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OVERVIEW OF AGRICULTURE AND AGRO -FOOD SECTOR IN CANADA

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In Canada, agriculture is an important industry. However, only about 7 % of Canadian land can be cultivated. Other marginal (poorer) land can be used for grazing and breeding cattle. Regarding crop production, some crops, such as tomatoes, hemp and flowers, are grown in greenhouses in urban areas.

Agriculture in Canada

Agriculture is an important industry of Canada's economy. It is diverse and continues to change. In general, Canadian farmers specialize in breeding animals and growing crops. However, Canada also has a considerable amount of aquaculture. (Aquaculture is the breeding of fish and other species that live in water). Another type of agriculture is the cultivation of food, flower, mushroom and hemp crops in greenhouses or warehouses. Some farmers also breed animals to produce fur or grow crops for various purposes (for example, fiber for building materials). Some foods in Canada are organic. This means that animal husbandry and cereals are grown in proven conditions (for example, the use of plant protection products or cattle access) [1].

Canada's federal and provincial governments provide funding to many industries, including agriculture. Government funds support agricultural research, export and trade. They also help farmers adopt new practices and technologies.

Agricultural lands and farms

As mentioned earlier, only a small part of Canada's territory is suitable for agriculture. Most of this land is in Western Canada. However, marginal (poor) land can be used for cattle breeding. Farms in Canada vary by topography, soil type and location. The size of the average Canadian farm has increased over time. At the same time, the number of Canadian farms has declined as farmers and corporations expand their businesses by buying other farms. The average Canadian farm covers about 800 acres (just over 3 km2). Some crop farms in Western Canada cover thousands of acres.

Agricultural regions of Canada

Most crops in Canada are grown in the provinces of Alberta, Saskatchewan and Manitoba. Alberta has the greatest cattle breeding potential of any province. Saskatchewan produces the most durum wheat, canola and lentils. Manitoba has the largest number of pig farms, and the province ranks second in potato production. In British Columbia, farmers grow a large number of fruits, vegetables, aquaculture products, eggs and poultry. This province also has the largest number of grape producers. Ontario has the most poultry farms of any province, the second largest number of hog and dairy farms, and the largest number of hemp operations. Ontario farmers also produce the most corn and apples in Canada. Quebec is the largest producer of blueberries and has the largest number of dairy farms. In Atlantic Canada, agriculture is equally divided between crop production and livestock production (including aquaculture). Potatoes are a popular crop in this region. Atlantic Canada also has several large food producers.

Canadian Agriculture Challenges and Progress

Areas where farmers face challenges include crop protection, soil conservation, labor shortages, climate change and health.

Crop protection

To maximize the yield of field crops, growers apply manure or fertilizers and plant protection products. These products include herbicides (for weeds), insecticides (for insects), and fungicides (for fungal diseases).

Farmers are working to prevent the potential negative effects of these products on the environment. Guidelines developed by industry and government define the relevant norms and conditions for their use.

Soil protection

Farmers use soil conservation practices to protect their land. One example is contour plowing. Rows of crops that run straight up the slope risk accelerating erosion during heavy rain. These rows can act as channels through which rainwater carries the soil. In contrast, plowing that follows the contours of the slope leaves rows that run perpendicular to the flow of water. These rows slow down runoff and prevent erosion.

Labor shortage

Canadian farms are in dire need of additional workers. Many Canadians do not want to work on farms. Many agricultural jobs are seasonal and most Canadians want to work year-round. In some Canadians, farm work is considered too hard or too low-paying. In other cases, farms are located in remote areas where many do not want to live. That's why Canadian farmers have hired temporary workers from other countries for years.

Climate change

Climate change affects farms; for example, heat and drought can adversely affect crops and livestock. At the same time, agriculture emits greenhouse gases that contribute to climate change. Canadian farmers have significantly reduced carbon emissions over the past three decades. However, their total contribution, including other greenhouse gases, remains stable in the 21st century.

Natural hazards for agriculture

Heat, drought, and disease are examples of natural hazards to agriculture. Another natural hazard is flooding. Flooding can threaten farmland along coasts and rivers, and in areas with heavy rain or snow. For example, a spring flood can force farmers to postpone planting for weeks. Culture planted late is more vulnerable to summer heat or autumn frosts. Extreme weather events associated with flooding are likely to increase with climate change [2].

Animal and human health

Farmers, industry and governments have worked together for the past two decades to improve conditions for livestock. In recent years, for example, farmers, industry groups and the government have changed practices to reduce the use of antibiotics because their overuse in livestock production threatens human health.

A farming style called extensive farming can create healthy conditions for farm animals while minimizing pollution. Extensive farming involves minimal use of resources such as plant protection products, labor and machinery. Animals usually have more space than on large industrial farms, where the farming style is considered "intensive". Intensive farming relies heavily on resources to maximize crop yield or animal productivity. It requires more farm investment, but typically uses less land to produce the same amount of food.

References

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