

Such a shift toward industrial employment is characteristic of expanding economies where more rapid growth in productive resources and income than in population leads to a less rapid increase in demand for food than for manufactured products. The Canadian farmer, like his counterpart in other advanced countries, is faced with a scarcity of farm labour and must pay higher wages to attract or retain the needed farm help. He finds a cure for this difficulty in larger scale farming and in greater reliance on machine power than on farm labour. In other days, when large areas of good land were still available for settlement, increased output would have been achieved by an increase in the number of farms. But today it generally means an increase in the size of existing farms and a decrease in opportunities to become a farm operator. The number of farms declined steadily from 728,623 in 1931 to 575,015 in 1956 but the average size of farm increased from 224 acres to 302 in the same period. The actual increase in size of farm is really more pronounced than is indicated by these figures because the average size is held down by an increased number of specialized poultry and tobacco farms and market gardens which require only a small acreage for operation.

Farm mechanization has been the most important contributor to increased productivity and lower costs per unit of output. The quickening of the tempo of mechanization is clearly illustrated by the rise in sales of farm implements and equipment from \$47,700,000 in 1940 and \$64,300,000 in 1945 to a peak of \$250,000,000 in 1952 and a still high level of \$217,000,000 in 1960. However, recourse to mechanization is only one indicator of the Canadian farmer's desire to derive full advantage from new techniques and experimental research. He keeps abreast of the findings made by the Research Branch of the federal Department of Agriculture and other agricultural research agencies, knowing full well that research in soil fertility and utilization, the development of improved breeds and strains of animals and plants and the finding of better methods of coping with pests, diseases and other threats to animals and plants are all designed to increase his output and bring larger returns. The increasing use of commercial fertilizers and pesticides are two examples, among many, of the use of more efficient techniques or methods in farming. Sales of commercial fertilizers to farmers rose from 212,479 tons in 1935 to 819,803 tons in 1953, to 870,539 tons in 1958 and to 935,428 tons in 1960. Sales of pesticides rose from a low value of \$5,400,000 in 1947 to a peak of \$20,200,000 in 1956 and since then have been maintained at a high level.

The availability and use of electricity is another factor that has contributed at least indirectly to increased productivity. It has made a tremendous change in farm life, lessening the harshness and tediousness of farm chores and giving the farm home all the conveniences of the city home. In 1931, only 10.1 p.c. of Canada's 728,623 farms had electric power; 20 years later 51.3 p.c. of the 623,091 farms and in 1956 as much as 73.5 p.c. of the 575,015 farms enjoyed the use of electric power. There was great variation in farm electrification among the provinces in 1951. Newfoundland, Prince Edward Island and the Prairie Provinces had by far the lowest proportions of farms with electric power. Changes from 1951 to 1956 were slight in Newfoundland where 38.1 p.c. of the farms in 1951 and 44.4 p.c. in 1956 had electricity, but were quite sharp in Prince Edward Island from 22.0 p.c. to 39.7 p.c., in Manitoba from 48.1 p.c. to 84.3 p.c., in Saskatchewan from 16.3 p.c. to 42.3 p.c. and in Alberta from 24.6 p.c. to 51.5 p.c. The over-all increase for the three Prairie Provinces was from 25.8 p.c. to 54.4 p.c. In the other provinces, the proportions in 1951 ranged from 60.3 p.c. in New Brunswick to 73.8 p.c. in Ontario and by 1956, 89.1 p.c. of the farms in Ontario, 88.6 p.c. of the farms in Nova Scotia, 88.1 p.c. of those in Quebec, 87.4 p.c. of those in New Brunswick and 81.9 p.c. of those in British Columbia were electrically operated.

Changes in size and type of demand for farm products, technical and managerial innovations on the farm, the enlargement of urban centres and the entry of industry into rural areas are all factors conducive to changes in land use. The most obvious is the transfer of land from farm to non-farm uses. The construction of highways and airports and the spreading out of residential and industrial areas have cut into the formerly cultivated land close to most urban centres. The extent of the loss from such developments