

quired, then, the small areas must carry on more intensively or enlarge their operations. Extensive methods on small areas cannot avoid inequality of income as compared with larger areas practising

more intensive methods. Any general rise of prices will increase the variations in output and income as it has been expressed in these terms, "Them as has gets."

Nova Scotia Apple Marketing Situation

By A. E. RICHARDS

WHEN war broke out an abundant crop of apples was hanging on the trees in the Annapolis Valley. Under ordinary circumstances 85 per cent of the packed crop would be exported overseas, most of it going to the United Kingdom. Early in September 1939, it was learned that as a result of priority cargoes very little if any space would be available for Nova Scotia apples. Approximately one and one-half million barrels of apples which had cost the orchardist an equal amount in dollars to grow seemed destined to rot on the ground. The prospect was even darker than that for the 2,500 growers and their families had counted on the sale of the crop to help pay their debts and buy their groceries. The Nova Scotia apple industry was the first Canadian major war casualty.

By virtue of the powers conferred under the War Measures Act, the Minister of Agriculture was authorized to take action to meet the emergency. The Minister could not deal with individuals or with separate shipping houses. That would be an impossible administrative task. Following the principle of local control and by the elective ballot of all the apple growers, the Nova Scotia Apple Marketing Board was set up to enter into an agreement with the Dominion Government and act as a central selling agency for the entire crop.

Under government guarantee the grow-

ers received approximately 75 per cent of their pre-war returns for the 1939 crop. The processing plants in pre-war years had handled an average of 400,000 barrels of apples per season. Through plant expansion, double shift and top-speed operation by March 31, 1940, 1,500,000 barrels of fresh apples were evaporated, canned or turned into apple juice and other apple products and their food value conserved.

THE 1940 CROP

In order that growers might use the document as a basis for financing the production of their crop the government concluded an agreement for the marketing of the 1940 crop in April of that year. Under the plan growers were guaranteed 80 per cent of the 3-year (1936-37-38) average net return for the higher grades and sizes of selected varieties which were considered desirable for export. Marketing limitations were applied in order to discourage the production of odd varieties, low grades and small sizes.

Financial position of the grower. In an attempt to determine the relative financial position of growers in the Annapolis Valley during recent years, the Economics Division, Dominion Department of Agriculture, examined and analysed the individual orchard accounts of 55 representative growers for the period 1937-40. The average standing as at December 31 after credit had been allowed for the sale of the entire crop was a debit balance of \$179 in 1936, a credit balance of \$2 in

EDITOR'S NOTE: Dr. A. E. Richards is Economist with the Department of Agriculture in Ottawa. He has given special attention to the problems of the Canadian apple industry and has previously contributed an article on the subject in PUBLIC AFFAIRS of August, 1940, Vol. IV, No. 1.

1937 and \$654 in 1938, a debit balance of \$298 in 1939 and of \$783 in 1940. In making this comparison, it should be pointed out that the average purchases of supplies and cash advances were only \$2,190 in 1940 as compared with \$3,628 in 1939 and \$3,700 in 1938. That is in 1940, growers reduced their expenditures very substantially and dealers were much stricter in their credit policies.

The financial position of the growers in the Annapolis Valley is also reflected in their ability to support community service. School teachers in the apple districts reported difficulty in collecting their current salaries due to unpaid taxes. Arrears of municipal taxes in Kings County were \$139,244 at December 31, 1940, as compared with \$124,174 at the same date in 1939 and were nearly 19 per cent greater than the current levy.

Credit requirements. Loans for agricultural purposes make up about 40 per cent of the total loans made by the chartered banks operating in the Annapolis Valley. During the three years 1937-39 the estimated bank loans for agricultural purposes in the Annapolis Valley averaged about \$1,603,500 per month. Of this amount 82 per cent was made through apple shippers.

