

STATISTICAL AND SOCIAL INQUIRY SOCIETY OF IRELAND.

AN ECONOMIC BASIS FOR AN IRISH RURAL CIVILISATION

Read Thursday, 27th November, 1947:

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The general argument of this paper is that if we would establish a suitable economic basis for a worth-while Irish rural civilisation we must have, not only co-operation of farmers living in their scattered homesteads, but large-scale co-operative farming units dotted all over the country, and, wherever possible, making use of the mansions and estates that were formerly associated with Anglo-Irish landlordism.

There are various points of view from which a consideration of the practicability and desirability of fully integrated co-operative farming in Éire might be approached. We must take into account, in the first instance, the rugged inescapable facts, for no sound structure can be erected which is not firmly based on these. These facts are of the most varied character, but broadly speaking they divide themselves into two main groups—facts of Irish human nature as influenced by history and modified by present-day circumstances, and facts of a more objective character, like the facts of climate and geographical situation, and those other facts that concern the application of modern scientific knowledge to the organisational problems and the productive techniques appropriate to modern agriculture.

The accident of history has determined that our 11 million acres of "crops and pasture" should be divided among about 300,000 owners, each one constituting a distinct economic unit legally responsible for his success or failure as a separate economic enterprise. These farm units (for practical purposes we may refer to them as holdings) are of the most varied sizes, the average size being about 30 acres. Farms under 50 acres in size may be referred to as "small," farms 50–100 acres in size may be called "medium," while farms in excess of the 100 acre size may be regarded, from an Irish point of view, as "large," though elsewhere the term "large" would probably relate to a much higher acreage minimum. We may note, in passing, that if we leave out of account all holdings of less than 5 acres, there are 226,000 holdings between 5 and 50 acres in size. They cover an area of 5,246,000 acres, which is 35·3 per cent. of the total area of agricultural land given in official statistics. This total area of all holdings exceeding 5 acres in size, namely 14,822,900 acres, includes some four or five million acres of rough mountain grazing and other land which is, at present, practically useless for agricultural purposes.

There are 50,000 "medium" farms, occupying an area of 3,524,000 acres, or 23·7 per cent. of the total agricultural area in question. The large holdings number 29,000, and account for 6,103,000 acres, which is 41 per cent. of the total agricultural area. Only 7,949 of these large holdings exceed 200 acres in size. The number in excess of 500 acres in size is probably about 1,500.*

In many regions of the country, farms of the most varied sizes occur in close juxtaposition. From a map on page lviii of *Agricultural Statistics*,

*Cf. App. I, p. 93, *Majority Report of Committee of Inquiry on Post-Emergency Agricultural Policy*.

1847-1926, it will be noted that small farms are the prevalent type in a group of counties from Monaghan to Mayo, including Donegal; medium farms prevail in a group that includes Wexford, Carlow, Kilkenny, Waterford, Cork, Limerick and Clare. In Meath, Westmeath, Offaly, Dublin and Kildare large farms are the more typical.

Elsewhere in this most valuable official publication it is pointed out and proved statistically that there is an important agricultural commerce, binding together farms of various sizes and various productive possibilities, and that this commerce takes place regionally as well as locally, thus transforming the appearance of isolated and independent farm units into the substance of a national agricultural economy. The question is, would the introduction of large-scale co-operative farming units in every characteristic farming area of the country promote an even closer integration of the national agricultural effort in a regional as well as a national sense? Would it eliminate some of the wastes incidental to the present system e.g. the transporting of half starved Limerick calves through two or three counties before they find a temporary resting place? Would such a system promote more effective use of local human and material resources, and therefore make possible a greater output of wealth and a higher standard of living for all? The answer to this question must depend partly on the possibilities of Irish human nature and the availability of suitable agricultural leadership, conscious of a mission, able to appeal to the emotions as well as to the intellect, and capable of harnessing all spiritual and material resources in an effort to achieve a social order in which the individual can fully realise his best self because his welfare is merged in the welfare of a community of individuals. All we can do in the course of this paper is to point out that such developments, however Utopian they may sound, would in fact only be a logical development of certain features of our agricultural economy *that now exist*, and a desirable rationalisation of those aspects of it which are indefensible economically and therefore anti-social in effect.

