o-operation

V .-- Results of Co-operation --- Improved Land System --- Rural Education --- Increased Production

It is a noteworthy fact that every observer who writes about the economic condition of Denmark attributes the great agricultural prosperity of its people to the influence of co-operation. As we have seen in the first article of this series, before the beginnings of co-operation, the agricultural industry in Denmark was threatened with grave danger, if not with extinction. Denmark owes very little of her agricultural success to the beneficent gifts of nature. Her soil is not rich enough, nor is her climate of askind-likely to please the farmer. Indeed there are degrees of frost on as many as 116 days in the year, and the number of days on which there is both a rain and a snowfall averages 156 per annum, whilst the average number of hours of sunshine per annum is only 1,200. Yet by the co-operative movement and the close association between the scientist's laboratory and the small holder's farm which the co-operative movement influenced and fostered, the Danish small holder is now in a position which gives serious pause to those who contend that any system of land tenure based upon small holdings is bound to be uneconomic and unprofitable unless great natural advantages obtain.

An Iniquitous Land Tenure System

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Before we go on to summarize the results which the co-operative inovement has achieved for Denmark it will not be out of place to give some account of the Danish system of land tenure. As in Ireland a complete revolution has taken place since the eighties in the method by which land is held. Before the passing of the Acts which enable small holders to be proprietors of their own farms' the Danish small farmers labored under a system which made it almost impossible for them to eke out anything but the scantiest subsistence from the soil. The tithe system hore heavily upon them, and they were obliged when called upon, to give the service of their labor to their superior landlord, with the result that as the time when their own farms required their labor coincided with the time—such as the harvest when the landlord required it, many of the small farmers were unable to attend to the pressing work of their own holdings.

During the latter part of the 19th century, by the establishment of credit unions in order to enable Danish small holders' to purchase their holdings, and by the encouragement of landed proprietors to sell; (a legislative enactment was made enabling proprietors to sell a portion of their enjailed land to their tenants) the state brought it about that the Danish peasantry now own most of their holdings. There is only a small portion (27%) of the total number of farms which is under rent, and as time goes on, even this 27% will become the property of the people.

Encouraging Small Holdings

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In the Acts of 1899, 1904 and 1909, the state provided for the purchase of small holdings on the credit of state money advanced to the farmers in respect of 90 per cent. of the purchase price. The restrictions which the state imposes in the working of this scheme are: that the small holder who desires to buy with state credit must not be under 25 nor over 50 years of age; that he must give a guarantee with two securities that he is a well conducted citizen and capable of managing his farm, and that he has not sufficient capital to purchase the holding without state assistance, but has enough to enable him to work his farm on an seconomic basis. The holding which he proposes to purchase must not be less than two and a half zeres, nor must its purchase price exceed £360.

It is undoubtedly true that many people hold that Denmark is a country more suitable for the large farmer with capital than for the small holder, and although many of the holdings are rather too small for the best results, it is a significant fact that with this very intensive culture, although the price of land has increased since 1870 by 53.8 per cent., the annual value of the harvest has increased during the same period over 100 per cent.

Of the holdings of Denmark only 800 have more than 600 acres; 1,600 are between 300 and 600, while there are 116,000 less than eight acres. The division which the Danish legislature makes of holdings is into manors, possessed by large land owners—farms which are medium holdings; and tenall holdings which are very small farms bought, as we have described, with state aid. It is interesting to note that laborers may purchase small holdings and many observers think that the trend of events in Danish agriculture will lead to the creation of co-operative societies of existing small holders who will co-operate to work their land and will pool, their profits, thus effecting a great saving in the working and overcoming the undoubted disadvantages of working single handed, a property which

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co-operative method is likely to be applied to solving the remaining problems of land tenure. In the official Statistisk Aarloog of Denmark there are interesting tables showing in detail the distribution of co-operative societies amongst the people.

A, Nation of Co-operating Farmers

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In the census taken in July, 1909, we find that in the whole country there were 154,602 farmers members of co-operative dairies, owning between them 1,059,359 cows; of this number, 75,000 owning 500,000 cows were holders of less than 60 acres, whilst there were only 12,000 persons who were members of dairies which were non-co-operative. Affiliated to the co-operative abbatoirs were 86,510 holders owning between them 926,886 pigs; of these, 45,619 people owning 442,405 pigs were holders of propery under 60 acres. In the egg exporting societies there were 48,172 members owning over 3,000,000 hens. The cattle exporting societies, the horse breeding societies, the pig raising societies and the sheep raising societies have between them a membership of about 60,000 members. Turning to the co-operative store societies, we find the total number of members in 1914 was 243,855, of whom

7,225 were in Copenhagen and the remainder in rural districts and country towns.

