. In England and Wales the consideration mentioned in sub-paragraph (f) would apply also to oats.

(f) Other fodder crops—feeding barley, beans, peas, kale, &c.—A substantial increase would follow from the policy proposed.

(g) Vegetables.—Before the war we supplied a large proportion of our requirements in vegetables, apart from onions and tomatoes and early vegetables.

The future of vegetable production depends largely on public demand. There would be no difficulty in meeting any increased demand.

(h) Fruit.—There is no very strong agricultural case for encouraging a large expansion of home fruit production. The problem is largely one of maintaining a fairly stable market. Considerable progress was being made before the war in this direction by producers themselves through the medium of the Empire Fruit

The policy proposed would thus mean an increase in the general productivity of domestic agriculture to some significant extent and would involve some reduction in pre-war imports of food and feeding stuffs. Before the war imports of food and feeding stuffs amounted to some 22 million tons, valued at some £374 million. The agricultural policy here proposed, allowance being made for increased efficiency, might entail a reduction of such imports to about 19 million to 20 million tons, valued at about £330 million to £340 million (at pre-war values). It would not, therefore, entail any radical change in national economic policy, but only some comparatively modest increase in the production from our soil, a step which might be advantageous from other standpoints in view of the difficulties we shall have in paying for imports on the pre-war scale. may be added, however, that under the proposed policy, if it were necessary or desirable still further to increase production from our soil and to reduce imports, it would, of course, be quite possible to do so. What is indicated here is the minimum increase in production and reduction in imports that would probably be necessary to secure the maintenance of the bulk of our agricultural land in productivity and fertility. As will be seen, the main feature of the policy is to grow better grass and increased quantities of arable fodder crops for our livestock and thus reduce the imports of animal feeding stuffs. It is thought that under any other policy it would not be possible to maintain the bulk of our agricultural land in productivity and fertility without a greater measure of protection or assistance and a greater reduction of imports than that here proposed.

What measures would be required, and what would it cost to maintain all reasonably good agricultural land in a state of fertility and productivity under

appropriate and efficient systems of farming?

Countries like Britain, France and Germany can probably produce the ordinary range of products of European mixed farming (cereals, potatoes, sugarbeet, milk, beef, mutton, pigmeat, eggs, vegetables and fruit) about as cheaply as such a range of products taken as a whole can be produced in most other countries, assuming that the fertility of the soil is maintained. But each separate item can be produced more cheaply in some other country where conditions are specially favourable—wheat in North America, beef in the Argentine, mutton and dairy products in New Zealand. Moreover, if agriculture and the agricultural population is to be maintained over the bulk of the agricultural land in old-

established countries, it must be maintained on land which is of average quality, and, indeed, on land which is of less than the average quality as well as on the most fertile land, and such land can hardly compete with selected land in the vast sparsely-populated exporting countries. Some protection and/or assistance is therefore essential. Without it only the most fertile land in countries like this The degree of protection could be maintained in productivity and fertility. and/or assistance required will be less in so far as systems of mixed farming are varied and based as far as possible on natural geophysical factors, and if they are devoted, as far as is compatible with sound farming practice, to the products which give the highest money return per acre of land.

- The means of securing the necessary economic stability are dealt with in Part II below. The cost would depend on such factors as the following:
 - (a) The extent to which the efficiency of British agriculture has improved as a result of the war relatively to that of the exporting countries.

 (b) The extent to which world prices of staple food and feeding stuffs rise

above the very low levels prevailing before the war.

(c) The extent to which countries like the United States direct their agricultural production to providing more of the protective foods required for the optimum diet of their own population.

(d) The extent to which social policy is directed to subsidising consumption

of protective and other foods, e.g., milk.

(e) The extent to which under a more regulated system economies can be

effected in merchanting, processing and distribution.

(f) The extent to which electricity and water supplies can be made available for agriculture at rates comparable to those at which they are available to manufacturing industry.

So long as these factors are quite uncertain, it is not possible to estimate the cost of maintaining British agriculture on the level indicated above. The maintiem would be the difference in the cost of producing a larger proportion of our animal feeding stuffs as a result of (a) an increase of our arable acreage by, say, 2 to 3 million acres and (b) an improvement in our grassland, as compared with the cost of importing the feeding stuffs thereby replaced. While it is not possible to frame an estimate at the present time, it should not be assumed that the difference in cost would necessarily be large, especially if the proposed increase in arable acreage over the pre-war level were secured by assistance to costs of production rather than to prices.

II.—ECONOMIC STABILITY.

- In formulating permanent post-war agricultural policy Ministers have indicated, as stated in paragraph 3 of this memorandum, that we should adopt a policy to secure to the utmost practicable extent measures for the economic stability of the industry. For a domestic agriculture which is directed not towards the maximum degree of self-sufficiency or maximum production, but to the more limited objective which has already been indicated, the problem of securing economic stability is one of providing for home agriculture a guaranteed share of the domestic market and of providing returns in respect of that share which will as a whole provide a fair remuneration for the efficient farmer. In other words, what is needed is a guaranteed market for the amount of home production indicated in the preceding section of this memorandum and guaranteed returns in respect of that amount of production. This involves regulation, including regulation of home production and marketing. The question how farmers are to be assured of such a market and of returns which would be adequate to maintain agriculture of the character and on the scale which has been indicated depends on whether we shall return after the war to an economic system under which, while there is some regulation of imports, there is a free market, or whether the Ministry of Food will remain in existence for the time being and be succeeded by some type of organisation for the wholesale purchase of food and the exercise of some degree of control over internal distribution.
- If we have to frame agricultural policy on the basis of the former alternative, then we should have to revert to a variety of schemes such as was in operation before the war for maintaining some stability of markets and prices.

Internally, we should have to revive the system of marketing boards and commissions which were in existence or in prospect before the war. As regards imports, there is no single principle or method that can be satisfactorily applied to all agricultural commodities. Subsidies, levy-subsidies, quantitative regulation, tariffs, &c., would have to be readopted for the various agricultural commodities

to which each method was particularly suited.

Such measures and devices are unsatisfactory. Not only do they lead to misunderstanding and irritation among both farmers and townsmen, but it is almost impossible to relate the degree of protection or assistance under them to any agricultural policy directed to maintain a healthy and well-balanced agriculture. In practice each commodity has to be dealt with separately, and the eventual degree of protection is a compromise between conflicting departmental interests. The outcome is a piecemeal policy and an unbalanced agriculture. Moreover, unless some control is exercised over retail prices, *i.e.*, over the relation between the retail prices of alternative forms of food (e.g., between butter and margarine or between different forms of meat), it may be difficult to provide economic stability either for domestic or overseas producers.

In the alternative there would be bulk purchase of imports of staple foodstuffs, and it should be possible to control the prices and volume of the main agricultural products, dealing with domestic production either by direct purchase or under specific arrangements fixing the price for certain products coupled, where necessary, with regulation of production. Quantitative regulation of imports, as understood in pre-war days, would be unnecessary. This would enable the great advantages of stable prices and secure markets to be continued, and farmers would be able to plan ahead with a sense of security. It would, moreover, give a far greater measure of administrative flexibility. In determining the wholesale and retail prices at which food would be sold in the country the central organisation would continue to take into account the prices of its demostic and everyone purphases and everyone of its domestic and overseas purchases and endeavour to balance its accountsthus applying, in effect, the principle of levy subsidy to the bulk of the food grown in this country.

It would, however, be essential that, in determining price policy and in particular the relationship between the prices of the different staple commodities, consideration should be given to the objective of agricultural policy, and effective machinery would have to be devised for this purpose. The objective of price policy should be to ensure that the returns of the various types of farming which it is desired to encourage should as a whole provide a fair

remuneration for the efficient farmer.

24. While the remuneration of the farmer should be fair, it should be no more than fair, but a certain dilemma arises. Prices which are adequate for efficient farmers on moderate land will be more than adequate to those farming highly fertile land. An alternative way of providing adequate returns would be a subsidy in respect of costs of production combined with lower prices of products. A payment per acre with a pro tanto diminution in the prices which otherwise would be necessary would probably be practicable in the case of certain cash crops. This and other forms of subsidy on costs of production would reduce the disparity between returns on moderate and exceptionally fertile land; they could be used to encourage good husbandry and proper rotation of crops and also alternate husbandry. They could also be used to encourage particular types of dairying, &c., which might be desired. There are, on the other hand, practical objections to such subsidies. Farmers feel, however illogically, that a direct system of adequate prices fixed in advance is more analogous to the protection given to industry by tariffs, and direct subsidies excite more public attention and criticism than tariffs do.

Agricultural Wages.

An important factor in determining the post-war level of farmers' returns will be the level of wages for agricultural workers. While for various reasons, and particularly the development of machinery, it is not necessary to provide for any large increase in the number of agricultural workers, it is essential to stop the drift from the land which was taking place before the war. It is particularly important to prevent the drift of young people from the land: unless it can be checked this drift will raise very serious problems for the future of agriculture and be dangerous from a social as well as an economic point of

view. An adequate rate of recruitment of juveniles to agriculture must be maintained. In the post-war period industry and agriculture will be competing against each other for a dwindling supply of juvenile recruits, and if the demands of industry are maintained (or possibly increased) the problem of juvenile recruitment in agriculture will become increasingly more acute.

26. There are many factors which have led to the drift of young people from the land—the urban bias of education, the attraction of town life, the lack of opportunity for advancement, the lack of suitable cottages for young agricultural workers when they want to get married, &c.; but the most important has undoubtedly been the disparity between agricultural wages and wages in other occupations.* It is essential that the level of prices should be such as will provide for a reasonable wage comparable to those in other occupations in rural The Agricultural Wages Acts provide the necessary machinery for assuring a reasonable standard of wages, but this machinery will not work unless farmers' returns are at a level which enables them to pay the wages.

III.—LAND UTILISATION.

The need for general State control.

If all reasonably good agricultural land is to be maintained in a state of fertility and productivity it is necessary to stop large areas of productive agricultural land being lost to agriculture under the working of a system of indiscriminate speculation and unplanned urban and industrial development. If we are to make proper use of our resources in agricultural land it is in the first place necessary to secure effective united national control of the utilisation of agricultural land.

The final word on control should be vested in an impartial Central authority and not be left to Local Auhorities. The Government is already pledged to the establishment of a Central Planning Authority, whose main function will be to secure that our land resources are used to the best advantage from the national point of view, and that agricultural land is not diverted from food production without good reason. The principles which should govern the utilisation of land in the national interest and the means by which these principles should be carried into practice are at present under consideration by Committees appointed by the Government.