The number of males "engaged" in farm work on the 1st June, 1944, was 526,000 (*Statistical Abstract*, 1945, Table 57). It was 579,000 in 1934 (*Statistical Abstract*, 1939, Table 53). The total area of crops and pasture is officially given as 11,703,000 acres (*Agricultural Statistics*, 1927-1933, Table 6), and the total agricultural area, which includes "other land," as 17,024,000 acres. If we take the 1944 figure for males "engaged" in farm work (526,000) and apply it to the figure indicating total agricultural area (17,024,000 acres) the average for the whole country works out at rather more than 3 males engaged for every 100 acres of agricultural area. It would work out at 4.5 for every 100 acres of crops and pasture.

Using the data contained in Appendix II on page 94 of the *Post-Emergency Committee's Majority Report on Agricultural Policy*, it appears that there were in 1936 386,000 males "engaged" on farms from 1 acre to 50 acres in size. The total area of the farms in this group is officially given as 522,000 acres. Thus there are seven males "engaged" in agriculture for every 100 acres of "agricultural area" in farms under 50 acres in size. In our definition of "small" farms we left out the size group 1-5 acres, but for our present purposes we may regard a density of 7 persons "engaged" per 100 acres of farm area as sufficiently typical of the small-farm category of our definition. The density per 100 acres of crops and pasture would, of course, work out at about 10.

In the "medium" farms man-power in 1936 was 119,000 and total

area 3,547,000 acres. In this category man-power per 100 acres of total area works out at 3.35.

In the "large" farms of our definition, man-power was (in 1936) 92,700 and total area 5,936,000 acres. The ratio of man-power to total acreage was in this category 1.56 to 100 acres. Incidentally it may be noted that, according to Mr. Freeman's calculations, there was a slight tendency for man-power to increase between 1926 and 1936 on farms between 30 and 200 acres in size, but a 5.6 per cent. decrease in farms 15 to 30 acres, and a 20 per cent. decrease in farms 1 to 15 acres in size.

One of our major economic problems is to increase the density of agricultural employment as well as output per person and per acre on our agricultural area as a whole. During the 1930's the political and economic atmosphere was distinctly unhealthy for the large holding, especially those of the "rancher" class. And yet large holdings up to 200 acres in size maintained and even increased the man-power associated with them, while the decrease of some 3,000 associated with farms over 200 acres in size was adequately accounted for by the public policy that promoted the division of such holdings. Economic tendencies, if left to themselves, would probably promote a further consolidation of holdings, and the total number of holdings under 50 acres would probably diminish in spite of the artificial creation of new holdings under 30 acres in size by the Land Commission. Yet a policy of *laissez-faire* in this matter is politically impossible and perhaps socially undesirable. The path of wisdom is to work with the tide in promoting suitable consolidations of holdings in convenient centres while at the same time taking care that the public good is nowhere subordinate to private selfish interests. It may be that an experiment in the establishment of large-scale co-operative farming units, under public auspices but not under public control, will provide a solution in accordance with democratic principles and the ideals of a Christian social order.

The relative densities of man-power per 100 acres of area, namely 7, 3.35, and 1.56 in small, medium and large farms respectively, appear to afford an argument for dividing up the land into the smallest possible units. However, output per person, on which the standard of life depends, almost certainly varies directly with the size of farm as well as with other factors, some of which are within the control of the human will. A chess-board pattern of nothing but small farms would lose even the present limited degree of mutual interdependence between small medium and large farms which is one of the essential characteristics of a national agricultural economy. In fact a congeries of small farmers not co-operatively associated with one another for production, processing, buying or selling would be a kind of agricultural slum and in no sense a rural community.

To a certain extent the economic isolation of our individual farm units has been qualified by the application of co-operative methods to many of their common interests. The most successful example of this in Éire is in connection with the Creamery industry. Moreover, the Creamery Societies perform a lot of functions for their members which are not directly related to the making and sale of butter. In the non-creamery districts co-operative association is comparatively undeveloped. But hitherto the co-operative method has not been applied on any large scale to the general processes of production on actual farms, though there have been one or two attempts to do so, and more recently the purchase of large farms by some of our wealthier and more enterprising

creameries has provided the possibility of ambitious developments in this direction.

