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SYMPOSIUM ON 'NUTRITIONAL ASPECTS OF FOOD AND AGRICULTURAL POLICIES IN THE UK'

Food and agriculture policies in different countries

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Since its foundation 36 years ago this Society has considered at Symposia many scientific aspects of nutrition, and also the application of nutritional science to practical problems of agriculture and public health at home and abroad. The first scientific meeting (October 1941) was devoted to *the evaluation of nutritional status*, the second (February 1942) to *food production and distribution in relation to nutritional needs* (Kon, 1944a, b).

The present symposium is the first for many years to attempt an examination of nutrition and food supplies in the United Kingdom in terms of the potentialities of 'home' agricultural and fisheries' production.

My paper is intended to serve as a brief introduction to the general theme. Almost any major topic I mention will be discussed in greater detail later. I propose therefore, to confine attention to a few general points within the wider context of European and global food and nutrition problems.

No attempt can be made to describe the food policies of individual countries; emphasis will be placed, therefore, on the differences between food patterns and policies in the United Kingdom and those in other countries or regions, in Europe or elsewhere. The inter-connections between agricultural and food systems of the United Kingdom and those of other countries were clear at early meetings of the Society 35 years ago during the second world war. The inter-relations were later forgotten in many circles, but now, with the onset of economic crises, the need for re-examination has become evident. Moreover, discussions must now take into account various new dimensions which have affected or are likely to affect food and agriculture patterns and policies in different industrialized, as well as in developing countries.

These new dimensions include: (1) the shortages and increased costs of fossil fuels; (2) the shortages and geographical locations of mineral resources, including components of fertilizers for agricultural production; (3) the limitations of

marine resources, especially in the seas around Britain; (4) the problems of the developing world, particularly in terms of the pressure of populations on food supplies.

Arising from the above we have (5) a recognition of the importance of examining the food chain, from farm or other source to the consumer, in terms of the requirements of energy and of non-food raw materials and (6) the importance of conservation of resources with the avoidance of waste throughout the food chain. To the above points we may add (7) newer knowledge of nutrition in relation to medicine leading to questions as to how far recent changes in dietary patterns can be accepted without criticism. And finally (8) how far newer technologies, and in particular microbiological processes, can contribute to supplies of animal feed or human food.

National policies and national traditions

I will use the term national policies in a wide sense, to include not only governmental initiatives and legislation, but also the traditions incorporated into national agricultural practices and into food patterns, traditions often deeply-rooted in a community.

This approach is probably more common in Continental Europe than in Britain. French pioneers in studies of human geography and ecology have long emphasized the intimate relations between the soil, its produce, and dietary patterns on the one hand, and social and community structures (cf. Sorre, 1951, Tremolieres, 1977) on the other. More than one author has asserted that French civilization has evolved on the basis of the wheat grain, the olive and the vine (Vidal de la Blache, 1946). It is probably true to say that in several continental countries writers adopt a more philosophical and less mathematical outlook on food and nutrition problems than is normal in Britain. Some two centuries ago the German philosopher-poet Goethe asserted that the colour of bread, white from wheat and black from rye, was the shibboleth that distinguished Gallic and German cultures. In recent times the rye bread frontier has moved eastwards across the Rhine.

National policies, as shown by governmental decisions, have in many countries reflected strongly some current consensus and, in particular, consumer demand. Throughout history, food has been a sensitive area for the politician. Older policies in respect to agriculture and food supplies were designed in most European countries to ensure a supply of staples to meet established food patterns.

Except in time of war or other emergency, state intervention in agriculture and fisheries has been usually limited; changes in attitude have taken place in recent years, but in most countries it is accepted that agronomy and animal production are often most successful when carried out by individuals and their families.

There are, of course, examples in early recorded history of state intervention: the granaries of the Pharaohs were designed to ensure food supplies in the lean years of poor harvests. There has been a long-standing interest in food supplies for the army in the field as is evident from the recent essay by White (1976) on the Roman legions.

