This increase is approximately equal to the increase in the price of farm inputs, which rose 24% over the same period. Farm input prices rose rapidly in the early part of the 1980s, with a 14% increase between 1980 and 1981. From 1981 to 1986, there was an additional increase of only 8%. Farm expenses reflected these price trends closely, with an increase of 19% in 1981 and an additional increase of only 4% in the following five-year period.

Although most individual expense categories increased due to higher prices for farm inputs, some expense categories increased in response to changes in quantities purchased. For example, fertilizer expenses rose 40% in the 1980-1986 period, entirely in response to increased fertilizer use since the average price for all types of fertilizer was virtually unchanged. In contrast, pesticide expenses increased over 80% in the same period, as both the quantity of pesticides used and the average price of pesticides increased about 40% over the six-year period.

The price of farm fuels fluctuated dramatically in the 1980s, with sharp increases in the early part of the decade and sharp decreases in 1986. Aggregate fuel costs increased about 50% from 1980 to 1986, due entirely to increased prices, as farm fuel use was little changed through the 1980s. Increased direct rebates of fuel taxes to farmers by federal and provincial governments reduced the net increase in fuel expenses to farmers to 36% over the six-year period.

Wages paid to hired farm labour increased 57% in the six-year period since 1980. Although average total employment in agriculture increased only 1%, according to the Labour Force Survey, the number of paid workers in agriculture rose over 10%. Wages paid to hired farm labour were 35% higher on average from 1980 to 1986.

Interest expenses in the six-year period since 1980 increased only 13% despite total farm debt outstanding which rose 56%. Interest rates were variable through the 1980s, affecting the amount farmers paid to service their debt. High average interest rates in 1981 were followed by sharply lower rates in 1982 and 1983. Rates in the mid-1980s continued to fluctuate. In 1981, interest expenses rose to 19% of total operating expenses. By 1986, this ratio fell back to 14%. In addition to lower market interest rates, federal and provincial government programs in the form of interest rebates and subsidized loan programs helped limit increases in interest expenses.

Crop insurance premiums more than doubled from 1980 to 1986 as the number of farmers purchasing crop insurance and the level of insurance coverage purchased increased. An important factor influencing farmers' total expenses was the level of direct government rebate payments on farm inputs. Farm input rebates were paid on such expenses as farm property taxes, fuels, interest charges and feed. From 1980 to 1986, the level of total rebate payments on farm inputs increased from \$182 million to \$510 million.

Farmers' purchases of new capital goods such as farm machinery and equipment have declined from levels recorded in the early 1980s. Canadian farm machinery sales in 1986 were 18% lower than average sales in the 1979-83 period, in constant dollar terms. Lower market receipts from many crops, lower levels of farmer equity and continued relatively high real interest rates contributed to the declines in real investment in farm machinery and structures in the mid-1980s.

## 9.5 Other federal services

## 9.5.1 Agriculture Canada

Responsibilities of the federal department cover three broad areas: research, promotional and regulatory services and assistance programs. Research aims at solving practical farm problems by applying scientific research to soil management, agricultural engineering, and crop and animal production. Promotional and regulatory services apply to market development, crop and livestock improvement, inspection and grading of agricultural products, control of insect pests and diseases of plants and livestock, and registration of pesticides and fertilizers. Assistance programs provide for price stabilization, compensation, and income security in the event of a crop failure. In a recent reorganization, the Canadian Forestry Service has become part of Agriculture Canada.

## 9.5.2 Grains industry

Government involvement in the grains industry predates Confederation and is a record of policies relating to land use and settlement; transportation; grain storage, handling and forwarding; marketing methods and opportunities; income security; and the many ramifications of international competition and the search for international co-operation in the sale of grain. The federal government's role in the grains industry is carried out by Agriculture Canada, External Affairs Canada and two semi-autonomous bodies which report to Parliament through federal ministers: the Canadian Grain Commission and the Canadian Wheat Board.

The Canadian International Grains Institute contributes to the maintenance and expansion of markets for Canadian grains and oilseeds and their