The need for a Land Commission.

How is land reserved for agricultural purposes to be efficiently maintained for these purposes, i.e., how are proper standards of upkeep of land and

buildings to be secured?

Some degree of State control, coupled with some degree of State purchase, would appear to be required. The present rates of income tax and surtax, combined with the incidence of the death duties, if that incidence cannot be modified, would make it difficult, if not impossible, after the war for many landowners to fulfil their proper function in maintaining their estates and providing capital for improvement. From the point of view of agricultural efficiency, where landowners are unable to maintain agricultural land or buildings in proper condition or to find the capital for improvements or do not, in fact, adequately perform these functions, it will be necessary for the State to take action.

It is suggested that a Land Commission should be appointed by the Minister of Agriculture and a similar body by the Secretary of State for Scotland† to acquire and manage agricultural estates and single farms in the

following circumstances:-

(a) They would acquire estates or farms voluntarily offered by existing owners, much in the same way as the Forestry Commission acquires land for afforestation.

(b) They would have the right to call upon existing owners to do necessary works of maintenance or improvement, and in the event of default compulsorily to acquire the estates or farms in question.

In both cases the price to be paid would be a fair value of the land as an agricultural estate or farm, i.e., so many years' purchase of the net rent or annual value, without regard to amenity values.

In Scotland housing conditions are probably at least equally important. † Such proposals are not necessary in Northern Ireland, where, under the Land Purchase Acts (Voluntary and Compulsory) landlords' interests were bought out.

- It will be appreciated that the proposed terms of purchase are drastic. The ordinary market value of purely agricultural land (apart from any development value) has in the past been exceedingly high in relation to its net annual This has been in part due to the competition of corporations which desire to make investments to hold in perpetuity and in part to the readiness of individuals to pay high prices by reason of what is known as the amenity value attached to the ownership of an agricultural estate. It is uncertain how far this amenity value will continue after the war. In any case, the State could not reasonably afford to buy at a price which included amenity value, since such value, regarded as a separate element in the total value, brings no annual monetary return. It is believed, however, that compulsory purchase upon the lines mentioned would be generally accepted as reasonable, provided it was clear that it applied only in cases of land which was not being properly maintained and managed, and that there was general confidence in the good judgment and fairness of the Commission operating the provisions, and provided also it was accompanied by some relief from the burdens which press severely upon agricultural landowners. The latter condition would be met if, at the appropriate time, the Chancellor of the Exchequer found it possible to make some important alteration in the incidence of death duties upon agricultural land.
- 32. Payment by the Land Commissions might be made in the form of Land Bonds or Stock bearing interest comparable to ordinary Government securities and guaranteed by the Government. The Commissions would need finance for works of maintenance and improvement. In the early post-war years, however, it must be anticipated that the demand for capital for purposes of reconstruction and the overtaking of arrears of maintenance in many connections will be exceedingly heavy, and it is recognised that these considerations must govern the amount of capital facilities which can be provided and the pace at which they can be provided.
- 33. It would be desirable that the Land Commissions should have power to grant long leases of estates or farms subject to the observance of strict conditions as to proper maintenance.
- 34. The Land Commissions should be responsible to the Minister of Agriculture and the Secretary of State for Scotland, respectively, to ensure that they carry out their operations in accordance with general agricultural policy, but should so far as possible have a free hand regarding the actual management of their estates and farms, including the selection of tenants, fixing of rents, &c.

The use of agricultural land: farming types and systems.

- 35. The next problem is how to ensure that agricultural land shall be put to appropriate agricultural uses and that proper standards of farming shall be maintained. It has been suggested above that the main objective of agricultural policy should be to promote properly balanced systems of mixed farming over as wide an area as possible. There may, however, be a need for further afforestation which would absorb some of the poorer land; and there will be a further considerable acreage of poor land which will only be suitable for fairly extensive grazing, preferably on long leys coupled with crop production at intervals of 7 or 10 years. It is probable that in the immediate post-war years a large proportion of the land to be acquired by the proposed Land Commission will be marginal land, and the Commission should be able to try out various types of farming designed to maintain the fertility of such land, even if it cannot be made highly productive under the economic conditions likely to prevail in time of peace.
- 36. There are at present in the United Kingdom 537,751 agricultural holdings of over one acre, made up as follows:—

${\it Description}.$			$N\epsilon$	o. of Holdings.
Smallholdings up to 50 acres		• • •		357,881*
Small farms 50 to 100 acres			• • •	83,635
Medium farms 100 to 300 acres		•••	•••	81,501
Large farms 300 acres and upwards	• • •	•••	•••	14,734

* Not all are separately farmed units.

Farms of over 100 acres, though much fewer in number than farms of less than 100 acres, comprise two-thirds of the total agricultural land of the country. It will be desirable to encourage mixed farming of various types on all sizes of holdings and farms. Many smallholdings and small farms will continue to be devoted mainly to horticulture and pig and poultry-keeping. On ordinary land and in most districts it is desirable, even in the case of smallholdings, to avoid undue specialisation.

- Some people, who think it would be desirable on social grounds to restore a large rural population, recommend a wide extension of more or less intensive smallholdings and small farms run either as individual units or under settlements which provide for co-operative effort in production and marketing. It must, however, be recognised that in a country which has become predominantly urban and industrial we cannot maintain or recreate the peasant type of agriculture any more than we can revert to a form of agriculture which requires a large amount of exceptionally cheap labour. There may be some possibility of an extension of smallholdings and co-operative settlements mainly concerned with horticulture, poultry and pig-keeping, but the amount of land required to produce vegetables for optimum consumption by the people of this country would be quite insignificant compared with the total acreage of our agricultural land. Moreover, the use of machinery of all kinds and other modern scientific developments all tend to require large rather than small units for their economic use. It may be desirable gradually to effect some increase in the present numbers of smallholdings. There is in many counties a waiting list of agricultural workers who possess the necessary knowledge, experience and capital to take a smallholding; and the smallholding forms the first step in the ladder for the farm worker who has the ambition to become a farmer. But experience has shown that only an exceptional man is likely to make a success as a smallholder, and that there is a strict limit to the number of extra smallholdings that should be provided.
- 38. There is no need to encourage an expansion of the numbers of the small family farm of 50 to 100 acres. The small farm is in many ways well suited for the type of farming in which the rearing of livestock plays a prominent part. On some soils it is a suitable size for a farming system in which milk, pigs and eggs are the chief products sold off the farm. It is also useful as a second step in the ladder for the successful smallholder. The drawback, however, is that it encourages a type of farmer who has insufficient capital and limited knowledge, and is therefore unable to take proper advantage of modern methods and improvements. It will therefore probably need the greatest measure of control to secure the maintenance of adequate standards of farming.
- 39. The moderate-sized farms of between 100 and 300 acres are suitable units on some soils and for some types of farming, e.g., mixed dairy/arable farming supplemented by poultry and/or pig keeping. For land where arable farming predominates, however, they are in many cases no longer convenient or economic units. They date from a period before the advent of the tractor when all the farm work was done by horses and there was an ample supply of cheap labour. Modern mechanisation normally requires larger units for its efficient and economic use. In these cases it would be desirable that the Land Commission, and the County Executive Committees which it is proposed in paragraph 43 below should exercise control over farming efficiency, should encourage suitable redistribution of land and buildings into more economic units.
- 40. With the development of tractors and modern machinery there should be an increase, though it can only be gradual, in the number of large farms (i.e., farms over 300 acres) provided that sufficiently satisfactory economic conditions can be established to attract the considerable amount of capital required to run them successfully. They provide opportunities for skilled management and a high output per man employed especially where crop production is an important element on the farm.
- 41. In many districts it will be desirable on economic grounds and for the sake of promoting efficiency to rearrange farm boundaries and regroup farms. This is clearly a reform that can only be accomplished gradually. As indicated above, however, it should be possible for the proposed Land Commission to re-divide estates which it may acquire. It would also be desirable to continue

the existing powers under which tenancies can be terminated for the purpose of rearranging farm boundaries where the land remains in private ownership.

Control of Standards of Farming.

- 42. The control of farming to ensure good husbandry was in the old days supposed to be the function of the landowner. But the Agricultural Holdings Act of 1923, while it gave the tenant much-needed security of tenure, in effect deprived the landowners of any real power to enforce good husbandry. Moreover, since 1918 a third of the farms of the country have passed into the hands of owner-occupiers and it is generally agreed that for various reasons these are on the whole the farms where the standards of farming and the condition of the land had deteriorated most before the war. This was more particularly the case where an unduly high purchase price was paid after the last war.*
- 43. There is already a great deal of support for the view that the solution of this problem is to be found in the maintenance of bodies like the County War Agricultural Executive Committees, i.e., Committees appointed by the Minister with an adequate technical advisory staff and with powers (delegated to them by the Minister) to give directions, to terminate tenancies and, if necessary, to recommend the Land Commission compulsorily to acquire farms. Control designed to maintain adequate standards of farming is the price which farmers would have to pay, and would be willing to pay, for economic stability. This subject is dealt with later in this memorandum.

Land Drainage.

44. Efficient land drainage is essential to the proper cultivation of land. In England and Wales much work has been done since the passing of the Land Drainage Act, 1930, by the Catchment Boards set up under that Act and by the Drainage Boards which were either already in existence or have been constituted since 1930. It is, however, desirable that the Ministry should have more effective powers of controlling Catchment Boards than is given in the 1930 Act and provision might be made for the supersession of such Boards by Commissioners appointed by the Minister if it appears that the drainage work on the "main river" is being neglected. Furthermore, more stringent powers of control over Internal Drainage Boards should be given to Catchment Boards, or in default to the Minister. Catchment Boards have been given power during the war to prepare drainage schemes for areas outside the "main river," but they have no power of maintaining watercourses so improved after the war emergency has passed. Provision should be made enabling Catchment Boards to maintain the drainage of these areas by collecting contributions from the landowners or farmers who are benefited. War-time powers of giving directions conferred in various ways on Executive Committees, Catchment Boards and Drainage Boards should be maintained, possibly in a modified form. In view of the proposed transference of many of the agricultural functions of the County Councils to County Agricultural Executive Committees it is a matter for consideration whether the drainage powers of County Councils should not be transferred to Drainage Authorities (including Catchment Boards) and County Agricultural Executive Committees. In Scotland arterial works should be carried out, as under recent legislation, by the Department of Agriculture for Scotland.

Farm Survey.