Large-scale farming can be just as intensive as small-scale farming. It can concentrate on aspects of agricultural production and processing which cannot be done economically in a small farm or cannot be done at all. According to an English authority, D. B. Johnstone-Wallace, as reported in *The Farmers' Weekly* of January 28, 1944, "To be fully equipped a 100 acre arable dairy farm now requires a medium-powered tractor, a power-lift toolbar with hoes and cultivator tines, a direct-attached mower for the tractor, a two-furrow plough with general purpose and digger bodies, a spike-tooth harrow, a Cambridge roller, a fertiliser distributor, a combine grain-drill also adapted for root crops, a power-drive binder, a combined swathe turner and side-delivery rake, a horse rake, a tractor sweep, two pneumatic-tyred carts, two low-loading dumping trailers, a steam sterilizer, a milk-cooler, and various small tools. In addition, it would be helpful to have a milking machine, a 5-7½ H.P. electric motor, an electric refrigerating plant for cooling and storing milk, a double-disc harrow, a flexible grass harrow, etc."

Obviously the typical Irish farm of 50 to 100 acres is not and cannot be fully equipped in this sense. And yet the low-cost production of tillage crops is not possible unless in farms which are fully equipped with the most up-to-date labour economising machinery. According to some authorities, the economic growing of corn crops is virtually restricted to farms of at least 350 acres in size.

On farms over 100 acres in area the ratio of man-power per 100 acres of area is, as we have seen, 1.56. On several individual large farms with which I am acquainted 10 persons or more per 100 acres are fully and productively engaged. On a well-known 2,000 acre mixed tillage farm in the Midlands 100 workers are permanently employed—a ratio of 5 persons to 100 acres. The question is can we reproduce under a co-operative system the technical and other conditions which enable our best-managed, privately-owned large holdings to show a high density of employment and a high output per man and per acre? We cannot tell unless a few large-scale experiments are made, adequately financed and under suitable leadership.

Captain Richards Orpen has outlined, in his final article on "Post-War Planning in Irish Agriculture," a system of what he calls "Economic Farm Units," each one serving a region of some 1,500 acres. What I have in view is merely an elaboration or restatement of the same general idea.

The variety of our climate, soil, and geographical conditions is such that probably no two "Economic Farm Units" or Co-operative Farming Societies would be identical in function and activities. A working example already exists. The Mitchelstown Creamery exploits a farm of 150 acres at Mitchelstown in connection with its cheese factory. It maintains a large pool of agricultural machinery, not only for use on the collective farm but for hiring out to its members for use in their own farms. It grinds corn for the members, and maintains a store in which it sells artificial manure and other agricultural requisites. Its total turnover now approximates to £1 million per annum, and it is undoubtedly the dominant factor in the prosperity of the rural community within a radius of 5 or 10 miles.

For the maximum development of the possibilities inherent in this movement, it is desirable that the collective farm should be conveniently near the creamery which owns it. Unfortunately in some cases they

are some miles apart. It is also desirable that a big house or mansion should be available on the farm to accommodate the farm manager and the celibate working staff. Life in common is in itself a valuable education. Given suitable residential accommodation, such farms could in some cases become perhaps high schools, analogous to the Danish Folk Schools. A floating population of young farmers could thus pass through them and return to their respective neighbourhoods with their vision enlarged, their imagination quickened, and their sympathies deepened.

The Mitchelstown farm has no mansion on it. The former abode of the Earls of Kingston did not survive till our day.

This limits its possibilities of development in the cultural and educational sense, which is so highly desirable. But such as it is, it may be regarded, at least in the economic sense, as a good working model of the kind of "Economic Farm Unit" which Captain Orpen envisages for every appropriate centre in our heterogeneous agricultural regions. Needless to say, if our agriculture were fully organised on these lines, there would be as much variety in the functions and activities of the various Economic Farm Units as there is variety in the character of our agricultural resources and in the geographical and human conditions of the various areas. Making allowance for this, the general picture may be given in Captain Orpen's own words:—

"The method which looks most promising as regards this country may be called the 'Economic Farm Unit.' I propose to describe this system in some detail, as it has features of interest peculiar in itself. The Unit is composed of a centre and subsidiary parts, and the area may be anything from one thousand to twenty thousand acres, depending on local circumstances

"First let us take the Centre. This may be a large farm or a group of smaller farms willing to co-operate with one another, or it may in certain cases be a central processing organisation according to the farming practised in the area. We will consider first the Centre in a tillage area where the chief cash crop is grain. The Centre will have the necessary equipment for growing and handling grain in bulk, tractors, tillage, harvesting and threshing implements (or 'Combines' and grain dryers). The Centre will be able to produce grain far cheaper and with greater certainty than the small farmer, or Subsidiary, with inadequate equipment and everything against him except an excess of unpaid family labour. The Centre will not be handicapped as the larger farmer is to-day, because it can call on the excess labour on the Subsidiary Farms to assist in the harvest.

