

The Economy of Agriculture in Nova Scotia

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WHAT place does agriculture take in the economy of Nova Scotia? Is it the most important industry? What changes have been brought about in the last quarter of a century? What of the future? These are some of the questions that occur to anyone studying trends in agricultural production and rural population in Nova Scotia.

The relative value of net agriculture production as compared with all industries in Nova Scotia has dropped from 25 per cent in 1928 to 12 per cent in 1949. The number of farms has dropped from 55,873 in 1881 to 23,515 in 1951. The rural population has fallen from 92 per cent in 1871 to 46 per cent in 1951. The proportion of the farm population has been reduced one-half during the twenty-year period 1931-1951—that is, from 34.6 per cent to 17.4 per cent. Facing such facts, one can well ask these questions, and look for answers, and consider as to what is taking place.

It should be stated, however, that the census definition of a farm has changed somewhat. Thus, in the 1951 census, a farm is defined as “an agricultural holding on which agricultural operations are carried out. The holding may consist of a single tract of land or a number of separate tracts held under different tenures. It must be (a) three acres or more in size, or (b) from one to three acres in size with agricultural production in 1950 valued at

\$250 or more.” The 1941 definition includes more small holdings for it covers “all holdings one acre or more in size if the 1940 production was valued at \$50 or more.”

A further insight is given by a study of the 1941 census data. While the number of farms is listed at 32,977, only 11,453 can be classed as commercial. The largest group is “subsistence and combination of subsistence”, numbering 17,514 or 53 per cent, while the so-called part-time farms numbered 4,010. That is, only about one-third of the farms listed as such in the 1941 census could be classed as commercial farms. Of this number, 7,361, or nearly two-thirds, were in the so-called six agricultural counties—namely, Annapolis, Kings, Hants, Colchester, Cumberland and Pictou. It is well to note that five of these counties are bordering on the Bay of Fundy and include areas of dyked lands, while Pictou is a county with several rivers and streams where most of the agricultural land is situated along these water courses. In fact, throughout the Province, the agricultural land is largely confined to dyked lands, meadows, intervals and areas along the many rivers and streams.

THE decrease in number of farms and the change in the relative proportion of the population in rural areas is a part of the change in the economy not only of

the Province but of the country as a whole. The rural community was at one time largely self-sufficient, raising not only the food for the community but also the sheep that provided the wool for a considerable proportion of the clothing and the flax from which linen was spun. The implements used on the farms were made in the community; the carriage shop, the blacksmith shop, the tannery and like industries were all part of the community.

Data from the 1881 census give some idea of the economy of that period, showing the self-sufficiency of our economy. Production of home-made cloth and flannel amounted to 1,329,817 yards; flax and hemp, 63,750 pounds; home-made linen, 68,038 yards. Carding and fulling mills numbered 68; cheese factories, 13; limekilns, 108; blacksmith shops, 915; carriage shops, 239; and tanneries, 151. Maple sugar production totalled 217,481 pounds as compared with 15,191 pounds in 1941; tobacco produced in 1881 totalled 1,216 pounds and hops, 18,677 pounds. The latter were used in the making of yeast for home-made bread.

Our forefathers settled where they could provide a home, where they could live from the hunt and the streams, with a plot of ground for vegetables, land for bread-grains and areas for grazing and hay for cows and sheep. This has all been changed with the industrial revolution which has taken place since then. The scythe, the sickle and the cradle have given way to the mower, the binder and even the combine. The tractor is furthering the change in power and the use of machinery on the farms and is taking the place of oxen and horses. Thus, the number of horses has been reduced more than one-half during the last 70 years, while tractors increased ten times in the last 20 years, from 424 to 4,307. Motor trucks employed on farms have doubled in the last ten years, and milking machines have increased from 41 in 1931 to 1,903 in 1951. The 1951 census reports 16,733 farms with electric power.

Thus it is that the farm which was formerly largely self-sufficient is today a place where products are produced for the market, where much of the goods consumed on

the farm are manufactured elsewhere and where electric and like power units are taking the place of hand and animal power. With the movement of the population to our cities and industrial centres, labour has become increasingly more difficult to hold with very definite wage increases—with the resultant greater use of tractors and other mechanized implements. Many persons living on what were formerly classed as farms are today classed in the census as fishermen, miners, and under other occupations.

This change has not necessarily meant less production. Rather the production for sale off the farms has been increased.

THE cash income from the sale of Nova Scotian farm products has increased from \$12,941,000 in 1939 (the last pre-war year) to \$45,249,000 in 1951. There has though been a very definite change during this period in the relative importance of various products.

Thus, dairy products which came first in 1939 with 24.7 per cent have fallen slightly in relative value to 22.5 per cent, although production in 1951 was valued at \$10,146,000, or more than three times the 1939 production. First place in 1951 went to live-stock (including poultry) which moved from fourth place in relative importance to first place, with 36.9 per cent of the total and a value of \$16,707,000. Fruits, which came second in 1939 with 21.0 per cent, or only slightly under dairy products, had been reduced by 1951 to a value of \$1,497,000, or 3.3 per cent of the total. This division is largely made up of apples and reflects the greatly reduced production in the Annapolis Valley brought about through the loss of the British market during the war and post-war periods.

