

Korea's Plan for Promotion of Tomato Exports

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The Ministry of Agriculture, Food and Rural Affairs (MAFRA) announced the plan for developing tomato into a strategic commodity to lead domestic consumption and export on February 24, 2014. MAFRA announced its plan to develop tomatoes into the “second paprika” by resolving problems in the tomato industry, vitalizing the domestic market by raising competitiveness and actively developing export markets. Korea's controlled horticulture industry including tomatoes is a high-value industry that has shown constant growth based on Korea's skilled labor with Information/Communication Technology (ICT) convergence. As for tomatoes, however, Korea's tomato productivity is 20-40% lower than advanced countries and has the problem of high production cost structure attributable to oil heating vulnerable to high oil prices and the use of imported seeds. Therefore, MAFRA plans to increase productivity to 30-60% of advanced countries (The Netherlands) by 2022 and also reduce production costs by reducing the ratio of heating costs in the entire cost from 30-40% to 20-30% through improving energy efficiency. It also plans to expand export to 17,000 tons by 2022, up seven times from 2,437 tons in 2012. The summary of the plan is as follows.

First, it will expand the foundation for improvement of productivity and quality and ease the burden of farmers with regard to construction of facilities. It will develop and provide an ICT-based total environmental control system to farms to optimize the growth environment of facility cultivation and reduce costs. It will provide ICT convergence equipment that enables farms to monitor and control the growth environment to 2,200 farms by 2015 and expand the number to 2,800 farms by 2017. It will establish the foundation for optimizing the cultivation management environment by constructing new greenhouses of 530ha with the application of ICT technology by 2020. It will support the improvement and repairs of obsolete greenhouses to improve productivity. It will provide support for greenhouses only for facilities that meet disaster-resistance standards and establish disaster prevention systems in response to frequent abnormal weather. This can be achieved by revising the specifications for standard design for disaster-resistant horticulture and herbal crop facilities in a way to suit reality. As for greenhouse materials, it will reinforce its supervision of private qualification agencies and induce responsible construction by restricting the participation of companies and farms using poor materials in agricultural projects. For large complexes (organizations) such as export complexes, it will modernize joint nursery facilities and production facilities to produce high-quality tomatoes. To mitigate the burden of farmers with regard to taking loans for construction of new greenhouses and modernized production facilities, it will increase the cap of the surety by the agricultural credit surety fund from the current 1 billion won for individuals and 1.5 billion won for corporations to 3 billion won and 5 billion won, respectively.

Second, it will also expand the reduction of energy and the dissemination of renewable energy facilities to reduce the ratio of heating costs, which account for 30-40% of the entire management costs of controlled horticulture. It will also increase the number of greenhouses equipped with energy-efficient materials (thermal screens, auto switch and water screen equipment) from 3,500 ha in 2013 to 10,050 ha by 2017. It will expand the use of renewable energy sources such as geothermal heat and wood pellets and disseminate geothermal and

water source energy heating system featuring low installation costs. It will also implement the measure of utilizing various energy sources as heating sources for greenhouses, including the drainage heat from power plants and waste heat from incineration facilities.

Third, it will develop a new consumption market with stable supply and demand even in case of increasing supply due to improved productivity. It will create new consumption demands through, for example, supplying species of tomatoes suitable to each purpose, developing recipes and introducing various consumption methods. It will carry out consumer promotion in connection with the introduction of the efficacy and functionality of tomatoes and tomato festivals and events. It will also replace imported tomato materials by financing funds for facilities and operation to companies using domestic tomato as processing materials.

Fourth, it will expand export volume from the current 2,437 tons to 17,000 tons by 2022 through developing new overseas markets with diversification of export destinations and utilization of Hallyu (Korean wave). It will reinforce marketing for the Japanese market, which is geographically close to Korea, to increase the ratio of Korean tomato consumption, and develop tomato into the “second paprika” by expanding the current export focused on cherry tomato to mature tomato. For new overseas markets with high growth potential, such as Russia and Hong Kong, it will build overseas distribution channels and implement local marketing customized to each market to increase the export volume to those destinations. To secure export volume, it will also increase the number of designated special horticulture tomato production complexes and supply export volume in time through contract cultivation.

Fifth, it will establish an advanced distribution system by fostering organizations with autonomous supply and demand capabilities and scaling up and specializing producing areas. It will integrate tomato organizations into a control tower to implement production and distribution autonomously. It will allow consultative bodies to adjust cultivation area and schedule autonomously by region and farm by providing autonomously raised funds and observation data to them in order to prevent excessive shipment and supply export volume stably, realizing the stability of supply and demand. It will finance the facility modernization program only for farms that have signed the joint grading and shipment contract (joint grading and settlement) and the shipment consignment terms and conditions for systemizing and scaling up producing areas. It will increase the number of joint grading and shipment organizations for tomatoes from the current 150 to 200 by 2015.

Lastly, it will develop new species, reduce production costs and support R&D such as development of processing technologies to develop the tomato industry into a high value creative industry. It will invest 26.4 billion won in the Golden Seed Project by 2021 (2.8 billion won for 2014) to develop new domestic seeds with higher productivity and strength against viruses. This project is expected to provide the effect of import substitution of around 9 billion won per year. Additionally, it will develop technologies for reducing production costs and technologies for eco-friendly control of disease and insects, and support the expansion of consumption of tomatoes through development of various processed products.

MAFRA said, “To implement the plan for improving competitiveness of the tomato industry without problems, the government needs to make efforts, but what matters most here is the autonomous efforts of farmers and producer organizations.” MAFRA also requested consumers to participate in consuming healthy domestic tomatoes. For example, tomato is the top 10 healthy food selected by Time Magazine of the U.S. Tomato is rich in lycopene, which

prevents stomach cancer, pancreatic cancer and uterine cancer with its powerful antioxidant effect. Two tomatoes a day will satisfy the required amount of lycopene. Tomato is also known to prevent aging and to be very good in preventing osteoporosis and senile dementia.

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