"Turning to the Subsidiary Farm, grain may be grown economically on some of these, and the equipment available at the Centre be used to help out the Subsidiary's operations. Other Subsidiaries, who have hitherto wasted their land and strength in producing grain crops uneconomically, can turn to more remunerative occupations because they can now buy their requirements of grain at ex farm prices within the Unit. We must remember that in the past the subsistence farmer could buy relatively little, as he produced next to nothing for exchange. Now, too, the Subsidiary could devote his activities to production of young stock, dairy, fruit, vegetables, poultry and eggs, bees and flowers. He has a market at his door, as the Unit either processes the produce or distributes it to the consuming area or to factories. The Unit can provide rapid transport to the town and railhead, and at the same time draw farm requirements for distribution to the Subsidiaries. In this type of set up of, say, fifteen thousand acres, no farmer is more than

two and a half miles, as the crow flies, from the Centre, the conveyance of goods and produce by the Subsidiary is no longer an excessive burden, and yet the produce from an Economic Farm Unit of this size would warrant efficient transport facilities, provided as part of the equipment of the Unit.

"The Centre would purchase in bulk much of the requirements of the Subsidiaries at present bought piecemeal, and would provide seed correctly dried and stored, manures, etc. Technical services and advice would form part of the duties of the Centre, as a region of fifteen thousand acres can afford to carry expert technicians quite beyond the means of even the largest farms. Repair work hitherto sent away could now be done on the spot.

"The Centre would process all produce bought in from the Subsidiaries, and as far as possible distribute it in a condition ready for the consumer. Thus the Centre would give employment to many persons who for various reasons were unsuited to field work, and who previously migrated from the countryside, thereby breaking up the family, and causing that serious social and economic phenomenon, the 'flight to the town.' Farm grouping on the lines indicated would tend to a more varied life in rural areas."

The "Economic Farm Unit" would be a legal personality, representing a close co-operative association of a nucleus of workers, under expert leadership, and a looser federation with all the independently-owned farms in the neighbourhood. The latter are called by Captain Orpen "Subsidiary Farms," but the term is perhaps misleading. Legally they would be just as independent as the members of any farmers' co-operative society now are. The essential difference would be that the latter could now concentrate their whole energies on production in their own farms, and on extending their productive efforts in new, desirable directions, since all their commercial and processing, and most of their transport problems, would be taken care of by the "Economic Farm Unit." The latter would cultivate the central farm, which might well contain from 500 to 1,000 acres, using all the most modern labour-economising devices and implements. It would maintain a surplus of tractor-power and agricultural machines, and skilled personnel to service them. These would be available to supplement the deficiencies of neighbouring farmer members occupying an area of perhaps 15,000 to 20,000 acres. The manpower of the whole area would be strategically mobilisable at a moment's notice. At times, surplus labour from farm members' families would work in the central farm, to meet a temporary seasonal need, or in the various works of long-term improvement on which labour in slack seasons is always usefully occupied in a really progressive farm. At other times labour from farm members' families would follow the machines and skilled personnel of the Economic Farm Unit around to work on the farms of farmer members. In fact they would go in doing very much what they do at present in the threshing season, only it would be done in a fully-organised, comprehensive manner, and would touch many other useful activities besides threshing. The mutual helpfulness of neighbouring farmers, small, medium and large, is one of the pleasantest features of Irish rural life. The fact that it does exist, in an informal, unorganised way, is, I think, definite proof that the typical Irish farmer is not an incurably isolationist individualist. All that is necessary, if we are to create a brave new world in the Irish countryside, is to build intelligently and imaginatively on this most happy fact of Irish human nature.

