

NATURE

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POST-WAR AGRICULTURAL EDUCATION

N EARLY two years ago the Minister of Agriculture appointed a committee under the chairmanship of Lord Justice Luxmoore to examine the present system of agricultural education in England and Wales and to make recommendations for improving and developing it after the War. Both the need and the magnitude of the task are evident from that Committee's report, which has now been issued*. The Committee interpreted 'agricultural education' as covering the bringing up, training and instruction of adolescents and adults in the sciences applicable to agriculture; the art and practice of the various branches of animal and crop husbandry, including horticulture; the provision of advisory services and the organization of general instructional work by means of lectures and demonstrations.

So long ago as 1668 Abraham Cowley directed attention to the neglect by landowners in not providing suitable tutors for their children to instruct them in the nature and improvements of the land they would inherit. He suggested that one college in each university should be erected for the study of agriculture. It was not until 220 years later that the first university college provided facilities for the study of agriculture, though the Royal Agricultural College was established in 1845. The early days of organized agricultural education were more directly associated with the other cultural branches of education than has been the case more recently, being fostered by the Board of Education through the activities of the local education authorities. Many of the ideas which now prevail concerning 'rural bias' were appreciated in the early years of the present century. It is a singular fact, however, that farmers themselves have long held the idea that education of any kind produced an attitude of mind inimical to manual work, whereas in point of fact it is largely an economic one.

Since 1911 the Board (now Ministry) of Agriculture has been the prime mover in matters affecting agricultural education, operating through grants to local education authorities in the counties and to the governing bodies of universities and colleges. This has resulted in considerable developments and in some cases notable results have been achieved, but invariably in proportion to the means available for the purpose. Unfortunately the application of schemes for advancing agricultural education has been very uneven in character, due in a large measure to unsatisfactory methods of rendering financial aid and the lack of authority in regard to development work.

The present War had not been long in progress when it was realized that food is a vital munition. The agricultural education staffs in the counties were diverted to the direct task of organizing the food production effort. Considerable powers were entrusted to the War Agricultural Executive Committees, but it is of more than ordinary interest that it

* Report of the Committee on Post-war Agricultural Education (Cmd. 6433.) Pp. 92. (London: H.M. Stationery Office, 1943.) 1s. 6d. net.

is being recognized increasingly by farmers and their workers that an intensification of educational work is the quickest way of making progress. It is no longer necessary to convince the average farmer that practice by itself will not reach the goal of maximum efficiency. The ideal is that combination of 'practice with science' which was adopted as the motto of the Royal Agricultural Society of England so long ago as 1840. Into this happy atmosphere the Luxmoore Report has been born.

As a record of the position obtaining at the present time the Report is valuable. Attention is directed to past and present weaknesses. It is perhaps unfortunate that the background of war-time needs and methods has largely affected the trend of ideas, and it is by no means certain that these views will obtain for any length of time on the conclusion of hostilities. It becomes necessary to stress this fact, for though inquests are very necessary, it is by no means true that the pre-war agricultural education system of Great Britain was so completely moribund that only a revolutionary replacement of the old system can achieve results which everyone wishes to see realized. The absence of uniformity is not necessarily a defect. It is one of the strong features of democratic government. In fact, one may go so far as to say that uniformity in any branch of college or university education is undesirable. In agricultural education, however, where the need has been greatest the means for rectifying this position have been totally inadequate.

It is accepted as a preliminary necessity that agriculture should be made sufficiently attractive to induce young people to enter it. A solid foundation of general education is stressed. A prevailing tendency in some agricultural circles at the moment is to suggest the introduction of vocational training in the ordinary school curricula. The Committee rightly decides against this proposal, but agrees with compulsory school attendance until fifteen and part-time continuation education until eighteen, in which both cultural and vocational training would be given, and in the latter connexion the Young Farmers' Clubs movement is commended. Up to this stage the Board of Education will be in control.

The main defects of the present system are considered to be due to the absence of any controlling authority responsible for the organization of agricultural education; the number of different authorities providing agricultural education; and the diversity of the sources and means of finance. To remedy this, it is proposed that a central statutory authority, to be called the National Council for Agricultural Education, should be set up. This Council is to be so constituted that it is outside the Ministry of Agriculture, but under the control of the Minister (an extraordinary proposal in view of the average life of a pre-war minister), and to be responsible for providing, at the cost of the national exchequer, for the different branches of agricultural education. At first sight, this cuts across previously recognized systems by removing agricultural education completely from the control of local authorities. One can scarcely imagine that the suggestion will be accepted without

question, and indeed one member of the Committee presented a minority report on this very subject. While it will be generally agreed that local authorities have not always functioned satisfactorily, a different attitude would probably have been adopted with more specific guidance and the availability of adequate means, but again it should not be forgotten that the War has given a new complexion to ideas even in relation to reforms in local government.

The Committee considers that farm institutes should be established in practically every county, with the object of providing training for those who are to become small farmers or to occupy posts of responsibility as agricultural workers. The type of training in these institutes is outlined, and the proposals are based on the successful experience of some of the existing centres. Attention is directed to the necessity for avoiding extravagance in the lay-out of farm institutes, and this is particularly necessary judging from some of the pre-war efforts in this direction. Farming and educational opinion generally will support the extension of farm institutes, for their usefulness will also serve some of the needs of vocational education in the counties through short courses in rural subjects for members of the teaching profession, thus necessitating contact with the Board of Education. It is to be hoped, however, that such courses as are given to teachers will be more on broad principles than on specific topics.

