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Industrial Surveys and Employment Problems\*

AMONG the discussions at the recent meeting of the British Association which were given particular attention in the general Press were those arranged by the Section of Economic Science and Statistics on international migration and on the location of industries. There are, however, still many persons to whom the relation between science and problems of this type is as yet obscure. It is indeed far from being generally realised that the complex issues and intricate problems presented by international migration in the twentieth century can only be resolved by the scientific study of the numerous factors involved.

Similarly, in the national migration problems which are bound up with the unemployment problem, the bearing of scientific determination and analysis of the essential facts is only now being perceived. The social and industrial difficulties of the last two years, the magnitude of the post-War unemployment problems, have led to the active discussion of such questions as whether the present location of industries is the most economic that could be devised ; whether, under private enterprise, manufacturing industry is becoming less or more localised and whether its tendency is to render the prevention of maladjustment of labour more or less difficult.

Definite indication of the desire to ascertain the features of a rational location of industry or of the deliberate planning of social in relation to industrial resources is afforded by the invitations extended last year by the Board of Trade to various universities to conduct industrial surveys of their respective surrounding areas. It was suggested that such inquiries should cover not merely the present industrial position of the respective areas but also the prospects of early expansion and new development, having regard to recent industrial developments, and an assessment of the prospective employment capacity of the various industries in the area as a basis of estimating the probable volume of labour surplus to the requirements of individual industries within the next few years.

The mere suggestion that such an inquiry should be entrusted to the universities is significant of a changed attitude to the contribution which the

\* Board of Trade. An Industrial Survey of the Lancashire Area (excluding Merseyside) made for the Board of Trade by the University of Manchester. Pp. ix + 380. (London : H.M. Stationery Office, 1932.) 6s. net.



universities have to make to the modern State. It obviously indicated an appreciation of the ability of the universities to render services which go beyond the mere training of men and women qualified to fill important positions in industry, in government, municipal or social service. The provision of men and women trained to learn quickly and accurately to grasp the essential problems of a technical problem, to analyse it and develop a plan of action, and possessing a sense of values which enables them more and more closely to relate knowledge to action or policy as their judgment matures with experience, is a function of growing importance in this scientific age, but it is only one of the ways in which the universities can serve the community. The terms of reference of these surveys suggest that the universities possess not merely the powers of conducting such social research but also the perspective and sense of values which are essential to the presentation of an authoritative and impartial analysis of the facts thus assembled.

There have now been presented to the Board of Trade no fewer than five such surveys. A survey of south-west Scotland has been completed by the University of Glasgow, while the University of Wales, Cardiff, has issued its report on the South Wales area. Surveys of the Merseyside area and of the remaining Lancashire area carried out by the Universities of Liverpool and Manchester respectively have followed that on the industrial area of the north-east coast by the University of Durham. The five surveys together not only provide a most valuable analysis of industrial conditions in the areas covered but also afford a basis for assessing the importance of such contributions of university resources to the national welfare.

In the first place, it is pertinent to observe that the presentation of such a report by a university confers upon the report an authority and an assurance of impartiality which is not easily otherwise obtained. The industrial situation has frequently suffered from *ex parte* statements which differed widely in themselves but could not be verified against some reliable and independent authority. An accurate estimate of the problem presented by surplus labour is impossible apart from some such inquiry and analysis, and accuracy and authenticity are essential if confidence is to be placed in the deductions or recommendations based thereon. Mr. A. G. H. Dent, in a paper before the Department of Industrial Co-operation at the recent British Association meeting, specially

stressed the value of statistics obtained by absolutely reliable authority as a means of avoiding suspicion and misunderstandings in any industrial dispute.

The Lancashire survey brings to light the high incidence of unemployment among workers in the age group 18-24 years, and sets in its true significance for national or social economy this incidence upon workers at a period in the working lives when they should be rapidly approaching maturity of industrial skill and adaptability and when they should be most capable of moving into other industries or localities. Similarly, the analysis of the inflow and outflow of labour is characterised by a concern for social consequences that could scarcely have been found in any inquiry initiated by industry itself, and leads to definite suggestions for regulating the recruiting of labour for the cotton industry in all districts. The survey demonstrates that in the absence of any organised effort by the cotton industry or the State to control the flow of juveniles into the industry, heavy unemployment and restricted earnings of adults did not deter very large numbers from entering the industry. Nor is there any full and accurate information from year to year as to the numbers entering the industry at the age of fourteen years, or their progress during their early working years. The tracing of the industrial history of juvenile workers in this way is an obvious preliminary to the difficult task of regulating entry and avoiding blind-alley occupations, apart from the opportunity for an attempt to secure for every entrant the advantage of a reasonable period of skilled instruction in his occupation.