Once the Economic Farm Unit got going in any neighbourhood the activities taking place on the various farms round about would be modified and suitably adjusted. The central farm would doubtless maintain a pig-breeding establishment. Just as at Mitchelstown, it could arrange for finishing some thousands of pigs in the most economic manner. Many of these it would doubtless rear on its own premises. But also, as at Mitchelstown, it would buy in bonhams reared by the members. The latter would thus tend to specialise in the rearing of bonhams rather than the finishing of pigs. Similarly the individual farm members could specialise in rearing young cattle, passing them on to the central farm at a suitable age. Horticulture and fruit growing would be encouraged, for the central farm would maintain expensive spraying apparatus, and undertake the processing (by quick freeze and other appropriate methods) of members' vegetables and fruit. There would, in fact, be a continuous nexus of reciprocal exchanges between members and the Economic Farm Unit. Labour services and the hire of machinery would figure in these exchanges, as well as the buying of agricultural requisites from the central store, and the sale of agricultural produce to the Economic Farm Unit. No money need pass with every act of exchange. All that would be necessary would be a record of each transaction and an understanding about its price. It would be a strange thing (once the system was fully developed) if at the end of a quarter or a year the central organisation did not owe its members in most cases substantial amounts. These would be drawn on as required by individual family circumstances. In fact the central organisation would function as an automatic savings bank for its members as well as being their commercial and processing agency.

If one could imagine some hundreds of such farm units operating in every agricultural area in Éire (saturation point would be reached with, perhaps, not more than 400 to 500 such centres) there would remain no problem of agricultural credit for the individual farmer.

The State could if necessary finance the Economic Farm Units through the Agricultural Credit Corporation. Initially, finance from this source would certainly be needed in every area where there was no financially-strong co-operative creamery to undertake this function. But once the system got under way, and showed promise of success, the ordinary commercial banks would be only too glad to provide any additional finance that might be necessary. The rate at which they could afford to lend to such an organisation would compare very favourably with the rate they require from the ordinary farmer borrower. Given good management and a healthy co-operative spirit, the risk to the bank making a loan to the Economic Farm Unit would be quite negligible.

By methods such as these an intensification and diversification of agricultural production could be stimulated widely. The high standard of production already attained in some of our well-run large scale *privately* owned farms reflects itself in a high density of employment per 100 acres and in *increasing* local rural population.

The Department of Statistics has supplied me with statistics of population for certain D.E.D's. where I happen to know that large-scale farming has been intensively carried on for some time. I give them, but not under their names, as I have no authority to reveal the identity of the farms concerned.

	A			B			C		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1871	462	262	200	449	242	207	727	367	360
1881	437	228	209	375	206	169	672	333	339
1891	379	192	187	351	175	176	590	307	283
1901	362	178	184	309	168	141	572	287	285
1911	328	164	164	329	179	150	534	267	267
1926	347	166	181	378	199	179	505	264	241
1936	385	201	184	386	207	179	506	255	251
1946	459	243	216	406	218	188	528	257	271

It would be interesting to make a note of all the rural D.E.D.'s in which population *has* increased in recent decades (there are not so many of them), and then go round the country and find out locally *why* this exceptional phenomenon has taken place. Doubtless in many cases, as in those listed above, the answer would be good intensive agricultural production in large, medium or small farms in the D.E.D.'s in question.

From 5 to 10 persons or more per hundred acres of crops and pastures are regularly employed on our comparatively few farms of any size in which intensive agricultural production is carried on. This is far above the general average for the whole country on "medium" and large farms.

If our salutary agricultural revolution went so far as to double the man-power associated with "large" farms, an additional 93,000 workers would be needed on such farms. The present ratio is 1.56 persons engaged to 100 acres of *total area* on such farms. To increase that ratio to 3 would need 93,000 additional workers, as we have just seen. In fact if a vigorous attempt were made to establish numerous Economic Farm Centres they would soon run into a man-power bottleneck, except to the extent that surplus family labour could be attracted from smaller farms and permanently associated with them. Such a strategic "redeployment" of available agricultural labour would be highly desirable in any case. More than 200 years ago Bishop Berkeley queried:

"Whether the industry of our people employed in foreign lands, while our own are left uncultivated, be not a great loss to the country?"
And also—

"Whether it would not be much better for us, if, instead of sending our men abroad, we would draw men from the neighbouring countries to cultivate our own."

These queries are still topical.