Few Extremes of Poverty and Riches

When we consider that the population of Denmark is less than three millions these figures will sufficiently indicate that the co-operative movement has taken bessession of the whole people and has spread its not over the whole country. The standard of living is lower, not unnaturally in Denmark, than it is in rich, industrial countries like England. Much more margarine for example, is consumed, although it is an interesting fact that in the budgets of family expenditure compiled by the Danish government, the returns show that the Danish artizan alone, amongst the various classes of the community, consumes more butter than he does margarine. Yet, notwithstanding that the standard of living is low, there are not such extremes of poverty and riches as in great industrial countries. Observers place it on record that the Danish agricultural laborer is on the whole, better clothed, better fed and more comfortably housed than most of his class in Germany, France or England.

Unlike most countries in which it is difficult for the agricultural laborer to become anything else, he may in Denmark, if he is thrifty and attends to his work, avail himself in time of the ofate-aided facilities for obtaining a little property of his own. It has often been observed that the standard of work in agriculture in Denmark is so much higher than that of countries like England and Ireland, that the Danish farmer, in order to raise his subsistence from the soil, has to labor much more strenuously than his competitor with a life well balanced between work and recreation, and that he has no time for the cultivation of his mind. Although it is difficult to strike a happy medium between the inertness which we observe in many countries.

and a life of over-toil, it is probable that the Danish farmer in working so hard as he does, does not exclude all possibilities of making his occupation pleasant and not overburdensome. It is certain indeed that the standard of rural education in Denfiark is much higher than in many agricultural communities. Not only is this so in regard to the usual subjects of education of a rural people, but it is true of their agricultural education as well. From the Royal Agricultural College in Copenhagen, which has 31 professors and 500 pupils, to the adult or popular high school, which have about 8,000 pupils of the agricultural and horticultural schools, to which the state makes a yearly grant of £26,000, every facility is offered to old and young to receive both ordinary and technical education.

In 1913-14, the last year for which we have statistics of the agricultural and the popular high schools, we find that there were 2,000 male and 300 female students in the agricultural schools, and 4,000 male and 3,000. female students in the popular high schools. In the agricultural schools 1,300 pupils were between 18 and 25 and over 400 were over 25 years, whilst in the popular high schools over 5,000 males and females were between 18 and 25 and about 700 were over 25.

In the agriculture, a fair number take the courses in agriculture, horticulture, dairying and management. Most of the students in these schools follow the courses in agriculture, a fair number take the course in dairying and a small number in horticulture. In the popular high schools there are courses in agriculture, a fair number take the course in general knowledge, suitable for those who had little education in their youth, courses in general knowledge, suitable for those who had little education in their youth, courses in general knowledge, suitable for those who had little education in the popular high schools most of the students, as one would suppose, follow the course in general instruction, a good number take the technical classes, about 100 take t

Co-operation at the Base of Danish Industry

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Some Danish industries which have now attained a remarkable size owe their present standard entirely to the co-operative movement. As we have seen in a previous article, it was so with the bacon industry. At the start of the co-operative creameries there were not enough pigs in Denmark to utilize the separated milk, now the Danish bacon industry is in a sound and flourishing state. It was also so with the egg industry, although the egg trade was the last to come under the influence of the co-operative movement, and although a certain amount of leeway so far as membership goes has to be made up, it is nevertheless true that the export of Danish eggs has been tremendously increased by co-operation, whilst the still more important factors of securing quality by grading has been insisted on all through by the co-operative movement societies. The export is done through a central federation called the Danish Egg Export Corporation. To this corporation there are affiliated about 500 societies, with as we have seen above, a total membership of 48,172, owning between them 3,000,000 hens, that is to say, a fourth of the total number of hens-in Denmark. The grading and packing of the eggs are done under the strictest supervision, and heavy fines are imposed by the federation on members who are found negligently or deliberately sending, had eggs for export The egg export trade of Denmark has increased from 800,000 eggs in 1864 to 430,000,000 today. There is no doubt that this large trade his been in the main built up by co-operative methods and that the reputation which Danish graded eggs have is due to the stringent supervision of the export federation.

Eighteen Agricultural Experts Employed

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What gives the Danish co-operative movement its chief significance for other countries is that the Danes realized that agriculture being their main industry, required thorough organization and should not be left under the haphazard methods which prevail still in many countries. The state, the scientists and the farmers themselves, when they once realized the value of co-operation in one branch of the farming industry, were not prepared to let it rest there. They proposed to apply it to every branch, and to aid and stimulate its application by providing the facilities which we have described for education of a technical as well as of a general character, and by placing at the service of the farmers the most authoritative expert advice in matters connected with agriculture which can be secured. Eighteen agricultural experts, two of whom are agricultural consuls, are employed

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