Cultivating healthy potatoes to produce quality potato chips
How it all started

In the last few years, the Korean mass media repeatedly issued reports on the safety of foods, especially on processed foods. As a result, some consumers have become more critical of the quality and safety of food products, so the government has reacted by increasing food safety requirements. The influence of consumers and mass media, on the one hand, and the government, on the other, represents both a challenge and an opportunity to farmers and food chain stakeholders nowadays.

In response, the food chain started to look for solutions for producing safer and higher-quality crops and foods. For potato chip producers, for example, there is growing pressure for improvements in the quality of the main ingredient, potatoes. HAITAI Confectionery & Foods Co., Ltd., a major player in the Korean potato chip industry, is aiming to increase its market share significantly in the long term by following a quality-focused strategy. In order to produce high-class potatoes for potato chips, HAITAI encourages its contract farmers to use safe and innovative agricultural chemicals in a sound way.

The first contact between HAITAI and Bayer CropScience, one of the most experienced and competent partners in the Korean crop protection industry, occurred in September 2007. A concept for the Food Chain Partnership followed and a three-year memorandum of understanding was agreed on in June 2008.
Who is involved

HAITAI Confectionery & Foods Co., Ltd., headquartered in Seoul, has a potato chip factory in Gangwon province. Its best-known brand of potato chips is Saeng-Saeng, which literally means “fresh chip.” HAITAI aims to produce its high-quality potato chips with 100% locally produced potatoes (up from 70% at present). This strategy differentiates HAITAI from the competition. As a leading potato chip producer, HAITAI has close relationships with, and a direct influence on, numerous contract farmers. To achieve its aim of sourcing higher-quality potatoes, HAITAI arranges regular meetings and training sessions for its contract farmers. HAITAI looked to the Food Chain Partnership with Bayer CropScience as a key contributory factor in achieving their goal of sourcing higher-quality potatoes.

Bayer CropScience, with more than 50 years of experience in the Korean market, is a leading crop protection company. It not only offers innovative crop protection products, but also state-of-the-art crop solutions. Bayer CropScience sees its role in the Food Chain Partnerships as the solution provider for high-quality potato production through developing a tailor-made crop protection program and training farmers in the safe use of agrochemicals, which ultimately leads to effective crop protection and residues below the maximum limits.

Potato-growing farmers want a solution that achieves two goals: effective crop protection with no concerns about agrochemical residues, and increased yields.

Although not directly involved in this Food Chain Partnership, Korean consumers are certainly stakeholders in this process since they are keen to buy safe, healthy, and great-tasting potato chips.
What we aimed to achieve

All the partners in this project agreed that the best way to achieve the goal of supplying the best-quality potato chips to consumers is by encouraging farmers to use good agrochemicals in a more effective and safer manner in order to produce top-quality potatoes.

As Seok Oh Han, the man responsible for the project at HAITAI, pointed out: “We enjoyed the committed partnership with Bayer CropScience to produce best-in-class potatoes.”

The sustainable solution

The various stakeholders share the same goal in this Korean potato project. Their behavior and attitude towards project implementation have been a decisive factor in achieving high-quality potato production according to sustainable agricultural principles.

Bayer CropScience’s role has been to reinforce the added value to every food chain partner by building up the partnership. It is the most effective way to provide farmers with a tailor-made crop protection program in the project region, and encourage them to cultivate the crop according the crop protection programme. The Integrated Crop Management (ICM) solution Bayer CropScience has been pursuing with its partners in the project involved two training courses for farmers in 2008 and a total of six in 2009. In all, 120 farmers have been trained.

Since the GLOBALG.A.P. standard has not yet been introduced in this Korean market, HAITAI has been working to set up a standard crop protection program of its own to govern the safe use of crop protection products. As soon as a localg.a.p. is available, HAITAI is expected to adopt the G.A.P. standard.

The first indication of the project’s success came during the 2008 growing season. The yield from the demo field for the Food Chain Partnership was 15% higher than in comparable potato fields, and the loss rate was the lowest of all fields from which data were taken.
What we plan to achieve

Added value for all the partners in excellent potato chip production:
High quality + Traceability + Increased yields =
More confidence in healthy potato production
Consumers are becoming increasingly conscious of the need for healthy nutrition. Food Chain Partnerships help to supply consumers with high-quality fresh produce, which forms the basis of a healthy diet. But such partnerships can only succeed if they involve every player in the food chain – from the farmer and processor to the exporter or importer and retailer. Bayer CropScience has the global experience and cutting-edge expertise to create a successful partnership at every level.