Fiscal policies involving varying degrees of free trade, or protection through import duties on different commodities, have had a direct influence on food supplies and food patterns. Subsidies or other forms of support have been used at different times to encourage agricultural production, and taxation of individual commodities has a long history. Salt, a substance of great importance for food preservation, especially in older civilizations, attracted the attention of the tax gatherer many centuries ago. In many countries there was an early, and continuing interest in the taxation of alcoholic beverages.

Agriculture and food policies in the United Kingdom

The key to pre-1970 agricultural policies in Britain is found in the Repeal of the Corn Laws in 1846. Britain with its relatively small population (about 11,000,000 in 1801) had been largely self-supporting in respect to food supplies, but the growth of towns following the industrial revolution led to a 40 year agitation for cheap food. The Repeal Act represented a victory for the townsman at the expense of the countryman, henceforth food and agricultural produce could follow a free trade pattern.

As the century went by, Britain imported wheat from the newly developed farmlands of the American Mid-West. Later, with the building of the ocean-going steamship and the refrigerated cargo-ship, trade was established with many different countries; meat supplies came from Australia, New Zealand and Argentina; oil-seeds and related produce from West Africa; beverage and related crops (tea, coffee and the cacao bean) from many tropical countries.

The finer details of changes since 1846 are described in many surveys on economic history (cf. Burnett 1966, 1969, 1976; Fenelon 1952). The ideals of the free trade philosophy can be outlined in relatively simple terms: a belief that, with free movement of goods by sea or land on a world-wide scale, peace and prosperity would come to all nations. In terms of British National policy the philosophy could be formulated in more realistic terms: (1) the strength of the British navy ensured a free movement across the seas; (2) the townsman of industrialized Britain required cheap food; (3) the lead established in the industrial revolution enabled British manufactured goods of many different types to be exported; and (4) for payments to be made for food imports.

There seems little doubt that for a long period this policy was successful; visitors from abroad wrote of the wide range of food available in Britain. And many readers will know, from personal experience, the great variety of food in retail markets such as Soho, and its relative cheapness, up to very recently, compared to supplies in many parts of Continental Europe.

Two comments may be made on this older British policy. In the first place there is now a wide measure of agreement that the basic assumptions are no longer valid; secondly it was largely confined to the United Kingdom and was followed by very few other countries.

Some details for the breakdown in the Corn Law Appeal philosophy will no doubt be given by subsequent speakers but three points may be made at this stage:

(1) the lead obtained in the first industrial revolution has inevitably been lost, because parallel lines of industry and manufacture have been adopted by many different countries; (2) the population increase and higher standards of living in North America and elsewhere, together with world-wide demands on American supplies has reduced the possibility of cheap produce from abroad; (3) in several developing countries, mainly tropical or sub-tropical, similar factors have begun to operate, but at an even more rapid pace and larger scale.

The effects of (2) and (3) can be seen not only in the spectacular increase in the cost of petroleum, but in great increases in a wide range of commodities including oil-seeds and other materials for animal feed, and more recently in beverage crops.

Drummond & Wilbraham's classical monograph on *The Englishman's Food* first published in 1939 gave an account of changes in agriculture and food supplies over a thousand years of history; the revised version (Hollingsworth, 1958) includes a final chapter summarizing policy during the years of emergency in 1914–18 and 1939–45.

The weaknesses of the older policy were evident in 1939. Many observers now believe that the policy should have been discarded or modified in 1945, if not in 1918. It appears that, as in other aspects of national life, we were reluctant to learn the lessons of experience and it is only comparatively recently that the White Paper on *Food from our own Resources* (Anon, 1974) provided public evidence of new thinking. This, and other more recent aspects of changes in policy, will be discussed by later speakers.

Policies in other countries

Food and nutrition science has advanced through contributions from different parts of the world. Early numbers of the *Proceedings* record symposia devoted to European problems (Kon, 1947) and to global problems (Kon, 1944c). This latter symposium, reporting the Hot Springs Conference of 1943 and the beginnings of the Food and Agriculture Organization of the United Nations, drew attention to an event of 40 years ago, the publication in 1937 of the Report of the Mixed Commission of the League of Nations on the relation of Nutrition to Health, Agriculture and Economic Policy (Anon, 1937). The Report provided a comparative study of food problems and policies in many different countries. F. L. McDougall of Australia who gave one of the papers in 1943 was the originator of the phrase, accepted by the League of Nations Group, and later by FAO, *the marriage of health and agriculture* as the basis of sound nutrition.

