

is not exactly known but there is no doubt that it is of great concern in certain localities. There are other changes in land use that are also of significance, such as the much more intensified use of agricultural land for agricultural production and trends in type of product. For a country the size of Canada, with such varying climates and such a wide variety of types of farming, the patterns and changes in farm land use are equally varied and almost impossible to describe in detail. However, a comparison of the relative contributions of grain crops and of livestock and livestock products to total farm cash income gives a general indication of the changes taking place during the past quarter-century. Livestock's share has increased almost steadily from 43.4 p.c. of the total in the period 1926-30 to 56.5 p.c. in 1941-45 and 59.8 p.c. in 1956-60. Grain crops, on the other hand, have declined almost steadily from 54.0 p.c. of the total in 1926-30 to 39.5 p.c. in 1941-45 and 37.2 p.c. in 1956-60.

Greater productivity and greater demand for farm products generally have led to a rise in the value of farm land, and the modernization of farms together with the larger size of farm enterprises obviously have been accompanied by a rise in the value of capital invested in land, buildings, machinery and livestock. For Canada as a whole, capital invested in the farm business has risen from \$5,600,000,000 in 1945 to \$11,600,000,000 in 1960—investment in land and buildings has risen from \$3,700,000,000 to \$7,400,000,000; investment in machinery from \$827,000,000 to \$2,200,000,000; and investment in livestock from \$1,000,000,000 to \$1,900,000,000.

Farmers in most areas sell their products in their original form to a nearby local assembler and usually transport them to a local market. The general pattern is to specialize in the production of one or two commodities and to sell to firms that specialize in the processing or marketing of these commodities. The extent to which this pattern is established varies by commodity. The wheat producer of the Prairie Provinces has long delivered his wheat to the country elevator—the practice of taking grain to a local mill for conversion into flour had virtually disappeared twenty years ago. Farmers and city people alike buy baker's bread. Feed grains are fed to a considerable extent on the farm where they are produced. Nevertheless, many livestock farmers in Central and Eastern Canada now purchase most of their feed requirements. In these parts of Canada, there has been a long-term trend toward dependence on ready-mixed feeds, especially for poultry and hogs.

Associated with this trend has been the emergence of vertical integration and contract farming in livestock production, a trend that has probably developed farthest in the production of broilers. Producer, hatcheryman, feed dealer, processor and retailer may all be integrated through a series of contracts. Under these arrangements the farmer is supplied with both feed and chicks. He feeds the chicks according to the instructions of the feed dealer and ships out the broilers at the designated time. He usually buys chicks and feed on credit and is more or less guaranteed a fixed sum per broiler, over these costs, when the chickens are marketed. The producer makes his management decision when he signs the production contract and then works under the direction of others. The advantage of such operation is that it permits the planning of a steady flow of output for hatcheries and processing plants and establishes a steady dependable market for the feed dealer and a source of continuous supply for the retailer, all of which contributes to high production efficiency and low production costs. On the other hand, under this form of operation farmers lose some of their traditional independence and mass production under contract arrangements sometimes leads to over-production. However, regardless of these advantages or disadvantages, such integrated arrangements have become the prevailing plan in the production of chicken and turkey broilers, and are found to a smaller extent in the production of eggs, heavy turkeys and hogs. It is difficult to forecast whether integration of production and marketing will proceed as far with these commodities as with broilers but there were evidences of a strong trend in this direction before the institution of the deficiency-payment method of price support; these payments are available for only a limited amount of production from each farm.