- 45. In addition to the official agricultural statistics and the Farm Management Survey which for the past few years agricultural economists have been carrying out under the ægis of the Ministry, the County War Agricultural Executive Committees in England and Wales are undertaking a farm-to-farm survey to secure full information about general farming conditions and about the potentialities of individual farms from the point of view of food production in time of war. The information collected as a result of the survey, which is being tabulated by the provincial Advisory Economists, added to existing sources of information, will give valuable assistance to the Ministry and the proposed Land Commission in framing detailed plans for the best utilisation of agricultural land after the war.
- * The remarks about the condition of owner-occupied farms apply more particularly to England.

46. In Scotland the Department have undertaken, through the officers of Agricultural Executive Committees, a farm survey with the object of securing information as to the agricultural potentialities of Scotland as a whole. The survey will have particular reference to land utilisation and is designed to discover the best capabilities of the land in each district, and from this the amount of production of the various classes of crops and livestock which could reasonably be aimed at for the whole country. The officers of Executive Committees have been assisted in the enquiry by the Advisory Economists of the Agricultural Colleges, who have given guidance on the scope and layout of the investigation. Work of a similar character is in progress in Northern Ireland.

IV.—PROMOTION OF EFFICIENCY.

(a) Production.

- 47. For many years before the war great efforts were made to improve the efficiency of farming. These involved the expenditure of large sums of money on research, education, improvement of livestock and grassland, eradication of pests, &c. These efforts did not meet with the success they deserved largely because agriculture was passing through one of the worst periods of depression the industry had ever known. Farming capital was dwindling, low and fluctuating prices ruled and there was often a lack of profits even for the best types of farming. Only wages, a high part of farm costs, remained largely stabilised by legislation. As a result, farmers tended to adopt low farming methods, that is, those which would enable them to manage with the least amount of labour. Arable land was laid down to grass, maintenance work on draining and ditching was neglected, and new and untried methods were left alone. Enterprise and initiative were sapped and few farmers could afford to take advantage of and try in practical farming the discoveries made in the research field.
- 48. As a result of this experience it is idle to suppose that farming efficiency can be promoted without a measure of economic stability. Hard times may be useful in compelling producers to reduce costs and to adopt new methods, but in agriculture, where the largest item in costs, viz., wages, has been stabilised by legislation, hard times tend to lead to lower standards and a decline in farming efficiency.
- 49. Given a measure of economic stability, farming efficiency can be promoted in two main ways:—
 - (i) Research and education.
 - (ii) Power to enforce proper standards of husbandry.

Research and Education.

- 50. It is very desirable to bring scientific research and practical agriculture closer together; steps to that end have been taken by the recent appointment of an Agricultural Improvement Council for England and Wales with a corresponding body for Scotland. In present circumstances more education is more important for the promotion of farming efficiency than more research.
- 51. The future of agricultural education is at present being considered by a Committee under the Chairmanship of Lord Justice Luxmoore. They are reviewing the arrangements not only for agricultural education for young people and at Colleges and University departments of agriculture but also for educational and advisory work among farmers. In the latter sphere it appears clear that if farming efficiency is to be promoted and standards of farming controlled, education and advice must continue to go hand-in-hand with powers of supervision and control as has been the case under war conditions. This would point to a national service, since such functions could not be adequately performed by Local Authorities or indeed be financed in many of the agricultural counties where it is most needed. A State service or a system such as exists in Scotland and in Northern Ireland would moreover facilitate the use by farmers of the services of the scientific and economic advisers attached to Universities and Colleges.

Control of Farming.

52. Given economic stability it is essential to have some effective means of ensuring farming efficiency and proper standards of husbandry. As has

been suggested in paragraph 43 there is general recognition among the agricultural community that supervision and control will be necessary and that it will have to be exercised by maintaining bodies like the County War Agricultural Executive Committees, i.e., Committees appointed by the Minister and acting under his authority with an adequate technical, advisory and educational staff and with powers (delegated to them by the Minister) to give directions to farmers to terminate tenancies and if necessary to recommend the proposed Land Commission compulsorily to acquire farms.

Other Measures for Promoting Efficiency.

- 53. Measures for promoting efficiency in regard to the production of livestock and livestock products, *i.e.*, measures to promote animal health and to improve the quality of livestock will have to continue to be mainly administered by the Central Departments. The control of pests and diseases affecting crops will have to be administered by the Departments in conjunction with County Executive Committees.
- 54. For farming efficiency and reduced costs of production it is important that supplies of electricity and water should be made available on farms at rates comparable to those at which they are available to manufacturing industry. Both electricity and water supplies are of particular importance to an agricultural system which is predominantly directed to the production of livestock and livestock products (notably milk).

(b) Marketing.

55. In the inter-war period special effort was directed to improving the system of marketing of home-produced agricultural products. This effort was directed to three main objects:—

(i) To reduce the wide gap between what the producer received and what the consumer paid.

(ii) To promote the proper standardisation and grading of home produce to meet the demand of modern large-scale retail distributive organisations in competition with the bulk supplies of standardised

and graded imports.

(iii) To get farmers to organise collective bargaining machinery in the form of marketing boards and to give them statutory powers to enable them to regulate the marketing of agricultural products and to get a fair deal for the producer as against powerful distributive and processing interests.

- 56. The system of producer control embodied in the Agricultural Marketing Acts was found not to be suitable or adequate in all cases to secure reforms in distribution and processing. The principle behind the Livestock Commission and the proposed Milk Commission was the setting up of an independent body (a) to initiate reforms in distribution and (b) to safeguard the general public interests.
- 57. If in the post-war period we assume the continuation of some central organisation for the purchase of staple products as compared with a system of free demand and supply, the problems with which we were faced before the war will be profoundly changed. It will, however, still be necessary to promote efficient standardisation and grading of certain products and to set up some effective machinery for regulating the marketing of agricultural products and for promoting efficiency in processing and distribution.
- 58. Unless such steps are taken by the Government itself it will be necessary to revert to the far slower method of independent Commissions and producers' boards. Even if the Government acts itself, producers' marketing boards will probably still be necessary and desirable as part of the reorganised system. The principle of co-operation among producers is of great psychological value from the farmers' standpoint and would help to maintain the interest of farmers in increasing marketing efficiency, an interest which they tend to lose under a system of stabilised prices. It must be an objective of agricultural policy to link price stability very closely with marketing reform and efficiency.
- 59. Moreover, where home-produced foods reach the consumer in a processed form, e.g., bacon, milk products and canned fruits and vegetables,

the measures taken by farmers to increase efficiency in the production and quality of their product may be frustrated by bad processing and by the poor marketing of the finished product. It is important, therefore, that regulation of the processing and marketing of home-produced foods should be the counterpart of the promotion of agricultural efficiency and such measures must be a concern of the Agricultural Departments.

SUMMARY OF MAIN CONCLUSIONS AND RECOMMENDATIONS.

60. (i) In order to maintain our agricultural land in fertility and productivity varied systems of mixed farming are required over a large part of the country with a development of "alternate husbandry," involving some

substantial increase over the pre-war arable acreage.

(ii) Having regard to our soil and climate, British agriculture, as an agriculture which is not directed to maximum self-sufficiency or maximum production from the soil but is complementary to an economic system which relies on a large importation of agricultural products, should continue to be predominantly devoted to the production of livestock and livestock products. Grass should still be the principal crop in the north, west and midlands of England and Wales and over large parts of Scotland. There should be an

increase in mixed farms in which dairying is the predominant element.

(iii) It should be possible to maintain the bulk of our agricultural land in fertility and productivity under varied systems of farming with production of a character and on a scale which would not involve a reduction of imports by more than 10 per cent. of the pre-war volume and value, a reduction which may in any

case be necessary having regard to the prospective balance of payments.

(iv) Economic stability and the necessary regulation of imports and home production could best be secured by a continuation of the Ministry of Food or some similar type of organisation for the wholesale purchase of food and the exercise of some degree of control over internal distribution.

(v) National control over the use of land is required for the efficiency of

agriculture.

(vi) There will be a need for a Land Commission to acquire estates or farms, compulsorily if necessary, where the owners are unable or unwilling to maintain them and find the necessary capital for improvements. It would be desirable at the same time to make some important alteration in the incidence of death duties on agricultural land.

(vii) In view of the diversity and intermixture of soils and the variations in rainfall and climatic conditions, it is not possible to generalise about sizes or types of farms, but mechanisation and other scientific developments make it

desirable to encourage larger farm units in certain districts.

(viii) Control over standards of farming should be exercised by bodies similar to the present County Agricultural Executive Committees, i.e., Committees appointed by the Minister with adequate technical and advisory staffs and with powers (delegated to them by the Minister) to give directions and terminate

(ix) For the promotion of farming efficiency agricultural education is of the first importance. Educational and advisory work among farmers should be linked with powers to supervise and control standards of farming and should not be left to Local Authorities. The provision of electricity and water supplies to farms at reasonable rates is important.

(x) Increased efficiency in marketing, processing and distribution is required to supplement increased efficiency in production. Price stability should be linked

with marketing reform and efficiency.

Christofaniele (CX4, d)

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5TH JANUARY, 1943.

COPY NO. //

WAR CABINET.

COMMITTEE ON RECONSTRUCTION PROBLEMS.

POST-WAR AGRICULTURAL PROBLEMS.

Note by the Secretary.

1. The Official Committees on Post-War Internal and External Economic Problems have jointly considered the attached memorandum on post-war agricultural policy in the light of the Government statement of 26th November, 1940, and of the principles provisionally laid down by the two Agricultural Ministers, the Chancellor of the Exchequer and the Paymaster General as set out in paragraph 3. The memorandum is concerned only with the broad outlines of such policy and important questions will arise on the detailed arrangements for carrying that policy into effect. The two Committees are, however, agreed in submitting the memorandum as a basis for exploratory discussions with agricultural interests in this country and

with the Dominion Governments; they wish further to express the view that it must be borne in mind in connection with any discussions which Ministers authorize with the U.S. Government under Article VII of the Mutual Aid Agreement. Final and detailed decisions should be deferred until the reactions to the proposals both at home and abroad can be fully envisaged.

2. No attempt was made in the memorandum, for the reasons indicated in paragraph 18, to frame an estimate of the cost of the proposals. The Committee felt, however, that it was desirable that an attempt should be made to give some indication of the cost within the framework of the general stabilisation policy which is in contemplation and the following addendum to paragraph 18 has therefore been prepared.