The analysis of the position of the cotton industry presented by the report of the University of Manchester emphasises the importance of such independent social research. Thus the immobility of labour in Lancashire is largely due to social factors—the prevalence of the family income, the preponderance of female labour, the custom of women workers continuing at work after marriage, the high concentration of unemployment in relatively isolated districts, and the reluctance of workers to recognise the existence of a permanent surplus. Such proposals as the abolition of the short-time working and under-employment of labour which result from the existence of permanent surplus capacity of capital equipment and labour would reveal the real extent of the labour surplus, but so long as the displacement and recruitment of labour is unorganised, the burden



of unemployment will not be distributed in a manner causing a minimum of loss or damage to the labour resources of the industry.

Nowhere is the advantage of such independent research greater than where it touches the effect of technical changes on the demand for labour. So far as the cotton industry is concerned, it seems clear that no appreciable part of the existing surplus of labour can be attributed to technical 'rationalisation', but there are signs that changes are impending which will radically increase the physical output per person employed and consequently displace labour, if the aggregate output remains the same. The report gives an unbiased analysis of four new methods of production which are considered to present the most serious labour difficulties and its observations cannot be ignored by either side. The 'more looms per weaver' system presents the most serious problems, bringing about a decrease in production per loom but an increase in production per weaver; while the weekly earnings of the weaver are maintained or slightly increased, the weaving labour costs fall and also total costs per unit of output. The report observes that in the negotiations between employers and trade unions, the problem of mitigating the effects of further additions to the surplus of labour in the weaving districts does not seem to have been scientifically examined and urges as an essential condition that collective bargaining should be defended against the inclination of individual firms to break away from existing wage agreements. Given collective bargaining, it is considered that there is no reason why the introduction of the system should not be planned so far as is practicable to give security of employment to the workers who are retained and to regulate displacement so that the burden falls on those best able to bear it.

The value of this survey is equally apparent in its discussion of the position of the expanding industries and of the possibilities they offer of absorbing the surplus of labour from other industries. It is, however, evident that the survey is only a start towards the handling of the unemployment problem on scientific lines: "Lancashire's difficulties," says the report, "are essentially of the type which calls for long-distance treatment and far-sighted planning, based upon the intensive research of a continuing character, and the Survey has provided the opportunity for a critical examination of the existing statistical material and has revealed many serious gaps in the information

which must be made available if continuous investigation is to yield the most useful results." The report proceeds to emphasise the importance of compiling much more frequently than at present statistical material, the primary and chief value of which lies in its utility in economic research. "Increased funds devoted to the wider and more complete charting of the national economic system would be a sound investment, despite the urgent campaign for national economy."

The report punctuates its plea for such research by concrete proposals addressed alike to the national and local authorities, to trade unions and to employers' associations, for the collection of the specific statistics required. It thus envisages a definite field of social economic research which is fully in keeping with the programme advocated, for example, by Prof. W. McDougall. These surveys attest both the resources and the capacity of the universities to undertake such research and there is little doubt that it would be to the great advantage of the community if some of the effort at present directed to the advancement of the physical sciences were directed to these ends.

Apart from the corrective to that dangerous tendency in industry and politics to ignore or avoid unpleasant facts and disregard the consequences of a selfish or sectarian policy, research of this type has other advantages. It gives a striking demonstration of the capacity of the scientific worker for leadership and relates university life intimately with the main stream of national life; the recent suggestion of Mr. Alan Chorlton, M.P., for the formation of a Research Council in Manchester appears to be prompted by the survey and indicates the educational value which such research can possess. It also encourages a widespread appreciation of the value of scientific training and technique in the solution of social, economic, and industrial problems. Both factors should promote the production and acceptance of leaders and administrators whose qualifications for office include the indispensable capacity of assessing at first hand the technical factors in the problems they have to solve. Without such capacity, there is no prospect of the planning of our national material and social resources on national lines, of their being wisely co-ordinated with world resources in a spirit of international co-operation, or of that right relation of knowledge to action upon the rapid evolution of which the security of civilisation depends.