Innovation for sustainable potato sourcing
The aim is to ensure safe supplies of high-quality potatoes necessary to supply growing consumer needs. Sustainable production of potatoes means making farming more productive, preserving natural resources and contributing to developing communities. Reducing energy consumption, this Food Chain Partnership project particularly focuses on water conservation, worker protection, community development and optimized crop protection.

How it all started

In Chile around 55,000 hectares of potato production are distributed between the North and South of the country. This allows the domestic and industrial market to be supplied throughout the whole year. Since the weather conditions in Chile differ along the country, it is necessary to have an adapted phytosanitary program to protect the crop against diseases and pests through best agricultural practices, and to secure the supply of potatoes.

What we aim to achieve

Studies carried out by the United Nations reveal that the world population will increase to 9 billion in 2050. PepsiCo and Bayer CropScience are committed to supporting sufficient food supplies in the future by implementing sustainable crop solutions all the way from planting to harvesting. An important example in this context has been this Food Chain Partnership.
Who is involved

The **producers** of PepsiCo Chile are known all over the world for their high-level technology and innovation throughout the entire production chain. They have to face various certification schemes, for example from Rainforest Alliance, which include not only productive but also environmental and social aspects.

**PepsiCo** is a multinational US corporation headquartered in Purchase, New York, and manufacturing, marketing and distributing healthy food as well as snack foods, beverages, and other products. PepsiCo was formed in 1965 from the merger of the Pepsi-Cola Company and Frito-Lay, Inc. PepsiCo has since expanded from its namesake product Pepsi to a broader range of food and beverage brands, such as potato chips.

One of **PepsiCo**’s key objectives is to be the world’s No. 1 supplier of food products. To achieve this goal, they give their full support to producers with whom they are constantly seeking to integrate sustainable concepts into the food chain.

**Bayer CropScience Chile** strives to promote innovative and sustainable crop solutions to assure yields through increased productivity. They support farmers not only by providing products and technologies for a more efficient management of resources, but also by advising and training them in the safe use of crop protection products and the principles of sustainable agriculture.

From left to right:
Nelson Campos, Agricultural Manager of PepsiCo Conosur
Guillermo Fuentes, Agricultural Planification of PepsiCo Chile
Vicente Bravo, CRM & Food Chain Manager of Bayer CropScience Chile
Christian Benuchi, Agribusiness Coordinator of PepsiCo Chile
The project started off by sharing produce specifications and identifying the best practices that could be set up by each of the key stakeholders to improve performance. Communication and flexibility were fundamental for establishing optimal operational networks.

The project’s main purpose is to ensure that the growers apply proven sustainable agriculture practices and demonstrate continuous improvement for producing high-quality potatoes. In order to measure progress, a set of indicators were jointly selected from the “Bayer Sustainability Radar” and an action plan drawn up for improved performance:

- Increase the efficiency of the planting surface using precision agriculture
- Minimize the required inputs through a customized plant protection program
- Integrate the most innovative solutions to replace the highest-risk products for the consumer, user and environment
- Train farmers in the safe use of crop protection product and application technology
- Protect water sources by implementing mitigation measures such as Phytobac®
- Improve the welfare of communities supporting the project, making farming more productive
- Implement environmental protection areas (flora and fauna)

The project has a two-year timeline with constant monitoring of the performance in terms of the indicators selected and permanent corrective actions aligned with the stated objectives.
What we achieved

PepsiCo and the potato producers are already very satisfied with the support received from the Bayer CropScience experts throughout the entire project, as the following facts and figures demonstrate:

• Nine growers involved and 2,000 hectares of land
• 16 sustainable agriculture indicators selected for monitoring performance improvement over the years
• All WHO Class I insecticidal formulation products removed from the spraying program
• Over 70 agricultural workers were trained on the safe use of crop protection products, calibration of spraying equipment and spraying program optimization
• High-quality potatoes to meet PepsiCo's specifications and quality requirements
• Contribution to an improvement in sustainable potato production by working all together

Furthermore, a strategic alliance has been established with a Chilean provider of agricultural technology and machinery. In the context of this Food Chain Partnership project with PepsiCo, that Chilean company provides the participating potato farmers with the latest potato harvesting machines, as well as with precision agriculture, both of which support the farmers in producing more efficiently and profitably.

Next steps

In order to pick up the thread of the favorable start to this Food Chain Partnership project with PepsiCo, within the “Bayer Sustainable Radar” project, continuing improvements in the sustainability measures of PepsiCo’s suppliers have been agreed. Furthermore, the project will be expanded to include corn, which PepsiCo also sources.
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.