So far as the roles of agricultural colleges are concerned, these are regarded as essential for supplying opportunities at a higher standard than that provided by farm institutes, but below the scientific standard required for a university degree. Hitherto, colleges have had to compete with each other and with other centres providing agricultural education, and by reason of financial uncertainties courses of a very varied character have been provided. The South Eastern Agricultural College at Wye is within the University of London, and a similar relationship exists between the Royal Agricultural College, Cirencester, and the University of Bristol. The Midland Agricultural College, Sutton Bonington, which started at University College, Nottingham, is about to rejoin the parent stock. Cold water is poured on a widespread development of this trend, but the opinions of the Committee are not consistent. They suggest that for agriculture "the whole of any course leading to a degree should be taken in the University itself so that the benefit of contact with teachers and students engaged in other subjects should not be lost". Yet for horticulture it insists that "every effort should be made to induce more of the Universities to offer courses leading to degrees as well as graduate courses leading to diplomas in the same subject. They should be given in a separate department, but there must be contact between it and the science departments and the department of agriculture where it exists". It is difficult to understand that what is right for horticultural graduates is wrong for agriculture. One criticism made concerning the farms attached to some of the colleges is that they do not, either in farming or equipment, reach a sufficiently high standard. It is difficult to understand

how the Committee found it possible to examine this aspect carefully, and it would have been fairer if the criticism had been qualified. Indeed, more definite criticism of the college farms is essential, if any important development can be expected to accrue.

By contrast it is interesting to note the restrained references to the university departments of agriculture; but their functions are more specifically defined than in the case of the colleges. Suggestions are made for the avoidance of competition with centres providing lower-grade courses, and a very strong point is made of the need for providing an increasing number of candidates who have had a university training for technical and other posts. No one will disagree with this suggestion. People of independent thinking will be inclined to appreciate the autonomous character of the universities as centres of education, by comparison with the very tight reins by which other forms of agricultural education are to be controlled. The demand for university courses has increased considerably in recent years. Young people who would have been satisfied previously with a diploma course are now advised in their own interests to read for a degree, especially when they wish to enter the technical service. A criticism of many degrees, however, is that candidates can qualify without having had any satisfactory experience of practical agriculture, and it is in this deficiency that practical agriculturists have had most cause for complaint. The suggestion is made that in the case of students who ultimately wish to make the closest contact with farmers, adequate farming experience should be acquired before entry upon the university course. At the present, Leeds is alone in requiring evidence of this pre-university practical training. The suggestion put forward by the British Association Committee on Post-War University Education that all university students should spend at least one year in extra-mural pursuits (see *NATURE*, Dec. 19, 1942, p. 718) should do much towards meeting this criticism.

A re-casting and re-grouping of the advisory services for the whole range of agriculture is recommended. The Committee has appreciated the difficulties that belong to the present system, where the control is often ill-defined, the facilities at the provincial advisory centres very inadequate and the co-operation with the county services not always as close as it might be. The new proposals tend to result from the organization of technical services operating for the purposes of the war-time food production campaign. Already in most counties the Ministry of Agriculture has taken over the county agricultural staffs, while counties have been subdivided into districts of convenient size with technical officers in each district. This arrangement is regarded as a satisfactory one, though it should be observed that the staffs concerned work under the control of county executive committees that are constituted on a non-democratic basis. Some continuation of this control is envisaged after the War, though probably the method of appointment will harmonize more closely with traditional British ideals. The proposed county organization is to be linked directly with the specialist

advisory service, which will operate from a provincial centre or sub-station. At the present time there are thirteen provinces in England and Wales, each university department and major agricultural college acting as a provincial centre. The new proposals suggest larger provinces, numbering six in all, with headquarters located in a university city, though not necessarily part of the university. The proposed centres of the provincial organization are Leeds, Birmingham, Cambridge, Reading, Bristol and Aberystwyth. It is proposed to appoint a chief advisory officer at each provincial centre, his duties being to co-ordinate the work of the specialist staff. Similarly from the provincial centre a chief provincial organizer will direct and co-ordinate the work of the county organizers and their staffs throughout the province, while a provincial administrator will be the administrative head of both branches in the province.

These proposals are logical, but they suffer from several fundamental weaknesses, the chief of which is that no provision is made for the direct contact which now exists with the centres of higher agricultural education, while the new provinces are unwieldy in size and in certain cases eliminate strong county loyalties. If the present teaching centres are to be divorced from their contact with advisory specialists, the student life of the country will be very much the poorer, and it is to be hoped that reconsideration by the implementing authorities will be given to these points. It may be urged that when a better standard of education obtains among the rural community and advantage is taken of the facilities to be created for technical training that less responsibility will be shouldered by the specialized advisory staffs. Many of the problems confronting county organizers to-day result from the lack of fundamental knowledge of the rules of good husbandry and the application of scientific knowledge. Even a highly qualified race of advisers will not restore prosperity to an industry that depends for its well-being to a great extent on the skill and craftsmanship of the agricultural worker. The farmer of the future must be equipped to lead and direct his men. The Committee recognizes that two types of advisers are necessary: one highly qualified and scientifically trained, who will be presented with opportunities that compare favourably with other professions; the other who will command respect by reason of technical qualifications that are combined with a sound knowledge of agricultural practice.

Even though complete unanimity is unlikely to result from the various proposals put forward, it is necessary that steps should be taken to overhaul the pre-war organization and control. That questions of finance have been at the root of many previous deficiencies is strengthened by the suggestion that the implementation of the Luxmoore proposals will involve an annual expenditure of £2,500,000 and a capital expenditure of £3,500,000, compared with a total expenditure of £606,385 in 1938-39. It is as true of agricultural education as of farming itself, that its efficiency is dependent on the availability of adequate financial resources to provide the men and equipment necessary for the work.