Relative expenses of production. The prices of materials entering into the cost of producing apples in the Annapolis Valley had increased by almost 10 per cent in 1940 over those of the previous year. Sharp reductions in the amount of fertilizer and spray materials purchased were reported as general. The patrons of one company from which information was obtained reduced their purchases of fertilizer by 25 per cent and of spray material by over 40 per cent in 1940 as compared with 1939.

THE 1941 CROP

The experience gained in two years of operations enabled a more simplified plan to be worked out for the 1941 crop. Under the terms of the 1941-42 agreement the Dominion Government has agreed to assist the Nova Scotia growers in the marketing of a

maximum quantity of 1,500,000 barrels of apples. This in effect underwrote the total fresh fruit pack of varieties, grades and sizes considered desirable for export and domestic sale. Under the terms of the agreement an average price of \$2.35 per barrel is guaranteed f.o.b. the warehouse for apples sold for fresh consumption from a scheduled list of varieties. That is, if the average price realized for fresh apple sales was \$2.10 per barrel the government would make up the difference, or 25 cents per barrel. The grower does not receive this full amount as packing charges and cost of the barrel, amounting to approximately 75 cents has to be deducted. For schedule apples delivered to the processing plants the Dominion guarantees an average price of \$2.00 per barrel f.o.b. the warehouse. In order to safeguard the grower against the recurrence of a calamity from wind or weather such as he experienced in the 1940 season the government guarantees a return of \$1.30 per barrel for any quantity by which the total of schedule apples sold for fresh consumption or processing may be less than 1,250,000 barrels. This clause was inserted in order to guarantee the minimum maintenance considered necessary to protect the orchard industry. Deficiency payments by the Dominion Government under this clause are expected to approach \$500,000.

According to the records of the Marketing Board, there are 214 varieties of apples grown in the Annapolis Valley. From these a total of 1,701,388 barrels were sold through the Board in the 1939-40 crop season. Of this quantity 1,671,927 barrels or 98.3 per cent were the production of 39 varieties, 19,884 barrels or 1.2 per cent were the production of 19 varieties and 9,579 barrels or approximately one-half of one per cent of the total were produced from 156 varieties. The latter are classed as odd varieties. The record showed that for 156 varieties production for any single variety was under 400 barrels and the average for all was 61 barrels per variety. From 84 of these odd varieties total deliveries amounted to 683 barrels or an average

production of less than 8 barrels per variety. As far as could be judged these odd varieties were well dispersed throughout the Valley. While some have brought quite high prices on the markets in pre-war days, they have always been a nuisance and have added disproportionately to the cost of marketing the entire crop.

A tree census by the Nova Scotia Department of Agriculture shows that out of a total of $1\frac{1}{2}$ million apple trees in the Annapolis Valley, 142,000 or 9 per cent are over 50 years of age and are showing a decline in production. Most trees of this age are liabilities.

It was the view of the growers and the Department in 1939, 1940 and when the agreement for the 1941 crop was prepared in the spring of 1941 that this was the time, when apples were practically worthless without government assistance, to "clean house." The granting of aid from the war appropriations fund to the industry was made contingent on some definite steps being taken to reorganize the industry on a more economic basis by the elimination of aged unproductive trees and certain odd varieties.

Definite steps were taken. In 1939 and 1940 with assistance from the Nova Scotia Government over 50,000 trees of the aged and unwanted variety class were eliminated. The variety committee of the Nova Scotia Fruit Growers' Association and the Marketing Board proposed a schedule of varieties which would receive protection under the government guarantee. The schedule included 41 varieties, 16 of which were acceptable up to 60 per cent of their 1939 production. The Dominion Government accepted the schedule as submitted.

These arrangements were made in April 1941 in order that the growers might be guided in their seasonal cultural practices. At that time an abundant crop was in prospect and a large surplus was expected. The outlook was obscure until early in September when the situation presented an entirely different picture.