Eggs, on the other hand, have increased from a value of \$532,000 or 4.1 per cent of the total in 1939, to \$6,313,000 or 14.0 per cent in 1951. Eggs and poultry together account for 19.2 per cent of the total in 1951, or nearly one-fifth as compared with 6.3 per cent in 1939. The old hen has come into her own in the farm economy of the Province and is one indication of our more intensive system of farming.

Hogs marketed cooperatively increased from 4,470 in 1939 to 31,386 in 1951. This number accounts for those shipped through Moncton and sold through the Maritime Cooperative Services, Ltd. The number so shipped during the depth of the depression in 1933 had fallen to 293. Cash income from the sale of hogs increased relatively from 5.3 per cent of the total in 1939 to 10.7 per cent in 1951.

Sheep and lambs, which had increased through cooperative marketings to 18,189 in 1929, decreased to 8,926 in 1951. While this is not total marketings, it does indicate something as to the reduction in the sheep industry, an industry which goes with extensive farming and not intensive. During the period of self-sufficient agriculture, sheep were raised on most farms in order to supply clothing for the family but modern merchandising methods have changed this. Sheep on farms were reduced by 1951 to one-fourth of the number in 1881.

The value of livestock marketed through the Maritime Cooperative Services Ltd. has increased from \$37,380 in 1933 to \$111,579 in 1939, to \$2,261,391 in 1951. Even allowing for the change in the value of the dollar, this is a very large increase. Thus it is that the livestock business has increased its commercial marketing, reflecting the change in the livestock economy of the Province.

ONE of the wartime measures continued during the post-war period by the Federal Government is the freight assistance on feed grains and mill feeds from the head of the Lakes to Eastern Canada and from the Prairies to British Columbia. This policy, adopted in the fall of 1941, was one definitely furthered to aid the livestock industry in Canada and make greater use of western feed grains within the Dominion. Western grown grain was being transported for export shipment at lower freight rates than when the same grains were made available to eastern feeders, thus placing the latter at a disadvantage. The freight assistance policy placed eastern feeders on a basis where expansion of the livestock industry was possible.

Nova Scotia producers, along with others, have taken advantage of the policy. Government assistance during the period from October 1941 to February 29, 1952, was on 1,519,812 tons of feed and amounted to \$13,676,637, or an average of \$8.99 per ton. Loss of this assistance would result in a very definite decrease in the production of livestock and livestock products. Such a loss would be particularly heavy in the poultry and hog industries, both of which, to a very considerable extent, depend on feeds, imported into Nova Scotia.

Definite progress is being made in the "Grassland Program" in the Province. This program has for its purpose the improvement of pastures and the production of grass silage, both of which are aiding in replacing purchased feeds with home production. The acreage in fertilized pastures increased, as taken from the reports of the Agricultural Representatives, from 4,848 acres on 1,598 farms in 1941 to 17,765 acres on 3,710 farms in 1951. This no doubt is by no means a complete statement for all farms. The silo survey shows 395 silos in 1951 as compared with 131 in 1950. Of this number 135 silos were in Kings County, the leading livestock county in the Province, and the county where the most intensive campaign for grass silage has been conducted. That the campaign for the greater use of grass, both as pasture and for winter feeding, has had results is indicated by the fact that the tonnage on which the Federal Government paid freight assistance has decreased from 184,862 tons in 1946 to 127,345 tons in 1951—a reduction of nearly one-third.

One phase of the grassland program has been the campaign for the greater use of lime. While the use of lime has been advocated ever since the time of the Letters of Agricola (1818-19), it is only in recent years that any considerable quantity has been used on Nova Scotia farms; this even though practically all farms in Nova Scotia have an acid soil and require lime for profitable production of most crops, and particularly the legumes which are so essential to livestock production. As late as 1931, only 3,381 tons were used, and in 1939, 14,808 tons. With the outbreak of war, a very definite campaign

was started with the result that by 1951, 79,075 tons of lime were used. It should be stated, however, that even yet many parts of the Province are using very little lime. Thus in 1949 Kings County took nearly one-quarter of the total, while the three Agricultural Representative districts of Kings County, Pictou-North Colchester and Cumberland County took 53 per cent of the total. Farmers using lime in 1951 totalled 4,928. The lime program has seen one of the most modern lime plants in Canada established at Upper Musquodoboit, while the production of blast lime as a by-product of the steel industry at Sydney was started in 1948.

THE apple industry, largely centered in the Annapolis Valley and more particularly in Kings County, was a war casualty. Approximately 80 per cent of the apple production was shipped to the United Kingdom market in pre-war years. With the outbreak of war, this market was cut off in the fall of 1939 and only very limited quantities have been accepted there even during the post-war years.