The thoughtful reader will have realised that the nucleus of residential workers permanently associated with the Economic Farm Unit would not be just agricultural labourers in the abstract so to speak. They would live with and work under the supervision of a competent farm manager who knew all that Glasnevin could teach him about agricultural science and had all the other desirable qualifications as well. Each of his fellow-workers would also be a specialist of some kind, though preferably one who was willing to give a hand wherever it was needed. There would be a specialist for pigs, for cows, for dairying, for poultry, for bees, for horti-

culture and for tractors and agricultural machines. There would be abundant though perhaps not continuous work for a carpenter, a blacksmith, an electrician, a cabinet maker, a basket-maker, and men skilled in various other useful crafts. Such craftsmen would reside on the premises and work for the central farm or the immediate neighbourhood as occasion required.

Electric power would be available, for surely such centres would have a high priority in the rural electrification scheme.

With power, skilled management, economic leadership, skilled personnel and surplus labour all available on the spot a rural industrialism, not directly related to agricultural production, would develop by spontaneous generation. For example, motor engineering would be a natural and inevitable outcome of the garage workshop facilities which such a central farm would have to maintain for its own convenience. I can imagine no better foundation for the growth of a very desirable type of rural industrialism.

The workers resident in the mansion would necessarily be unmarried—with the exception of the farm manager. In fact it would be desirable that there should be a “woman of the house” to preside over the domestic amenities and civilise the mere males, as only the right hand of good woman can do. If the farm manager had a wife, and she was prepared to undertake this desirable but arduous role, so much the better. But permanent celibacy is not contemplated for the permanent residential workers. As and when they each entered the holy estate they would have to be provided with cottages conveniently near the central premises. In a growing community their places in the big house would be taken by others.

It is desirable that in each case the resident community of co-operative fellow-workers should have, so to speak, a collective soul from the very beginning. Consequently those chosen to constitute such collective entities should have some important common ideals which would constitute a strong emotional bond between them. For example, enthusiasts for the spread of the Irish language might well be chosen to constitute one or more of such collective entities. It ought to be quite easy to find a dozen or a score of such young enthusiasts who also possessed the necessary crafts and skills, and with these at least one experiment could be made and financed by a sympathetic Government. In the course of their daily work, as also in their leisure, such a community would find ample opportunities for *modifying* their immediate environment in harmony with their Gaelic ideals. Communist cells are a successful method of propaganda organisation for a different kind of ideology. Perhaps the Gaelic League would consider borrowing at least this one idea from that source!

Perhaps this other method would lead to happier results from the point of view of all concerned.

This hour of crisis is also a moment of opportunity and comes as a challenge to us all. It concerns not only individuals and families but collective groups of persons organised for whatever spiritual or secular purpose. It concerns the priest at the altar and the parson in the pulpit as well as the layman in the pew. But most of all, perhaps, it concerns those voluntary associations of individuals, like Muintir na Tire and the Irish Countrywomen's Association, which seek to express a spiritual conception of human society in terms of everyday social and economic relationships, and those other movements, such as the Gaelic League, which strive to influence the quality of the national life and culture as a whole.

In this new Dark Age, when European society is threatened with dissolution and millions of human beings in many countries are struggling to preserve the material conditions of physical survival, all spiritual values are at a heavy discount. And yet there was never a time when it was more important to remember that men—and nations—do not live by bread alone.

It is easier for us to bear this great truth in mind than for other nations which have sunk lower in the scale of human misfortune. Organisations such as those referred to have a special function in associating our spiritual and cultural life with the secular tasks of economic readjustment. Two of them have long been active in this field. But perhaps the Gaelic League can make an even greater contribution, since it is the custodian of a dynamic national ideal as indestructible as the atom. Like the atom too, its latent energy has tremendous potentialities when harnessed to the social and economic purposes of a peaceful national society.

DISCUSSION ON PROFESSOR JOHNSTON'S PAPER.

The vote of thanks was proposed by **Captain Richards-Orpen**.

Mr. P. S. O'Hegarty, in seconding the vote of thanks, said that while the proposal was well thought out and had its points, yet it seemed to him to base the defect of all large-scale planning in that it was based on theoretical considerations and paid insufficient attention to the human element. It seemed clear from the figures quoted in the paper that small holdings kept more people on the land than large ones, and the keeping of people on the land was to him more of a major consideration than was production. It seemed to him, further, that the Irish farmer was non-co-operative by nature in everything which had to do with the management, ownership, and general treatment of his land, and that the utmost that could be hoped for from him in the way of co-operative effort would be some co-operation in what might be termed external matters, as distinct from matters of an internal nature.