"In spite of the difficulties an attempt has been made by a Committee of representatives of the Treasury, the Ministries of Agriculture and Food and the Central Statistical Office to estimate the magnitude of the cost to the Exchequer of fitting the agricultural policy proposed in this Memorandum into the general framework of the stabilisation policy. The following assumptions have been made:

(a) That C.I.F. prices, the Ministry of Food's first hand selling prices and wage rates are maintained at the level of the end of October, 1942.

- (b) That after the wer the price level for farmers' products need not be maintained at so high a premium as at present over the price level of farmers' costs.
- during the war will be maintained, but no allowance is made for any further increase, for the removal of war-time hindrance, or distortion of normal methods, or for the possible effects of a relaxation of war-time effort.
- (d) That the cost of the cheap and free milk scheme (£m1/½ at present) is excluded from the account.

On this basis it has been calculated that the subsidies required would be of the order of £m50. There would also be a loss on imported foods, arising from the stabilisation policy, which would be of the order of £m36. Part . of the agricultural subsidy of deurse also arises from the stabilisation policy. If it proved possible to allow the price of foods included in the cost of living index to rise, the amount of the loss or subsidy on imported and home produced foods would fall. In so far as assistance were given to costs rather than to prices the subsidy required would be diminished. On the other hand, if it were found that the programme was not producing the particular products such as milk in the quantity desired on grounds of social policy, the need for stimulating them might result in increased cost to the Exchequer.

The calculations result in an assumed net income to farmers of £m145 - not an ungenerous figure.

The calculations from which these figures are derived are not in any way exact; they can only give an indication of the order of magnitude of the cost involved."

(Signed) A. W. HURST.
On behalf of the Committees.

4/5 Richmond Terrace, S.W.1. 5th January, 1943.

POST-WAR AGRICULTURAL POLICY.

Memorandum by Agricultural Departments.

INTRODUCTORY.

ON the 26th November, 1940, the Government announced that it had decided to guarantee that the present system of fixed prices and an assured market for agricultural products would be maintained for the duration of hostilities and for at least one year thereafter. The announcement went on to say: "The Government, representative as it is of all major political parties, recognises the importance of maintaining after the war a healthy and well-balanced agriculture as an essential and permanent feature of national policy. The guarantee now given is meant to secure that stability shall be maintained not only during hostilities but is meant to secure that stability shall be maintained not only during hostilities but during a length of time thereafter sufficient to put into action a permanent postwar policy for home agriculture.'

- The continuation of the present system of fixed prices and an assured market will involve as a corollary the retention of the present system of control over the use of agricultural land and over farming operations. When hostilities cease there is likely to be a transitional period the character of which it is impossible to predict, and for a time many features of the war situation may During this period it may prove necessary to continue, in part at least, ent war-time programme of production. When, however, hostilities the present war-time programme of production. When, however, hostilities cease it would be impossible to maintain the present very drastic war-time system of direction and control which would be required for a continuance of war-time production, without announcing what long-term agricultural policy is going to be. Moreover, on the cessation of hostilities a number of urgent questions will arise in connection with the programme during the transitional period, e.g., when and at what rate and to what extent and by what means the war-time acreage of wheat is to be reduced, the answers to which will depend upon long-term policy.
- It has been laid down by Ministers that for the purpose of formulating the lines of a permanent post-war policy for agriculture, the following principles should be provisionally accepted:

(i) That all reasonably good agricultural land should be maintained in a state of fertility and productivity.

(ii) That we should desire to adopt a policy to secure to the utmost practicable extent:

(a) proper standards of upkeep of the farm and buildings;

(b) proper standards of farming; and

(c) measures for the economic stability of the industry.

The purpose of this memorandum is to set out the considerations which arise in connection with long-term agricultural policy and on the basis of the principles laid down in the preceding paragraph to put forward positive proposals for "maintaining after the war a healthy and well-balanced agriculture as an essential and permanent feature of national policy "with as little interference as possible with other aspects of national economic policy and with due regard to what appear to be the probable trends of social policy.

In this connection it has been found necessary to make the following

assumptions:

(a) The Government's statement of November 1940 has generally been taken to mean that the Government intend as an act of policy to promote measures under which agriculture would occupy a more important place in the national life and economy than it did before the war. On the other hand, it is assumed that it will be unnecessary and undesirable to aim at an increase in domestic agricultural production of a higher order of magnitude than that contemplated in the Treasury

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Memorandum on External Monetary and Economic Policy. That memorandum appears to contemplate an increase compared with prewar of something like £60 millions at assumed post-war prices or say £40 millions at pre-war levels.

(b) There will be a larger measure of Governmental control than existed before the war, both in the sphere of international trade and over the

internal economic life of this country.

(c) High rates of direct taxation will continue after the war, and for this and other reasons a number of owners of agricultural estates, both large and small, will be unable to maintain them, and action by the State may in certain cases become urgently necessary.

- On the basis of the provisional principles laid down by Ministers and on the assumptions in the preceding paragraph, the problems of post-war agricultural policy can conveniently be considered under four heads:-
 - I.—The General Objective.

II.—Economic Stability.III.—Land Utilisation.IV.—Promotion of Efficiency in Production and Marketing.

To some extent, of course, these sets of problems are interlocked: land utilisation, economic conditions and farming efficiency react upon one another. They can, however, be most conveniently examined in separate groups provided that it is realised that one set of problems cannot be satisfactorily tackled without attention being paid to the others.

I.—THE GENERAL OBJECTIVE.

The general character of the main objective is indicated in the first of the principles provisionally laid down by Ministers, namely, that all reasonably good agricultural land should be maintained in a state of fertility and productivity. In considering what is involved in this principle, the following questions arise: What does "all reasonably good agricultural land" connote? What would be What does "all reasonably good agricultural land" connote? the character of British agriculture, i.e., what types or systems of farming would be appropriate for keeping all reasonably good agricultural land in a state of fertility and productivity? What would be the amount and character of the resulting production, having regard to the probable trend of public demand as influenced by social policy and to the fact that we shall continue to import a large proportion of the agricultural products we require? Lastly, what measures would be required and what would it cost to maintain all reasonably good agricultural products. tural land in a state of fertility and productivity under appropriate and efficient systems of farming?

What does "all reasonably good agricultural land" connote? Before the war the agricultural land of the United Kingdom comprised 48,285,585 acres, consisting of :—

	England and Wales.	Scotland.	Northern Ireland.	Total.
Cultivated land— Arable Permanent grass	Acres. 8,934,598 15,708,663	Acres. 2,935,487 1,622,724	Acres. 1,036,045 1,441,581	Acres. 12,996,130 18,772,968
	24,643,261	4,558,211	2,477,626	31,679,098
Rough grazings— (Mainly mountain			en e	and the second second
and hill land)	5,607,912	10,465,016	533,559	16,606,487
Totals	30,251,173	$\overline{15,023,227}$	3,011,185	48,285,585

This country is remarkable for a great variety and inter-mixture of soils. This fact taken in conjunction with the wide difference in rainfall in the eastern and western parts of the country and our uncertain weather has led to a great diversity of types or systems of farming producing a wide range of food and other products. It should be noted that these systems were developed or maintained during the period of 60 years of international free trade after British agriculture was subjected to the full force of competition from overseas countries in the 1870's. There is a prima facie presumption, therefore, that, based as they are in

the main on geophysical factors, these types of farming are those which are most appropriate for an agriculture which does not have to aim at self-sufficiency, but is complementary to an economic system which relies on a large importation of agricultural products. In any case it can be said that different kinds of land can be and are used for different purposes, and land which is not "reasonably good " for one form of production may be very suitable for another.

- It should also be noted that the different uses to which different types of land may be put and the different systems of farming that prevail throughout the country are to a large extent interdependent and interlocked. The grass that grows on the mountain or hill farms of Scotland, Wales and Northern Ireland is very suitable for the rearing of cattle and sheep, but it is not good for milk production, and it will not fatten cattle or sheep. The grass that grows on the soils of Cheshire is very good for milk production. The grass on the strong soils of Cheshire is very good for milk production. The grass on the strong pastures of the Midlands is unsuitable both for rearing young stock and for milk production, but is admirable for fattening mature cattle of certain breeds. Consequently, Welsh hill farms are appropriately used for producing young heifers for the dairy farms in Cheshire or beef stores for fattening on the Midland pastures, and hill sheep farms all over Great Britain are producing lambs to be fattened on lowland pastures or on arable farms. Thus fertile lowland farms and poor hill farms depend on each other. Many other illustrational statements are producing lambs to be fattened on lowland on each other. tions could be given to show the interdependence of varied uses of different kinds of soils and the advantages that follow from it.
- 9. It is suggested, therefore, that if "all reasonably good agricultural land" is to be maintained in a state of fertility and productivity the great bulk of the land which was being used for agriculture before the war should be so maintained. Some agricultural land will of course be required for industry, building and other forms of non-agricultural use, and there are considerable areas of land—mainly rough hill and mountain grazings—which could, if necessary, and perhaps with advantage, be devoted to afforestation. But an agricultural policy designed to maintain a healthy and well-balanced agriculture in this country could hardly be regarded as satisfactorily fulfilling its objective if it resulted in any districts in which agriculture had been carried on during the period of free international competition becoming unproductive or infertile or still further depopulated. What would appear to be desirable and necessary would be a policy directed to maintain the bulk of the agricultural land of this country, in appropriate productive use and fortility, while stopping, though it still further depopulated. country in appropriate productive use and fertility, while stopping, though it may not be possible to reverse, the tendency for the drift of the agricultural population from the land.

10. What would be appropriate productive use, i.e., what should be the general character of British agriculture, and what systems of farming are

required to maintain our agricultural land in productivity and fertility?

It has been suggested in some quarters that with the development of mechanisation which has taken place in recent years and been greatly extended during the war, it would be possible by the establishment of large farm units to restore arable farming to the position it occupied in the 1870's, when both cash crops like wheat and arable fodder crops for livestock occupied in the midlands and other parts of England the same place that they occupied before the war in the eastern counties. It is true that the development of mechanisation has led to a marked improvement in efficiency and has revolutionised what can be done in our uncertain climate, particularly on heavy clay soils. It is also true that to make full economic use of modern machinery larger farming units are required. Having regard, however, to the climatic conditions which exist in the midlands, west and north of the country, a system of agriculture in those areas predominantly devoted to the large-scale growing of cereal crops would not appear to be making the most appropriate use of the land. It is only in districts of low rainfall or where the soil is especially suitable for arable cultivation that large-scale mechanised farming would be suitable.