The Nova Scotia Department of Agriculture and Marketing started a tree-removal campaign in the fall of 1939. This was later aided through the financial assistance of the Canada Department of Agriculture. During the period to date some 874,141 trees have been removed, or close to 60 per cent of the number of trees ten years and over, as recorded in the 1941 census. The program has been for the purpose of reducing production, particularly through the removal of odd varieties and trees too old for profitable production. Whole orchards have been taken out and possible production has been greatly reduced. There has also been started a grafting program with the purpose in view of grafting out varieties that previously were largely grown for the British market and the grafting in of dessert varieties and those required on home markets.

Thus a very definite change is taking place in the apple industry in the Annapolis Valley. More attention is being given to the home market, while the future will possibly see the British market again

opened for us for limited quantities of preferred dessert apples. There is also a possibility of the market in the north-eastern United States being available.

To replace revenue previously derived from apples, the farmers in the Annapolis Valley have turned their attention more specifically to livestock and truck crops. The poultry industry has made its greatest development in this district with approximately 60 per cent of the baby chicks hatched in approved hatcheries being produced in Kings County, and here it is that we find two of the largest poultry establishments in Canada. Sixty per cent of the birds in approved flocks are in the same county.

The hog industry is another livestock industry which has greatly expanded in the Annapolis Valley.

Truck crops have aided in replacing some of the reduction in revenue from apples. Thus it is that we have a Tomato Growers' Association organized for the production and marketing of tomatoes. The Maple Leaf Fruit Company, a local co-operative, has done an outstanding piece of work in packaging and placing on the market certain vegetables. This is a field in which we will see further developments.

The progress in the poultry industry may well be shown by the increase in chicks produced in approved hatcheries. The average of the five pre-war years was 262,616 as compared with 2,337,038 in 1951. What is very significant is that while in 1932 hatchability was only 52.9 per cent, this has been increased by 1946 to 74.3 per cent, which was 5.9 per cent over the Dominion average. This has been brought about through better methods of feeding, incubation and disease control. Nova Scotia has continued to lead the Dominion in per cent hatchability.

Another important factor has been the improvement in the quality of both eggs and poultry. This has very definitely had an effect on consumption and has opened further markets. The quantity of graded poultry has increased from a quarter of a million pounds, as the average of the five pre-war years, to 2,400,000 pounds in 1951.

THE future of the agricultural industry in the Province calls for greater attention being given to proper land utilization and more consideration to the natural advantages of climate and location. Nova Scotia is naturally a grass country and as such our cheapest production of milk, beef, lambs and wool will be made on pasture. This calls for improved pastures through the use of lime and fertilizer and correct management methods. Hay will remain the chief crop with proper attention to the use of lime and fertilizers, resulting in greatly increased yields and increased production of legumes.

While the Province will never be a grain province, still the reseeded of grasslands calls for a certain acreage of grain. More attention to proper drainage as well as lime and fertilizer will materially help.

The dairy industry will continue to be the main branch of Nova Scotia agriculture. Cheese making, which once was a leading branch of the dairy industry, is no longer carried on in the Province. More attention will be given to the production of whole milk for the ever-increasing urban population. This in turn will mean less concern with butter production.

Poultry is coming to be one of the main branches of farming and will continue to increase. This increase goes with the improvement of quality, the packaging of the product and greater attention to the home and near-by markets. Poultry is well adapted to the small farms. Attention should be drawn to its dependence, to at least a considerable extent, in its rapid expansion, on the freight assistance policy of the Federal Government.

Greater diversification in fruits grown and less dependence on apples, with more attention to other tree fruits as well as the various small fruits, will aid in the changed economy, particularly in the Annapolis Valley. Along with this will go the development of the truck crop industry. The home markets are supplied to a considerable extent with imported fruits and vegetables. True, Nova Scotia cannot produce the citrus fruits which our people are demanding but many of the imported

products now being consumed by the urban population, and even rural workers, can be replaced by home-produced products. The processing industry is making progress with this development and will continue so to do.

The tourist industry can well become the most important industry in the Province. Situated as Nova Scotia is in close proximity to the most heavily populated part of the United States, the industrial north-east, the tourist industry is capable of even a greater expansion. The farm population has a vital interest in this industry. The country to the south may maintain tariffs and regulations which tend to restrict the movement of farm products to that country. When, however, their people visit us for rest and recreation, we need to give greater attention to seeing that they are fed on home-grown products. All this entails even more regard to quality and proper packaging of farm products.

Increased mechanization is already well underway. In no phase of the industry is this more evident than in poultry. The production here is, to a very large extent, in large units which further greater mechanization and more efficient use of labour. Rural electrification has already progressed favorably but needs even greater extension. Modern conveniences in the home will aid in keeping on the farms those that properly belong there. Farming today calls not only for those who have a love of the soil and of animals but those who have managerial ability and who are fully informed on the diverse phases of farming. Trained men and women, properly equipped for their life work, are required and attention needs to be given to the training of them in our secondary schools, as well as in our higher institutions of learning. Education is power and nowhere does this apply more than on the farm. The future of agriculture in the Province depends not only on the soil but on the intelligent and informed use of it in the production of crops and livestock for the home and near-by markets.