Mr. P. Harnett: I wish to support the vote of thanks to Professor Johnston for his very instructive paper. In spite of the many merits of the paper, taking the whole subject of Agricultural Co-operation, I think that Professor Johnston has chosen the more obvious aspect of co-operation in devising a plan or lay-out. Such a plan or lay-out is self evident to the small farmer such as we have in this country. They all know that over the year they are only partly employed on their small farms, they could do other work, they cannot afford or if they had the money they have only temporary use for expensive machinery, they cannot buy in bulk, they cannot as individuals influence to their own advantage the market in which they sell, they cannot provide the constant advice and help of various experts. These factors, well realised by the average farmer, of themselves suggest to him the groundwork of a co-operative system.

What I might call the fully nationalised system of co-operation would probably be the "economic unit." This has been accomplished in Russia by confiscation and by setting up the collective farm. It seems to have been general here and in Great Britain during the middle ages. In Denmark a system of co-operation has brought about advancements which we envy. To my knowledge, although we have co-operative societies in this country there is no true co-operation. Once a society

is formed its management passes over to a manager and a committee the manager being 90 per cent. of the society. The individual members just deliver milk and buy some goods at the creamery shop. The most typical co-operation practiced by our farmers is when they help at the harvest or give the loan of a horse or an implement or very rarely when they share in the buying of an implement.

Co-operation of itself is no panacea, it can only be a success when the co-operating farmers make full use of the scientific knowledge available to them and it is because co-operation led to scientific advancements that the Danes have been so successful. Since money is so often required in order to make the fullest use of scientific knowledge, co-operative farming helps to solve the money problem because in so many cases the expense can be spread out over a large number, the co-operative creamery being a typical example. I believe that if we could bring home to the farmer the "Science" of agriculture, the scientific outlook would (as it naturally does) bring with it the desire to discuss problems with his fellows and thus the urge to co-operate.

I agree, however, with Mr. O'Hegarty that the big, the difficult, the by no means obvious factor in all this is the psychological one. The plan, the scheme I want to be told of is the one which will get farmers to co-operate and in co-operating to improve their methods of production, of buying and of selling.

The President said that he would adopt the unusual course, in the unfortunate absence of Professor Johnston, of asking Captain Richards Orpen to reply to the debate on his behalf. Before doing so he (the President) would make a few observations on his own behalf. The first was of a flippant character which lost what little point it had through the absence of Professor Johnston, and it was to ask him why he put the word "engaged" in inverted commas at the end of page 14. The paper revealed him as possessing a romantic and idealistic temperament so perhaps he uses the word only in its romantic connotation. On the other hand, he (the President) thought that in the same paragraph Professor Johnston should put man-power in inverted commas for, to repeat the old joke, in this case man embraces woman.

The percentages shown at the top of page 15 for changes between 1926 and 1936 in the number of persons engaged on different sizes of farms were given slightly different values in the General Report (Volume IX) of the 1936 Census of Population, Table 22, page 25.

Throughout the paper the lecturer tends to use the term "agricultural land" for the total area of farms. In the Statistics Office, on the other hand, the term "agricultural land" is taken as equivalent to the area under crops and pasture, and the tendency is to use the latter figure for all purposes.

Professor Murphy's well-known surveys have shown that the output per person engaged increases with size of farm. He (the President) hoped that the State would pay Professor Murphy the sincerest form of flattery by instituting on a random basis a great nation-wide system of farm surveys which, it was suggested, would help in increasing the national agricultural output by showing, amongst other things, what the best farmers were able to do in this State. He would recall that perhaps the most remarkable feature of Professor Murphy's results was the wide variability in agricultural output on farms with physically the same characteristics, a variability, therefore, due simply to the personal factor.

It has often struck observers as strange that, despite assiduous fostering

of both agriculture and industry by successive Irish governments, during the period of self-government the volume of production of industry has increased by at least 50 per cent while the volume of production of agriculture shows no real upward trend or, indeed, any trend at all. The reason, basically, is that agriculture for expansion must depend on the export market where competition is unbridled, whereas the expansion of industry was almost entirely in the home market.

He (the President) was much interested in the debate. As to the communistic proclivities of mediaeval Irish agriculture, he thought that the system succeeded possibly because the people had not then experienced the sweetness of private ownership. Though not a historian, he could scarcely agree with the remarks of the last speaker. The Irish then, or perhaps a little earlier, were not merely in the main stream of European culture but *were* the stream.