Policies of Development, Protection and Promotion of New Varieties and Technologies in Japan

Part 2

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Product Specific Policies

(1) Rice

(a) Current situation

Demand for rice for table use has been shrinking due to changes in dietary habits. As household consumption has been particularly shrinking, other table uses such as restaurant and ready-made meals consumption account for more than one-third of rice consumption for table use. Non-table uses such as food manufacturing and feed use are rapidly increasing.

While very good taste are required of rice for household consumption, reasonable taste and price are required of rice for restaurants and ready-made meals consumption and very low price and stable supply are required of rice for food manufacturing and feed use.

However, current rice production is skewed toward high-quality good-taste varieties such as Koshihikari, which alone accounts for 40% of rice production in Japan.

While low-cost production is required of rice for feed use, average yield of rice for feed use is no more than 90% (482kg/10a) of that of rice for table use (530kg/10a).

(b) Basic directions toward creating products with "strengths"
The government aims to establish agricultural structure in which farmland cultivated by professional farmers account for 80% of all agricultural land in the next 10 years. In this context, it is required to respond to the needs of large-scale rice farmers and to provide options (varieties, technologies) for them.

One of the challenges for the large-scale farmers is to avoid the concentration of workload in the spring (planting) and in the autumn (harvesting.) By planting combination of early-ripening varieties (e.g. Milky Summer – an early ripening variety developed from mid-ripening Milky Queen through the use of genetic markers), mid-ripening varieties (e.g. Koshihikari – the most popular good taste variety suitable to household consumption) and late-ripening varieties (e.g. Akidawara - a high yield (700kg/10a) and reasonable taste variety suitable to restaurant/ready-made meals consumption), farmers would be able to spread their workload over time, reduce the idle time of labor and machines and diversify the marketing and weather risks.

As to rice production for feed use, introduction of high yield varieties (e.g. Momiroman (823kg/10a)), direct sowing technology (as opposed to transplanting of seedlings) and pre-harvest field drying of standing crops (as opposed to machine drying) are all expected to reduce the costs and workload of large-scale rice farmers.

(c) Policy targets

- Increase the production of so-called “new demand rice” (rice for flour, feed, whole crop silage, etc.) to 1.5 million tons in next 10 years.

- Reduce the production costs of rice of professional farmers by 40% compared with that of current national average in the next 10 years.

(2) Wheat and barley

(a) Current situation

Looking at the share of domestic wheat in different demand categories, while the share of domestic wheat is around 60% for Japanese style noodle making, it is less than 10% for bakeries and Chinese style noodle making. The potential for increasing the demand for domestic wheat is large in these areas.

In Japan, the harvest time of wheat overlaps with the rainy season and the crops are prone to mold cased diseases. Therefore, the yield and product quality of domestic wheat tends to be unstable.

(b) Basic directions toward creating products with "strengths"
In order to increase the demand for domestic wheat for bakeries and Chinese style noodle making, it is required to develop and disseminate new varieties that adapt to the local climate, have a high yield and are suitable to processing.

It is also important to increase demand for domestic wheat by branding through development of new varieties that are suitable to local unique noodle (e.g. Ra-mugi or Ra-wheat in Fukuoka prefecture that is suitable to ramen noodle making) and other local flour based food, utilization of intellectual property rights and collaboration between producers and users.

(c) Policy targets

- Double the acreage of planting of wheat varieties for bakery and Chinese style noodle making (from 25,400 ha to 50,800 ha) in the next 10 years.

(To be continued)