Although advances in laboratory, clinical, and agricultural sciences cross frontier lines, only a small minority of people in any one country have any deep acquaintance with the daily life of people elsewhere. And, as already noted, countries such as France have followed a philosophy in several respects different from our own (cf. Anon, 1932; Fenelon, 1952). In many Continental countries there have been two basic concepts; first that agriculture is a way of life to be fostered and protected in every possible way as part of the fabric of a sound society;

secondly that for national security, it is unwise to depend to any excessive extent on overseas supplies.

These concepts go back through the centuries, but were probably strengthened in the Napoleonic era. Whereas battles at sea helped to promote in Britain the idea of free movement of food and other materials, the Continental blockade provided new evidence on the Continental mainland of the importance of self-sufficiency in respect to major staples. And the two world wars of this century have given further support to this belief.

Thus, we find that most countries in the European Economic Community have, in respect to agriculture and food policies, followed a path, over the last hundred years or more, very different from our own. Even the smaller industrialized countries such as the Netherlands and Belgium have given strong support to their home agriculture.

Although the United States is a great trading nation, it has consistently fostered its farming sector which is a predominant political force once we leave the large cities of the East Coast (Aylward, 1971; Cummings, 1940). It has aimed at a high degree of self-sufficiency as may be illustrated through one example: the great efforts made by agriculturalists in conjunction with the food industries in the 1920s to introduce the soya bean to provide, first edible oil supplies for the margarine industry, and secondly oil-seed residues for animal feed. A massive private investment, supported by government, has provided one of the great success stories of agriculture, and has led to the further use of soya as a direct source of human food protein.

In many developing countries rapid changes in policy are taking place with an increasing emphasis on self-sufficiency in food crops on a national or regional basis.

Other differences in policies

Brief reference may be made to some other aspects of national policies.

The protection of the consumer, a common theme in current debates, is no new idea. In the Middle Ages (see Hollingsworth, 1958) regulations were introduced in England to control the price of bread; other countries had similar regulations. The last century witnessed in several countries the introduction of regulations to control fraudulent practices and adulteration of bread and other foods, and in the post-Pasteur period regulations regarding food hygiene. At a later stage came regulations for the fortification of food with nutrients and for the control of food additives.

Discussions at *FAO/WHO Expert Committees* and other international bodies indicate that there are wide differences of opinion on aspects of food safety and associated matters including food fortification (cf. Anon, 1972). These disagreements arise from different philosophies. Many competent scientists in Continental Europe are opposed to the extension of the use of food additives and are critical of food fortification procedures; they believe that colleagues in Britain have been too ready to accept uncritically practices from across the Atlantic.

Another area of current debate concerns the size, scale and organization of the food industry and its relationships to local and national agricultural systems.

Some general comments

A report recently published from the (UK) Cabinet Office (Anon, 1976) examines the sources of raw materials (including fuel) required for the maintenance of current standards of living in Britain and for the maintenance of agriculture and industry. Ashby's essay (1975) *A Second Look at Doom*, reviewed the debates on the initial report of the Club of Rome and covers similar ground to the Cabinet paper; he demonstrates clearly that Britain and other industrialized countries are now dependent for many types of raw materials on the natural resources of regions in the developing world. And several of these raw materials are of importance in agricultural production and in the food industries. Ashby's conclusions, which many of us will share, is that we should recognise that an entirely new situation has arisen; the well publicised shortages of fossil fuels (Leach, 1976) represent only one aspect of shortages of materials for modern industrial societies.

Viewed from this standpoint, our membership of the European Economic Community can be considered in terms of national security for the maintenance of food supplies and nutritional standards. Some of the difficulties now being experienced may have arisen because we fail to understand that colleagues abroad have a different approach to agriculture and food supplies; their philosophies deserve study as well as criticism!

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