11. Another school of thought has suggested that, in view of the importance of protective perishable foods such as milk, vegetables, fruit and eggs, this and other European countries should concentrate their agriculture on the production of these particular commodities and rely on the overseas exporting countries for cereals and meat. On this it may be said, first, that modern science is cereals and meat.

discovering new ways by which milk and vegetable and other foods can be dried and preserved and retain their nutritive value, and it would therefore be unwise to found an agricultural policy on the assumption that domestic agriculture in this and other countries will retain a natural monopoly of perishable protective foods. Secondly, at a time of rapid scientific discovery and rapid changes in public demand, it would be dangerous to frame a long-term agricultural policy directed to producing a few special products. Any policy formulated to-day should be one which will provide the utmost possible flexibility and adaptability to meet changing conditions. Thirdly, it would be impossible under an agricultural policy of this kind to maintain more than a small proportion of land in this or other European countries in productivity and fertility. Only a very small fraction of our agricultural land would be needed to produce the maximum amount of potatoes and vegetables required for an optimum diet for the whole population. In our climate fruit is an uncertain crop in any for the whole population. In our climate fruit is an uncertain crop in any particular year. While milk production can be extended yet, for the reasons given the production of the production of the particular year. in paragraph 13 below, the all-grass dairy farm largely relying on imported concentrates is not a form of farming under which large areas of this country could in practice be maintained in productivity and fertility. Unless a wide range of products is produced, including a considerable acreage of cereals, and crop production can be combined with grass production on ordinary as well as on exceptionally fertile land, the greater part of the agricultural land of this country (and of most European countries) would consist of deteriorating grassland used for dairy cows or for ranching cattle and sheep. This would mean not only a heavy decline in the agricultural population, but a calamitous decrease in the fertility of our land and in the knowledge of how to cultivate the land. Not only would the absence of arable farming over a large part of the country render us still more heavily dependent on foreign imported food and feeding-stuffs in time of peace, but we should be incapable of increasing production in time of war.

The view of the best agricultural opinion, both scientific and practical, is that the only way of maintaining the greater part of our agricultural land, excluding rough grazings, in productivity and fertility is under varied systems of mixed farming varying by reference to the diversity and intermixture of soils, the difference in rainfall between east and west and other geophysical factors, and producing the wide range of food and other products which have been produced over the last 70 years. By reason of our soil and climate and for economic reasons British agriculture should continue to be predominantly devoted to the production of livestock and livestock products over the greater part of the Grass has been, and should continue to be, our most important crop in the west, north and midlands; and a large part of the arable acreage should continue to produce crops for feeding to livestock rather than crops for direct human consumption. On land which is particularly suitable for arable cultivation or in those parts of the country where the rainfall is low, mixed farming systems should continue to be mainly devoted to cash crops like potatoes, wheat, malting barley, &c., but in those systems, too, the production of livestock should generally continue to be an important item in the farm economy and the temporary grass or clover ley an essential part of the rotation. There is, of course, land which is particularly suitable for intensive horticultural production and market gardening and some development of farms and holdings of this kind should be anticipated. There will also be farms or holdings which for one reason or another will remain all But over the greater part of the agricultural land of this country, excluding rough grazings, varied systems of mixed farming with appropriate proportions, varying by reference to geophysical factors, between grass and arable, livestock and crops, are the best and indeed the only way to maintain our agricultural land in productivity and fertility.

It is also believed that an agricultural policy directed to this end is one which would least interfere with other economic interests and would prove the most adaptable to new scientific developments and changes in public demand (e.g., increased demand for liquid milk) and in other economic circumstances.

13. The need for systems of mixed and balanced farming for maintaining soil fertility and the health of crops and livestock and the economic stability of farmers has been increasingly realised in this and other countries as a result of experience in the inter-war period and since the outbreak of the present war. It is well known that the United States have in recent years directed their agricultural policy and devoted immense sums of money to establishing better

balanced systems of farming in their country under which soil conservation crops (e.g., leguminous crops) would be alternated with the growing of cereals, and livestock production would be combined with crop production. The chief symptoms of the decay of agriculture in this country in the inter-war period were the steady decline in the tillage acreage and the slow deterioration of much of our permanent grassland. Both were, of course, due to the low world prices of cereals. Land was laid down or tumbled down to grass and because grass of a kind will grow easily in this country little attention was given to maintaining its feeding Farmers came to rely more and more on cheap imported feeding stuffs not merely, as in the case of Danish agriculture, as a supplement to what they could grow on their own farms but as a substitute for arable crops and even for good grass and hay. Whole districts came to consist of all-grass farms. Much of the grassland had very little feeding value for grazing or hay and was little more than an exercise ground for dairy cows or a ranch for cattle and sheep. In a survey of the grassland of England and Wales undertaken before the war it was found that out of some 16 million acres of permanent grass, excluding rough grazings, only 250,000 acres could be classified first class from the point of view of its feeding value and only 950,000 as second class; the remainder was third and fourth class. The difference between the feeding value of a first class and a fourth class pasture is very great. A first class pasture has thirteen times the feeding value of a fourth class pasture measured in terms of starch equivalent. An acre of first class pasture will provide 350 gallons of milk, compared with only 54 gallons provided by a fourth class pasture. It is generally known that permanent grassland, if not properly stocked and managed, will quickly deteriorate. It is not, however, generally realised that even when reasonably managed the grass growing on many soils will deteriorate over a period of years, weeds and inferior grasses taking the place of the grasses of high feeding value. The Ministry's survey showed how far this process of deterioration had gone. Modern grassland science has also shown that temporary grass, *i.e.*, leys, lasting for periods of one to ten years, which has always been a common practice in certain parts of the country, will, if proper fertilisers and seed mixtures are used, be of first class feeding value carrying a far heavier head of stock and producing far more milk or meat than the ordinary third or fourth class pastures which, as shown above, represented nearly the whole of our permanent grassland before the war.

14. This modern knowledge is obviously of the highest importance to a country like this whose principal crop is grass, and it is contemplated that agricultural policy should be directed to promoting a wide extension of what is known as "alternate husbandry" or "ley farming" as the basis of mixed farming systems. The system is already well tried and proved, as is shown by its fairly widespread adoption in the north and west. Alternate husbandry means the alternation of grass and crops, the grass being in the form of leys varying in duration from one to ten years, according to the soil and the purpose for which they are required. On a farm where this system is operating, the plough would be taken round the farm and every year a certain proportion of the land would be under arable crops. The bulk of the land on such a farm would no longer be under permanent grass and there would no longer be a rigid division between permanent grass and arable.

Alternate husbandry means a great improvement in grassland and a substantial increase in the arable acreage. Besides maintaining the land in a high state of productivity and fertility, alternate husbandry has the further advantages that it provides a high degree of flexibility and adaptability for mixed farming systems; that it enables larger numbers of grass-eating animals, mainly cattle and sheep, to be kept on a given acreage of land and that it provides not only more grass for grazing and hay but fodder crops for winter keep. It is the best way of securing a marked increase in milk production, if that should be required. It would also reduce animal diseases and promote a higher standard of general health in our flocks and herds—a matter of great economic significance in view of the very heavy losses at present caused by disease,

especially among dairy cattle and sheep.

15. What would be the amount and character of the production that could be expected from the varied types of mixed farming and the extension of alternate husbandry suggested above given reasonably satisfactory economic conditions and

having regard to the probable trend of public demand and to the fact that we shall continue to import a large proportion of the agricultural products that

we require?

It has already been indicated that under any agricultural policy designed to maintain the bulk of the agricultural land in this country in productivity and fertility there will continue to be a wide range of food and other products produced. The proportions will vary according to public demand and economic circumstances. It is, however, possible to give some general indication of the cutruit of staple products which would follow from the policy proposed. output of staple products which would follow from the policy proposed.

(A) Livestock.

Livestock and livestock products would continue to form a predominant part

(a) Cattle.—The improved grassland would mean an increase in the number With the present trend of public demand stimulated and encouraged by nutritional policy this increase would mainly be in dairy cattle. Given a widespread extension of efficient systems of alternate husbandry, we could carry a much larger population of dairy cattle. The need for more milk production and for improved standards of milk production and the health of our dairy herds calls for some transfer of milk production from the specialist suburban dairy farms on unsuitable land to mixed farms operating systems of alternate husbandry. Assuming that we should continue to rely mainly on imports for our supplies of butter and cheese, it should be possible to increase our dairy herds sufficiently to meet any probable demand for liquid milk, using the surplus that would be needed to ensure any given demand for liquid milk for the higher-priced manufactured milk products. Numbers of beef cattle could be rather larger than at present.

(b) Sheep.—There should be some increase in the numbers of sheep over the

pre-war figure.

(c) Pigs and Poultry.—Restoration to pre-war figures. Specialist pig and poultry production is of little importance from the point of view of maintaining the agricultural land of this country in productivity and fertility, and it would not be possible on agricultural grounds to claim that such production should be given special protection or assistance. With the policy proposed steps should, however, be taken to secure a considerable increase in numbers of pigs and poultry on mixed farms.

(B) Crops.

A development of alternate husbandry would involve a substantially larger acreage under the plough in any given year than existed before the war. It is thought that it might amount to about 16 million acres in the United Kingdom (about 12 million acres in England and Wales), including leys of one or two years' duration. It is contemplated that a considerable part of the remaining grassland would be leys of three or more years' duration instead of permanent grass. This would mean an increase of about 3 million acres in the arable acreage compared with the pre-war figures. It would, however, be no larger than the arable acreage at the beginning of the century under conditions of complete laissez-faire, and in the main the increased arable acreage would be devoted to fodder crops for feeding to livestock and not to cash crops. The figure of 16 million acres can at present only be regarded as an indication of the extent of the acreage which it might be found necessary or desirable to keep under the plough. The actual might be found necessary or desirable to keep under the plough. acreage to be aimed at would depend on a variety of circumstances, both technical and economic, which cannot now be determined with precision.

(a) Potatoes.—We are normally self-sufficient in potatoes. The pre-war acreage in the United Kingdom was 700,000. In the light of modern nutritional requirements we shall probably eat more potatoes after the war. We may

anticipate growing, say, 800,000 acres, or more.

(b) Wheat.—It would be unwise to seek to make ourselves appreciably more self-sufficient in wheat than we were before the war, but a development of alternate husbandry would probably involve some increase over the pre-war wheat acreage. In connection with the recent conference in Washington it was contemplated that the post-war wheat acreage in Great Britain would be about 2 million acres compared with 1,800,000 before the war.