Carry-over stocks of evaporated apples

from the 1939 and 1940 crop which appeared high in the spring had almost disappeared by September and the stocks of canned apples were dwindling. Unfavourable weather conditions reduced the estimated crop of 1,623,000 barrels to approximately 1,000,000 barrels. The British Ministry of Food placed an order through the Agricultural Supplies Board for the equivalent of 1,000,000 barrels of evaporated apples, and 160,000 barrels of fresh Nova Scotia apples. It was evident then that if these orders were filled, instead of a surplus there would be an actual shortage of fresh apples for disposal in Canada. Due to unfavourable weather the estimated total Canadian crop has been reduced from 15 million bushels to 10 million bushels. This unpredicted short supply and a strong demand due to increased business activity enhanced prices. Under such conditions the odd varieties have commanded a price far beyond any expected war-time surplus value.

The war is not yet over. Another year the situation may be reversed with a large crop and exports to the United Kingdom reduced. The industry must decide whether it will hold to its course and make a real job of "cleaning house" or be swerved from that course by what is probably a temporary and unusual situation.

Due to loss of export markets, Australia, New Zealand and the United States apple producers are confronted with problems similar to those of the Nova Scotia growers. In the State of Washington a grower-owned and controlled fruit clearing house has been organized. The purpose of the clearing house is to give the growers a larger measure of centralized control in the sale and orderly marketing of their product.

The administrative task of the Marketing Boards in Australia and New Zealand which were set up to acquire and market the entire crop has not been easy due to the opposition of minority groups. The opponents of the scheme believe that the control exercised by the Marketing Boards is an infringement of their personal

liberties and, therefore, should not be tolerated.

In defence of the scheme for controlled marketing, the Assistant Minister of Commerce for Australia stated, "The choice of the Government was between taking control or permitting chaos. We have chosen the more difficult path of control. In such an undertaking it is not possible to please all. Nevertheless, in the circumstances which war has created, it is our view that, whatever advantages and disadvantages accrue from the present situation, they shall be equitably spread over the entire industry and shared by all." . . . "It could not be expected, however, that growers could obtain the pre-war standards."

In each country the depressed condition of the industry has prompted action towards reorganization on a sounder, long range basis. Unwanted varieties are being eliminated and uneconomic orchard land taken out of production. In the North Central Section of the State of Washington under a reconstruction programme 25 per cent of the apple trees have been "pushed over" and eliminated. Much of the land which was planted in the over-optimistic days and has since proven unsuited to apple growing, is being shifted into more adaptable crops and to other uses. Combined with this rehabilitation plan is a debt adjustment and crop financing programme for orchard land with productive possibilities.

The Marketing Board in Nova Scotia is charged with the responsibility of pooling returns from the whole crop and making an equitable distribution to growers. The returns made to growers are based on the pre-war differentials

among varieties. In order to discourage the perpetuation of the unwanted, odd varieties which make up one-half of one per cent of total production the industry decided to discount settlement below pre-war returns. To insure a higher quality of apples being packed for fresh consumption, grading and size differentials were stiffened and colour requirements were raised. In carrying out its authority based on these guiding principles the Nova Scotia Fruit Growers' Association, through the Apple Marketing Board, which represents the industry, is taking a long time view of the problem. In correcting the faults of the industry it is desired that no individual should be seriously injured. The production of any one of the 156 odd varieties is approximately 1/50 of one per cent of total production and to the best of the Variety Committee's knowledge is a small proportion of the production of any individual grower.

Some growers do not view the situation in this way. Under what may be temporarily cleared skies they would like complete freedom of individual action.

The accomplishments of this period doubtless will develop an opinion within the industry as to the continuance or discontinuance of the regulatory features accompanying government assistance. That decision is for the future and will rest with the growers. But while the country is at war, reverses must be expected until the battle is won. If reverses come, further help may be needed. The industry has made an excellent start in "cleaning house." Will it now stop half-way or will it finish the job?