1 Introduction

The Japanese market for imported alfalfa and hay products has shown rapid growth over the past decade, increasing from 719 500 metric tons in 1980 to 1 712 794 metric tons (value: \$C380 million) in 1988. This growth can be attributed to the shortage of grazing land in Japan, declining availability of rice straw for feed, and improved feeding techniques adopted in recent years by Japanese livestock farmers. This report reviews the recent history of this import growth and outlines the market opportunities that exist for Canadian exporters of these products.

2 Import Trends, By Product Type

In recent years, import trends for dehy pellets, cubes and baled hay reflect the changing end-use demand for these products in Japan. Dehy pellets are utilized mainly in compound feeds, the production of which has stabilized at around 26 million metric tons annually. Imports of dehy and suncured pellets have been relatively stable since 1984 at approximately 300 000 metric tons annually.

Hay cube usage has expanded both for direct feeding to livestock and, to a lesser extent, for use in compound feeds. The import trend for cubes continued to be upward during the 1980s, reaching 668 388 metric tons in 1988. Hay cubes have to some extent replaced dehy pellets, particularly in direct feeding to ruminants, where Japanese farmers appear to prefer a longer-fibre, more natural-looking product.

By far the fastest-growing category of imported alfalfa and hay products is that of baled hay, of various types, mixtures and densities. This demand stems from the strong preference shown by Japanese farmers for long-fibre, natural hay products

comprised of legumes and grasses, either alone or mixed, for direct feeding mainly to dairy and beef animals, and to horses.

3 Market Segments

In mid-1989, Japan had about 2 million dairy cattle, 2.65 million beef cattle, 11.9 million swine, 180 million layer chickens and 154 million broiler chickens. (See Table 1.) Alfalfa pellets are used as a protein source in manufactured feeds for all classes of animals and poultry, while hay cubes and baled hay are used mainly for ruminant animals.

In terms of livestock populations, the numbers of livestock and poultry in Japan are very stable with only minor year-to-year fluctuations; this situation is expected to continue in the foreseeable future. However, in the longer term, increased imports of beef, pork, poultry and dairy products may in fact cause decreases in Japanese meat production, which generally speaking is not price-competitive vis-a-vis imported meat products. It is not certain what the long-term impact of recent market liberalization measures will be, but it is expected that Japanese agricultural production in general is more likely to decrease than to increase without further government subsidization measures for Japanese farmers, either through price or income supports. It is a fairly safe prediction that total imports of feed materials may not increase very much over the next five to ten years, but there may be further substitution of long-fibre products for other types particularly for feeding to ruminant animals while manufactured feed production may decline, depending on output trends for pork and poultry production in Japan over the next five to ten years. (See Tables 2 and 3.)

Table 1

Japanese Livestock and Poultry Numbers (Thousands)

Year	Dairy Cows	Beef Cattle	Swine	Layers	Broilers
1987	2 049	2 645	11 354	176 915	155 037
1988	2 017	2 650	11 725	179 396	154 869
1989	2 031	2 651	11 866	179 925	153 852

Source: MAFF.