(c) Sugar Beet.—The present sugar-beet acreage is determined by the capacity of the existing sugar-beet factories. The industry having been established, it should be continued because of the place the sugar-beet crop now occupies in arable farming in many districts and as an insurance in case of future wars. Post-war policy should aim at continuing production at the pre-war

(d) Malting Barley.—It would appear unnecessary and undesirable, especially in view of the prospective balance of payments, to import Californian or other malting barley or substitutes after the war. Brewers and distillers could This would mean depend on home sources for their supplies of malting barley. a considerable expansion over the pre-war barley acreage. Production would automatically be regulated by demands from brewers and distillers, and any surplus barley not taken for malting will go for feeding to livestock.

(e) Oats.—In Scotland and Northern Ireland oats is the principal cereal crop and the extent of its production must be determined by the demand for oatmeal as well as its use for feeding to livestock. In England and Wales the

consideration mentioned in sub-paragraph (f) would apply also to oats.

(f) Other fodder crops—feeding barley, beans, peas, kale, &c.—A substantial

increase would follow from the policy proposed.

(g) Vegetables.—Before the war we supplied a large proportion of our requirements in vegetables, apart from onions and tomatoes and early vegetables. The future of vegetable production depends largely on public demand. would be no difficulty in meeting any increased demand.

(h) Fruit.—There is no very strong agricultural case for encouraging a large expansion of home fruit production. The problem is largely one of maintaining a fairly stable market. Considerable progress was being made before the war in this direction by producers themselves through the medium of the Empire Fruit

16. The policy proposed would thus mean an increase in the general productivity of domestic agriculture to some significant extent and would involve some reduction in pre-war imports of food and feeding stuffs. Before the war imports of food and feeding stuffs amounted to some 22 million tons, valued at some £374 million. The agricultural policy here proposed, allowance being made for increased efficiency, might entail a reduction of such imports to about 19 million to 20 million tons, valued at about £330 million to £340 million (at pre-war values). It would not, therefore, entail any radical change in national economic policy, but only some comparatively modest increase in the production from our soil, a step which might be advantageous from other standpoints in view of the difficulties we shall have in paying for imports on the pre-war scale. may be added, however, that under the proposed policy, if it were necessary or desirable still further to increase production from our soil and to reduce imports, it would, of course, be quite possible to do so. What is indicated here is the minimum increase in production and reduction in imports that would probably be necessary to secure the maintenance of the bulk of our agricultural land in productivity and fertility. As will be seen, the main feature of the policy is to grow better grass and increased quantities of arable fodder crops for our livestock and thus reduce the imports of animal feeding stuffs. It is thought that under any other policy it would not be possible to maintain the bulk of our agricultural land in productivity and fertility without a greater measure of protection or assistance and a greater reduction of imports than that here proposed.

What measures would be required, and what would it cost to maintain all reasonably good agricultural land in a state of fertility and productivity under

appropriate and efficient systems of farming?

Countries like Britain, France and Germany can probably produce the ordinary range of products of European mixed farming (cereals, potatoes, sugarbeet, milk, beef, mutton, pigmeat, eggs, vegetables and fruit) about as cheaply as such a range of products taken as a whole can be produced in most other countries, assuming that the fertility of the soil is maintained. But each separate item can be produced more cheaply in some other country where conditions are specially favourable—wheat in North America, beef in the Argentine, mutton and dairy products in New Zealand. Moreover, if agriculture and the agricultural population is to be maintained over the bulk of the agricultural land in old-

established countries, it must be maintained on land which is of average quality, and, indeed, on land which is of less than the average quality as well as on the most fertile land, and such land can hardly compete with selected land in the vast sparsely-populated exporting countries. Some protection and/or assistance is therefore essential. Without it only the most fertile land in countries like this could be maintained in productivity and fertility. The degree of protection and/or assistance required will be less in so far as systems of mixed farming are varied and based as far as possible on natural geophysical factors, and if they are devoted, as far as is compatible with sound farming practice, to the products which give the highest money return per acre of land.

- The means of securing the necessary economic stability are dealt with The cost would depend on such factors as the following: in Part II below.
 - (a) The extent to which the efficiency of British agriculture has improved as a result of the war relatively to that of the exporting countries.

(b) The extent to which world prices of staple food and feeding stuffs rise above the very low levels prevailing before the war.

(c) The extent to which countries like the United States direct their agricultural production to providing more of the protective foods required for the optimum diet of their own population.

(d) The extent to which social policy is directed to subsidising consumption

of protective and other foods, e.g., milk.

(e) The extent to which under a more regulated system economies can be

effected in merchanting, processing and distribution.

(f) The extent to which electricity and water supplies can be made available for agriculture at rates comparable to those at which they are available to manufacturing industry.

So long as these factors are uncertain, it would not appear possible to make an estimate of the cost of maintaining British agriculture on the level indicated The main new item would be the difference in the cost of producing a larger proportion of our animal feeding stuffs as a result of (a) an increase of our arable acreage by, say, 2 to 3 million acres and (b) an improvement in our grassland, as compared with the cost of importing the feeding stuffs thereby While it may not be possible to frame a definite estimate at the present time, it should not be assumed that the difference in cost would necessarily be large, especially if the proposed increase in arable acreage over the pre-war level were secured by assistance to costs of production rather than to prices.

II.—Economic Stability.

- In formulating permanent post-war agricultural policy Ministers have indicated, as stated in paragraph 3 of this memorandum, that we should adopt a policy to secure to the utmost practicable extent measures for the economic stability of the industry. For a domestic agriculture which is directed not towards the maximum degree of self-sufficiency or maximum production, but to the more limited objective which has already been indicated, the problem of securing economic stability is one of providing for home agriculture a guaranteed share of the domestic market and of providing returns in respect of that share which will as a whole provide a fair remuneration for the efficient farmer. In other words, what is needed is a guaranteed market for the amount of home production indicated in the preceding section of this memorandum and guaranteed returns in respect of that amount of production. This involves regulation, including regulation of home production and marketing. The question how farmers are to be assured of such a market and of returns which would be adequate to maintain agriculture of the character and on the scale which has been indicated depends on whether we shall return after the war to an economic system under which, while there is some regulation of imports, there is a free market, or whether the Ministry of Food will remain in existence for the time being and be succeeded by some type of organisation for the wholesale purchase of food and the exercise of some degree of control over internal distribution.
- If we have to frame agricultural policy on the basis of the former alternative, then we should have to revert to a variety of schemes such as was in operation before the war for maintaining some stability of markets and prices.

Internally, we should have to revive the system of marketing boards and commissions which were in existence or in prospect before the war. As regards imports, there is no single principle or method that can be satisfactorily applied to all agricultural commodities. Subsidies, levy-subsidies, quantitative regulation, tariffs, &c., would have to be readopted for the various agricultural commodities to which each method was particularly suited.

21. Such measures and devices are unsatisfactory. Not only do they lead to misunderstanding and irritation among both farmers and townsmen, but it is almost impossible to relate the degree of protection or assistance under them to any agricultural policy directed to maintain a healthy and well-balanced agriculture. In practice each commodity has to be dealt with separately, and the eventual degree of protection is a compromise between conflicting departmental interests. The outcome is a piecemeal policy and an unbalanced agriculture. Moreover, unless some control is exercised over retail prices, i.e., over the relation between the retail prices of alternative forms of food (e.g., between butter and margarine or between different forms of meat), it may be difficult to provide economic stability either for domestic or overseas producers.

22. In the alternative there would be bulk purchase of imports of staple foodstuffs, and it should be possible to control the prices and volume of the main agricultural products, dealing with domestic production either by direct purchase or under specific arrangements fixing the price for certain products coupled, where necessary, with regulation of production. Quantitative regulation of imports, as understood in pre-war days, would be unnecessary. This would enable the great advantages of stable prices and secure markets to be continued, and farmers would be able to plan ahead with a sense of security. It would, moreover, give a far greater measure of administrative flexibility. In determining the wholesale and retail prices at which food would be sold in the country the central organisation would continue to take into account the prices of its domestic and overseas purchases and endeavour to balance its accounts—thus applying, in effect, the principle of levy subsidy to the bulk of the food grown in this country.

23. It would, however, be essential that, in determining price policy and in particular the *relationship* between the prices of the different staple commodities, consideration should be given to the objective of agricultural policy, and effective machinery would have to be devised for this purpose. The objective of price policy should be to ensure that the returns of the various types of farming which it is desired to encourage should as a whole provide a fair remuneration for the efficient farmer.

24. While the remuneration of the farmer should be fair, it should be no more than fair, but a certain dilemma arises. Prices which are adequate for efficient farmers on moderate land will be more than adequate to those farming highly fertile land. An alternative way of providing adequate returns would be a subsidy in respect of costs of production combined with lower prices of products. A payment per acre with a pro tanto diminution in the prices which otherwise would be necessary would probably be practicable in the case of certain cash crops. This and other forms of subsidy on costs of production would reduce the disparity between returns on moderate and exceptionally fertile land; they could be used to encourage good husbandry and proper rotation of crops and also alternate husbandry. They could also be used to encourage particular types of dairying, &c., which might be desired. There are, on the other hand, practical objections to such subsidies. Farmers feel, however illogically, that a direct system of adequate prices fixed in advance is more analogous to the protection given to industry by tariffs, and direct subsidies excite more public attention and criticism than tariffs do.

Agricultural Wages.

25. An important factor in determining the post-war level of farmers' returns will be the level of wages for agricultural workers. While for various reasons, and particularly the development of machinery, it is not necessary to provide for any large increase in the number of agricultural workers, it is essential to stop the drift from the land which was taking place before the war. It is particularly important to prevent the drift of young people from the land: unless it can be checked this drift will raise very serious problems for the future of agriculture and be dangerous from a social as well as an economic point of

view. An adequate rate of recruitment of juveniles to agriculture must be maintained. In the post-war period industry and agriculture will be competing against each other for a dwindling supply of juvenile recruits, and if the demands of industry are maintained (or possibly increased) the problem of juvenile recruitment in agriculture will become increasingly more acute.

26. There are many factors which have led to the drift of young people from the land—the urban bias of education, the attraction of town life, the lack of opportunity for advancement, the lack of suitable cottages for young agricultural workers when they want to get married, &c.; but the most important has undoubtedly been the disparity between agricultural wages and wages in other occupations.* It is essential that the level of prices should be such as will provide for a reasonable wage comparable to those in other occupations in rural districts. The Agricultural Wages Acts provide the necessary machinery for assuring a reasonable standard of wages, but this machinery will not work unless farmers' returns are at a level which enables them to pay the wages.

