

recently, large numbers of British farmers have changed over from beef to milk production, and now there is a large amount of milk which is surplus to the present requirements for liquid consumption.

The question arises whether a quota should be put on New Zealand butter and the surplus British milk used for butter making. In our opinion this would be wrong. Under British conditions of high costs of production, butter-making on a large scale is not a paying proposition. If the price of butter is raised by quota restrictions to the level at which it will pay British farmers to produce it, then we shall see a return to the consumption of margarine by the poorer classes of the community. From a nutritional point of view this is undesirable.

What then can be done with the surplus milk now being produced in Britain? In addition to immediate action with regard to beef prices—something perhaps rather more drastic and simple than the Fat Stock Commission's recent report visualises—a large portion, if not the entire present surplus, could be consumed as fresh liquid milk and thin cream (16–20 per cent fat), if our public could be persuaded to consume as much milk *per capita* as does the average American.

No 'milk publicity campaign', however, will persuade the British public to consume more dairy products unless it shows them how this can be done. There is a limit to the amount of milk which one can take as milk puddings. But the thin cream market is virtually untapped. The only choice open to the housewife between whole milk and the type of cream that almost defies extraction from its carton is the cream that rises to the top of the milk bottle, or some tinned substitute. Few people accustomed to thin cream in tea and coffee and as an accompaniment to puddings, porridge, fruit and breakfast cereals would give it up unless forced to do so. A demand for this commodity stimulated among the middle and upper classes would suit the farming community very well, for it would leave skim milk on the farms for pig feeding—a supplementary protein feed which is badly needed to assist quality of the carcase of pigs sold under the Bacon Pig Marketing Scheme. Danish bacon produced without skim milk would lose its characteristics.

The large American consumption of milk, however, is mainly brought about by the city office workers consuming milk with their light lunch, whereas the British take tea or coffee. It is by serving milk attractively in bottles off ice that the

American has been persuaded to drink it. Tepid milk, as it is too often served in Great Britain, is not a 'clean' drink and does not quench the thirst as iced milk does: like cocoa, tepid milk leaves a thick taste in the mouth, so in the absence of iced milk the British public prefer a 'clean' drink like tea or coffee for lunch. Stimulation of the consumption of the surplus milk in Great Britain in these ways—iced milk and thin cream—would not only be more profitable to the British farmer and avoid doing injury to the business of the New Zealand farmer, but would also be to the nutritional advantage of all classes of the British community.

Leadership in Local Government*

THE very attention which the growing complexity of the problems confronting the administrator, whether in national or industrial life, has attracted, makes it easy to overlook the extent to which technical factors have become important in local government also. In the last twenty years, the powers and duties of local authorities have greatly increased. They have now far-reaching responsibilities, and the welfare of the community is largely dependent on the efficiency with which those responsibilities are discharged. Public health, education, housing, town and country planning, road construction and maintenance—these are only some of the activities of local government authorities, and more and more they require to have at their disposal officers on whom they can rely fully, both for advice on the critical questions which come before them and for the execution of their decisions when taken.

The local government service in Great Britain maintains a high standard, for which no small share of the credit is due to the National Association of Local Government Officers. This and other associations have laboured to secure improved qualifications of their members and have succeeded in developing an invaluable professional spirit and outlook. In spite of this, there are wide variations in the standards of recruiting and training of officers for local government service. No consistent efforts are made by local authorities as a whole to secure the best persons for their service and to make the best use of them. Recruitment is often haphazard and training is unsystematic. Although technical qualifications where held are usually fairly high,

* Ministry of Health. Report to the Minister of Health by the Departmental Committee on Qualifications, Recruitment, Training and Promotion of Local Government Officers. Pp. 91. (London: H.M. Stationery Office, 1934.) 1s. 6d. net.

not all the qualifications are entirely satisfactory, and thorough investigation of the field is required.

Investigation of the technical qualifications of local government officers was excluded from the scope of the recent inquiry into the qualifications, recruitment, training and promotion of such officers carried out by a Departmental Committee of the Ministry of Health under the chairmanship of Sir Henry Hadow, but the report none the less discusses a number of important factors bearing on the training of administrators competent to deal with the many important technical issues involved in local government service. While the Committee recognises the importance of appropriate technical and professional qualifications in the principal departmental officers, it points out that the functions of any chief officer of a major department are mainly administrative, and it is of opinion that, in the past, local authorities have not laid sufficient stress on the administrative qualifications.

The essential problem in local government to-day is to ensure that the service offers an attractive career for vigorous minds and strong personalities. Methods of recruitment, training, grading, promotion and remuneration are of importance as they contribute to this primary purpose. The satisfaction of this end indeed offers the only adequate safeguard against incompetence or corruption in the public service, and is accordingly an essential factor in the redemption of the politician from his low position in public esteem and in the restoration of confidence in democratic institutions.

Among the factors which promote the supply of administrators of the requisite quality, recruitment on a wider basis is essential, and for this reason the Committee insists not merely that local authorities should draw their professional and technical officers from all available sources, whether within the service or without, but also that difficulties in the way of recruiting university graduates without technical qualifications must be overcome. No source of supply of the rare and invaluable quality of leadership can safely be neglected, but it is equally important to remember that administrative powers can be developed by training and experience. The recommendations that deliberate efforts should be made to arrange to give promising young officers practical experience in administration and to encourage the study of the principles of public administration are vital.

The report is happily free from the suggestion that technical and scientific officers as a class are lacking in administrative ability. It is recognised that individuals of high professional or technical standing may be lacking in this quality; it is therefore the more important to recognise it and develop it where found. The report outlines principles which are fully as valid in industry or in the Civil Service as in local government service, whereby the requisite combination of technical knowledge, professional integrity and administrative capacity may be encouraged and brought to bear on the complex problems of to-day. Its recommendations for centralisation and unification of the service, like those bearing on promotion and remuneration, are significant so far as they contribute to the main purpose of creating a service which compares sufficiently well with those obtaining in private enterprise to secure a proportion of the ablest minds and strongest characters of each generation.

Chemical Factors in Plant Growth

Croissance des végétaux. Par Dr. Albert Demolon.
(*Principes d'agronomie*, Tome 2.) Pp. ix + 307.
(Paris: Libr. Dunod, 1934.)

DR. DEMOLON is well known as one of the clearest thinkers and one of the most ingenious-minded among agricultural investigators. As chief scientific advisor to the French Ministry of Agriculture, he is kept in close touch with the practical problems of the French farmer, and as head of the research laboratories at Versailles he is equally closely associated with modern movements in science. In his earlier publication, "La Dynamique du Sol", he dealt with the formation and composition of soils and the changes occurring therein; in the present volume, which is by way of a continuation, he discusses the relations between the soil and the growing plant, the subject which as he truly points out is the foundation on which rests scientific agriculture.

In the first section of the book the author discusses the physical factors determining plant growth: the effects of light, of temperature, electricity and of various rays: also the amplitude of variations in yield due to meteorological conditions.

The greater part of the book deals with the chemical factors concerned in plant growth: the atmosphere, nitrogen and the mineral elements. The author sets out the facts clearly and discusses