

potential of surrounding soils and bedrock to reduce acidity) and sulphate deposition.

Of the total estimated surface water area of 51,605 km<sup>2</sup> located in regions sustaining over 20 kg/ha.yr of sulphate deposition, 44,337 km<sup>2</sup> (86%) are in areas with either low or moderate potential to reduce acidity. More than half of this (27,716 km<sup>2</sup>) are in areas of low potential alone. Within the moderate and high deposition zones, the majority of surface water is receiving between 20 and 40 kg/ha.yr of sulphate; only 1.9% (962 km<sup>2</sup>) both receive more than 40 kg/ha.yr sulphate and have low or moderate potential to reduce acidity.

The provincial breakdown indicates that 94% (22,166 km<sup>2</sup>) of the surface water surveyed (i.e., receiving more than 10 kg/ha.yr sulphate) in the Maritimes both receive at least 20 kg/ha.yr of sulphate and have a low or moderate potential to reduce acidity. Although Quebec has the greatest total surface water area (40,559 km<sup>2</sup>) only 28% (11,323 km<sup>2</sup>) are within areas of low and moderate potential to reduce acidity receiving more than 20 kg/ha.yr sulphate. Thirty-six percent (10,848 km<sup>2</sup>) of surface water surveyed in Ontario are in a moderate or high deposition zone combined with a low or moderate potential to reduce acidity.

### 8.3 AGRICULTURAL RESOURCES

The majority of crops listed in the inventory have been selected due to their significance in terms of value or production. The six most important crops are corn, soybeans, wheat, hay, tobacco and potatoes. This basic list has been supplemented by other crops which individually ranked high in the U.S. (cottonlint and sorghum) and Canada (barley and vegetables). Maps which provided crop data on a county or census tract basis were overlaid with deposition information to provide the quantitative crop information. The inventory presented here provides data on crop yields and values by state or province for each of the three deposition zones.

#### 8.3.1 U.S. Agricultural Resources

The growing of agricultural crops is a major economic industry in the United States. Farms in the U.S. in 1978 produced over \$64.9 billion worth of crops (USDA 1980).

The U.S. Department of Agriculture each year publishes its estimates of the previous three years crop statistics in Agricultural Statistics (USDA 1980). In addition to data on agricultural supplies, consumption, costs, and returns, this reference book lists data on acreage, production, yield, and value of 99 crops grown in the U.S. Of these crops, about 34 have been studied for their yield