III.—LAND UTILISATION.

The need for general State control.

27. If all reasonably good agricultural land is to be maintained in a state of fertility and productivity it is necessary to stop large areas of productive agricultural land being lost to agriculture under the working of a system of indiscriminate speculation and unplanned urban and industrial development. If we are to make proper use of our resources in agricultural land it is in the first place necessary to secure effective united national control of the utilisation of agricultural land.

28. The final word on control should be vested in an impartial Central authority and not be left to Local Authorities. The Government is already pledged to the establishment of a Central Planning Authority, whose main function will be to secure that our land resources are used to the best advantage from the national point of view, and that agricultural land is not diverted from food production without good reason. The principles which should govern the utilisation of land in the national interest and the means by which these principles should be carried into practice are at present under consideration by Committees appointed by the Government.

The need for a Land Commission.

29. How is land reserved for agricultural purposes to be efficiently maintained for these purposes, i.e., how are proper standards of upkeep of land and

buildings to be secured?

Some degree of State control, coupled with some degree of State purchase, would appear to be required. The present rates of income tax and surtax, combined with the incidence of the death duties, if that incidence cannot be modified, would make it difficult, if not impossible, after the war for many landowners to fulfil their proper function in maintaining their estates and providing capital for improvement. From the point of view of agricultural efficiency, where landowners are unable to maintain agricultural land or buildings in proper condition or to find the capital for improvements or do not, in fact, adequately perform these functions, it will be necessary for the State to take action.

- 30. It is suggested that a Land Commission should be appointed by the Minister of Agriculture and a similar body by the Secretary of State for Scotland† to acquire and manage agricultural estates and single farms in the following circumstances:—
 - (a) They would acquire estates or farms voluntarily offered by existing owners, much in the same way as the Forestry Commission acquires land for afforestation.
 - (b) They would have the right to call upon existing owners to do necessary works of maintenance or improvement, and in the event of default compulsorily to acquire the estates or farms in question.

* In Scotland housing conditions are probably at least equally important.

† No specific recommendation is made regarding the establishment of a Land Commission in Northern Ireland, where landlords' interests have been vested in the tenants under the various Land Purchase Acts. The problem of securing proper standards of upkeep of land and buildings exists in Northern Ireland as well as in Great Britain, for the owner-occupier is not always the ideal landlord from the point of view of the national interest. The precise manner in which this object should be achieved is being considered by the Northern Ireland Department.

In both cases the price to be paid would be a fair value of the land as an agricultural estate or farm, i.e., so many years' purchase of the net rent or annual value, without regard to amenity values.

- 31. It will be appreciated that the proposed terms of purchase are drastic. The ordinary market value of purely agricultural land (apart from any development value) has in the past been exceedingly high in relation to its net annual yield. This has been in part due to the competition of corporations which desire to make investments to hold in perpetuity and in part to the readiness of individuals to pay high prices by reason of what is known as the amenity value attached to the ownership of an agricultural estate. It is uncertain how far this amenity value will continue after the war. In any case, the State could not reasonably afford to buy at a price which included amenity value, since such value, regarded as a separate element in the total value, brings no annual monetary return. It is believed, however, that compulsory purchase upon the lines mentioned would be generally accepted as reasonable, provided it was clear that it applied only in cases of land which was not being properly maintained and managed, and that there was general confidence in the good judgment and fairness of the Commission operating the provisions, and provided also it was accompanied by some relief from the burdens which press severely upon agricultural landowners. The latter condition would be met if, at the appropriate time, the Chancellor of the Exchequer found it possible to make some important alteration in the incidence of death duties upon agricultural land.
- 32. Payment by the Land Commissions might be made in the form of Land Bonds or Stock bearing interest comparable to ordinary Government securities and guaranteed by the Government. The Commissions would need finance for works of maintenance and improvement. In the early post-war years, however, it must be anticipated that the demand for capital for purposes of reconstruction and the overtaking of arrears of maintenance in many connections will be exceedingly heavy, and it is recognised that these considerations must govern the amount of capital facilities which can be provided and the pace at which they can be provided.
- 33. It would be desirable that the Land Commissions should have power to grant long leases of estates or farms subject to the observance of strict conditions as to proper maintenance.
- 34. The Land Commissions should be responsible to the Minister of Agriculture and the Secretary of State for Scotland, respectively, to ensure that they carry out their operations in accordance with general agricultural policy, but should so far as possible have a free hand regarding the actual management of their estates and farms, including the selection of tenants, fixing of rents, &c.

The use of agricultural land: farming types and systems,

- 35. The next problem is how to ensure that agricultural land shall be put to appropriate agricultural uses and that proper standards of farming shall be maintained. It has been suggested above that the main objective of agricultural policy should be to promote properly balanced systems of mixed farming over as wide an area as possible. There may, however, be a need for further afforestation which would absorb some of the poorer land; and there will be a further considerable acreage of poor land which will only be suitable for fairly extensive grazing, preferably on long leys coupled with crop production at intervals of 7 or 10 years. It is probable that in the immediate post-war years a large proportion of the land to be acquired by the proposed Land Commission will be marginal land, and the Commission should be able to try out various types of farming designed to maintain the fertility of such land, even if it cannot be made highly productive under the economic conditions likely to prevail in time of peace.
- 36. There are at present in the United Kingdom 537,751 agricultural holdings of over one acre, made up as follows:—

${\it Description}.$,	. •	Na	o. of Holdings.
Smallholdings up to 50 acres	• • •	• • •	•••	357,881*
Small farms 50 to 100 acres		•••	• • •	83,635
Medium farms 100 to 300 acres			• • •	81,501
Large farms 300 acres and upwards				14,734

* Not all are separately farmed units.

Farms of over 100 acres, though much fewer in number than farms of less than 100 acres, comprise two-thirds of the total agricultural land of the country. It will be desirable to encourage mixed farming of various types on all sizes of holdings and farms. Many smallholdings and small farms will continue to be devoted mainly to horticulture and pig and poultry-keeping. On ordinary land and in most districts it is desirable, even in the case of smallholdings, to avoid undue specialisation.

- Some people, who think it would be desirable on social grounds to restore a large rural population, recommend a wide extension of more or less intensive smallholdings and small farms run either as individual units or under settlements which provide for co-operative effort in production and marketing. It must, however, be recognised that in a country which has become predominantly urban and industrial we cannot maintain or recreate the peasant type of agriculture any more than we can revert to a form of agriculture which requires a large amount of exceptionally cheap labour. There may be some possibility of an extension of smallholdings and co-operative settlements mainly concerned with horticulture, poultry and pig-keeping, but the amount of land required to produce vegetables for optimum consumption by the people of this country would be quite insignificant compared with the total acreage of our agricultural land. Moreover, the use of machinery of all kinds and other modern scientific developments all tend to require large rather than small units for their economic use. It may be desirable gradually to effect some increase in the present numbers of smallholdings. There is in many counties a waiting list of agricultural workers who possess the necessary knowledge, experience and capital to take a small-holding; and the smallholding forms the first step in the ladder for the farm worker who has the ambition to become a farmer. But experience has shown that only an exceptional man is likely to make a success as a smallholder, and that there is a strict limit to the number of extra smallholdings that should be provided.
- 38. There is no need to encourage an expansion of the numbers of the small family farm of 50 to 100 acres. The small farm is in many ways well suited for the type of farming in which the rearing of livestock plays a prominent part. On some soils it is a suitable size for a farming system in which milk, pigs and eggs are the chief products sold off the farm. It is also useful as a second step in the ladder for the successful smallholder. The drawback, however, is that it encourages a type of farmer who has insufficient capital and limited knowledge, and is therefore unable to take proper advantage of modern methods and improvements. It will therefore probably need the greatest measure of control to secure the maintenance of adequate standards of farming.
- 39. The moderate-sized farms of between 100 and 300 acres are suitable units on some soils and for some types of farming, e.g., mixed dairy/arable farming supplemented by poultry and/or pig keeping. For land where arable farming predominates, however, they are in many cases no longer convenient or economic units. They date from a period before the advent of the tractor when all the farm work was done by horses and there was an ample supply of cheap labour. Modern mechanisation normally requires larger units for its efficient and economic use. In these cases it would be desirable that the Land Commission, and the County Executive Committees which it is proposed in paragraph 43 below should exercise control over farming efficiency, should encourage suitable redistribution of land and buildings into more economic units.
- 40. With the development of tractors and modern machinery there should be an increase, though it can only be gradual, in the number of large farms (i.e., farms over 300 acres) provided that sufficiently satisfactory economic conditions can be established to attract the considerable amount of capital required to run them successfully. They provide opportunities for skilled management and a high output per man employed especially where crop production is an important element on the farm.
- 41. In many districts it will be desirable on economic grounds and for the sake of promoting efficiency to rearrange farm boundaries and regroup farms. This is clearly a reform that can only be accomplished gradually. As indicated above, however, it should be possible for the proposed Land Commission to re-divide estates which it may acquire. It would also be desirable to continue

the existing powers under which tenancies can be terminated for the purpose of rearranging farm boundaries where the land remains in private ownership.

Control of Standards of Farming.

- 42. The control of farming to ensure good husbandry was in the old days supposed to be the function of the landowner. But the Agricultural Holdings Act of 1923, while it gave the tenant much-needed security of tenure, in effect deprived the landowners of any real power to enforce good husbandry. Moreover, since 1918 a third of the farms of the country have passed into the hands of owner-occupiers and it is generally agreed that for various reasons these are on the whole the farms where the standards of farming and the condition of the land had deteriorated most before the war. This was more particularly the case where an unduly high purchase price was paid after the last war.*
- 43. There is already a great deal of support for the view that the solution of this problem is to be found in the maintenance of bodies like the County War Agricultural Executive Committees, i.e., Committees appointed by the Minister with an adequate technical advisory staff and with powers (delegated to them by the Minister) to give directions, to terminate tenancies and, if necessary, to recommend the Land Commission compulsorily to acquire farms. Control designed to maintain adequate standards of farming is the price which farmers would have to pay, and would be willing to pay, for economic stability. This subject is dealt with later in this memorandum.

Land Drainage. .

Efficient land drainage is essential to the proper cultivation of land. In England and Wales much work has been done since the passing of the Land Drainage Act, 1930, by the Catchment Boards set up under that Act and by the Drainage Boards which were either already in existence or have been constituted since 1930. It is, however, desirable that the Ministry should have more effective powers of controlling Catchment Boards than is given in the 1930 Act and provision might be made for the supersession of such Boards by Commissioners appointed by the Minister if it appears that the drainage work on the "main river" is being neglected. Furthermore, more stringent powers of control over Internal Drainage Boards should be given to Catchment Boards, or in default to the Minister. Catchment Boards have been given power during the war to prepare drainage schemes for areas outside the "main river," but they have no power of maintaining watercourses so improved after the war emergency has passed. Provision should be made enabling Catchment Boards to maintain the drainage of these areas by collecting contributions from the landowners or farmers who are benefited. War-time powers of giving directions conferred in various ways on Executive Committees, Catchment Boards and Drainage Boards should be maintained, possibly in a modified form. In view of the proposed transference of many of the agricultural functions of the County Councils to County Agricultural Executive Committees it is a matter for consideration whether the drainage powers of County Councils should not be transferred to Drainage Authorities (including Catchment Boards) and County Agricultural Executive Committees. In Scotland arterial works should be carried out, as under recent legislation, by the Department of Agriculture for Scotland.

Farm Survey. .

- 45. In addition to the official agricultural statistics and the Farm Management Survey which for the past few years agricultural economists have been carrying out under the ægis of the Ministry, the County War Agricultural Executive Committees in England and Wales are undertaking a farm-to-farm survey to secure full information about general farming conditions and about the potentialities of individual farms from the point of view of food production in time of war. The information collected as a result of the survey, which is being tabulated by the provincial Advisory Economists, added to existing sources of information, will give valuable assistance to the Ministry and the proposed Land Commission in framing detailed plans for the best utilisation of agricultural land after the war.
- * The remarks about the condition of owner-occupied farms apply more particularly to England.

46. In Scotland the Department have undertaken, through the officers of Agricultural Executive Committees, a farm survey with the object of securing information as to the agricultural potentialities of Scotland as a whole. The survey will have particular reference to land utilisation and is designed to discover the best capabilities of the land in each district, and from this the amount of production of the various classes of crops and livestock which could reasonably be aimed at for the whole country. The officers of Executive Committees have been assisted in the enquiry by the Advisory Economists of the Agricultural Colleges, who have given guidance on the scope and layout of the investigation. Work of a similar character is in progress in Northern Ireland.

IV.—PROMOTION OF EFFICIENCY.

(a) Production.

- 47. For many years before the war great efforts were made to improve the efficiency of farming. These involved the expenditure of large sums of money on research, education, improvement of livestock and grassland, eradication of pests, &c. These efforts did not meet with the success they deserved largely because agriculture was passing through one of the worst periods of depression the industry had ever known. Farming capital was dwindling, low and fluctuating prices ruled and there was often a lack of profits even for the best types of farming. Only wages, a high part of farm costs, remained largely stabilised by legislation. As a result, farmers tended to adopt low farming methods, that is, those which would enable them to manage with the least amount of labour. Arable land was laid down to grass, maintenance work on draining and ditching was neglected, and new and untried methods were left alone. Enterprise and initiative were sapped and few farmers could afford to take advantage of and try in practical farming the discoveries made in the research field.
- 48. As a result of this experience it is idle to suppose that farming efficiency can be promoted without a measure of economic stability. Hard times may be useful in compelling producers to reduce costs and to adopt new methods, but in agriculture, where the largest item in costs, viz., wages, has been stabilised by legislation, hard times tend to lead to lower standards and a decline in farming efficiency.
- 49. Given a measure of economic stability, farming efficiency can be promoted in two main ways:—
 - (i) Research and education.
 - (ii) Power to enforce proper standards of husbandry.

Research and Education.

- 50. It is very desirable to bring scientific research and practical agriculture closer together; steps to that end have been taken by the recent appointment of an Agricultural Improvement Council for England and Wales with a corresponding body for Scotland. In present circumstances more education is more important for the promotion of farming efficiency than more research.
- by a Committee under the Chairmanship of Lord Justice Luxmoore. They are reviewing the arrangements not only for agricultural education for young people and at Colleges and University departments of agriculture but also for educational and advisory work among farmers. In the latter sphere it appears clear that if farming efficiency is to be promoted and standards of farming controlled, education and advice must continue to go hand-in-hand with powers of supervision and control as has been the case under war conditions. This would point to a national service, since such functions could not be adequately performed by Local Authorities or indeed be financed in many of the agricultural counties where it is most needed. A State service or a system such as exists in Scotland and in Northern Ireland would moreover facilitate the use by farmers of the services of the scientific and economic advisers attached to Universities and Colleges.

Control of Farming.

52. Given economic stability it is essential to have some effective means of ensuring farming efficiency and proper standards of husbandry. As has

been suggested in paragraph 43 there is general recognition among the agricultural community that supervision and control will be necessary and that it will have to be exercised by maintaining bodies like the County War. Agricultural Executive Committees, i.e., Committees appointed by the Minister and acting under his authority with an adequate technical, advisory and educational staff and with powers (delegated to them by the Minister) to give directions to farmers to terminate tenancies and if necessary to recommend the proposed Land Commission compulsorily to acquire farms proposed Land Commission compulsorily to acquire farms.

Other Measures for Promoting Efficiency.

- 53. Measures for promoting efficiency in regard to the production of livestock and livestock products, *i.e.*, measures to promote animal health and to improve the quality of livestock will have to continue to be mainly administered by the Central Departments. The control of pests and diseases affecting crops will have to be administered by the Departments in conjunction with County Executive Committees.
- For farming efficiency and reduced costs of production it is important that supplies of electricity and water should be made available on farms at rates comparable to those at which they are available to manufacturing industry. Both electricity and water supplies are of particular importance to an agricultural system which is predominantly directed to the production of livestock and livestock products (notably milk).

(b) Marketing.

55. In the inter-war period special effort was directed to improving the system of marketing of home-produced agricultural products. This effort was directed to three main objects:

(i) To reduce the wide gap between what the producer received and what the consumer paid.

(ii) To promote the proper standardisation and grading of home produce to meet the demand of modern large-scale retail distributive organisations in competition with the bulk supplies of standardised and graded imports.

- (iii) To get farmers to organise collective bargaining machinery in the form of marketing boards and to give them statutory powers to enable them to regulate the marketing of agricultural products and to get a fair deal for the producer as against powerful distributive and processing interests.
- 56. The system of producer control embodied in the Agricultural Marketing Acts was found not to be suitable or adequate in all cases to secure The principle behind the Livestock reforms in distribution and processing. The principle behind the Livestock Commission and the proposed Milk Commission was the setting up of an independent body (a) to initiate reforms in distribution and (b) to safeguard the general public interests.
- If in the post-war period we assume the continuation of some central organisation for the purchase of staple products as compared with a system of free demand and supply, the problems with which we were faced before the war will be profoundly changed. It will, however, still be necessary to promote efficient standardisation and grading of certain products and to set up some effective machinery for regulating the marketing of agricultural products and for promoting efficiency in processing and distribution.
- 58. Unless such steps are taken by the Government itself it will be necessary to revert to the far slower method of independent Commissions and producers' boards. Even if the Government acts itself, producers' marketing boards will probably still be necessary and desirable as part of the reorganised system. The principle of co-operation among producers is of great psychological value from the farmers' standpoint and would help to maintain the interest of farmers in increasing marketing efficiency, an interest which they tend to lose under a system of stabilised prices. It must be an objective of agricultural policy to link price stability very closely with marketing reform and efficiency.
- 59. Moreover, where home-produced foods reach the consumer in a processed form, e.g., bacon, milk products and canned fruits and vegetables,

the measures taken by farmers to increase efficiency in the production and quality of their product may be frustrated by bad processing and by the poor marketing of the finished product. It is important, therefore, that regulation of the processing and marketing of home-produced foods should be the counterpart of the promotion of agricultural efficiency and such measures must be a concern of the Agricultural Departments.

SUMMARY OF MAIN CONCLUSIONS AND RECOMMENDATIONS.

60. (i) In order to maintain our agricultural land in fertility and productivity varied systems of mixed farming are required over a large part of the country with a development of "alternate husbandry," involving some

substantial increase over the pre-war arable acreage.

(ii) Having regard to our soil and climate, British agriculture, as an agriculture which is not directed to maximum self-sufficiency or maximum production from the soil but is complementary to an economic system which relies on a large importation of agricultural products, should continue to be predominantly devoted to the production of livestock and livestock products. Grass should still be the principal crop in the north, west and midlands of England and Wales and over large parts of Scotland. There should be an increase in mixed farms in which dairying is the predominant element.

(iii) It should be possible to maintain the bulk of our agricultural land in fartility and productivity under varied systems of farming with production of a

fertility and productivity under varied systems of farming with production of a character and on a scale which would not involve a reduction of imports by more

than 10 per cent. of the pre-war volume and value, a reduction which may in any case be necessary having regard to the prospective balance of payments.

(iv) Economic stability could best be secured as regards staple products either (a) by a continuation of the Ministry of Food or by Import Boards arranging for the wholesale purchase of food and exercising some degree of control over internal distribution; or (b) by a system under which the necessary guaranteed prices and guaranteed market for the desired level of home producguaranteed prices and guaranteed market for the desired level of home production would be secured by subsidies supported by such regulation of imports, levies on imports or tariffs as may be necessary and consistent with post war international arrangements or by some combination of these various methods.

(v) National control over the use of land is required for the efficiency of

agriculture.

(vi) There will be a need for a Land Commission to acquire estates or farms, compulsorily if necessary, where the owners are unable or unwilling to maintain them and find the necessary capital for improvements. It would be desirable at the same time to make some important alteration in the incidence of death duties on agricultural land.

(vii) In view of the diversity and intermixture of soils and the variations in rainfall and climatic conditions, it is not possible to generalise about sizes or types of farms, but mechanisation and other scientific developments make it

desirable to encourage larger farm units in certain districts.

(viii) Control over standards of farming should be exercised by bodies similar to the present County Agricultural Executive Committees, i.e., Committees appointed by the Minister with adequate technical and advisory staffs and with powers (delegated to them by the Minister) to give directions and terminate

(ix) For the promotion of farming efficiency agricultural education is of the first importance. Educational and advisory work among farmers should be linked with powers to supervise and control standards of farming and should not be left to Local Authorities. The provision of electricity and water supplies to farms at reasonable rates is important.

(x) Increased efficiency in marketing, processing and distribution is required to supplement increased efficiency in production. Economic stability should be

linked with the marketing reform and efficiency.