



Collaborating for sustainable agriculture

In a world where seemingly everybody is connected and everything can be tracked, consumers not only want to know where their food comes from, but also how it is produced. But how can a retailer answer this question, or a processor ensure that a crop is of the right quality? Instead of leaving individual members of the value chain to tackle these daily challenges alone, collaboration is key to success. This is where Bayer's Food Chain Partnership steps in: to guarantee food at reasonable prices and respond to global issues such as food safety and food security. A classic win-win-situation that supports the food industry around the world.

Fresh, green baby broccoli from Australia, tasty oranges from Spain or mangetout and sugar peas from Guatemala – consumers in developed countries can now choose from a wider range of affordable, fresh and processed fruit and vegetables than at any time in history. To cite just one example: the average German supermarket offers between 400 and 500 different fresh fruit and vegetable articles year-round. Demand and

consumption constantly boost the supply of fresh produce: over the last two decades, vegetable production has increased by about 60 percent, while fruit production has doubled. Global annual production has reached about 2.7 billion metric tons.

But variety is not the only thing consumers demand. The food-conscious customer expects supermarket shelves to be stocked with high-quality products at affordable prices year-round. Meanwhile, more and more consumers are considering issues of sustainability and economics. Global agriculture has to answer these demands while, at the same time, dealing with various other issues. Only three





percent of the earth's surface is devoted to arable farming. And, while the area of available agricultural land is finite, the growing global population demands more and more safe and healthy food. The whole food industry has to face these challenges and safeguard the food supply for more than nine billion people in 2050 while, at the same time, preserving the environment and using available resources responsibly. Therefore, representatives of the food value chain should work together. Only through collaboration can farmers, processors, importers, exporters and retailers respond not only to consumer demands, but also to the challenges facing every link in the retail chain.

Partnerships along the value chain

Bayer strives to connect partners all along the food value chain. "Our Food Chain Partnership initiative has become an important and indispensable link between growers, traders, processors and retailers when it comes to improving sustainable practices for farmers and suppliers worldwide," says Liam Condon, Member of the Board of Management of Bayer AG and President of the Crop Science Division. In the last ten years, Bayer's innovative business model has realized many projects around the globe. Currently, about 70 Food Chain Managers from Bayer are working in 30 countries around the world, focusing on more than 50 different crops – from berries in Portugal, through gherkins in Turkey, to potatoes in Colombia. The common goal of these Food Chain Partnership projects is to improve yields and harvest high-quality products based on sustainable agricultural principles for the benefit of all partners involved.



Bayer works as a facilitator and sharer of expertise regarding good agricultural practices, certification support and residue management, for example. "What started ten years ago mainly as reaction to public concerns about food safety – especially residues of crop protection products – has grown into something much bigger," explains Silke Friebe, head of Global Food Chain Management at Bayer's Crop Science division. "It has become a concept of strong collaboration and partnership between Bayer and the food value chain, to work together towards highly important common goals: sustainable agriculture, food safety and food security." The company collaborates with importers and exporters and helps growers to meet required quality standards. This way, Bayer enables farmers to gain access to both local and international markets.

Certification to enter global markets

"In a global marketplace, trust is a key element. From the farm in one country to the consumer in another country is a long distance. GLOBALG.A.P. meets this requirement to bring trust to the farm level and carry this all the way through the supply chain to the consumer," says Kristian Moeller, CEO of GLOBALG.A.P. Farmers who seek access to professional local and global food markets need to achieve demanding certifications – GLOBALG.A.P. is one of them. "A GLOBALG.A.P. certificate is

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often seen as a license to supply, because a producer can demonstrate that they are in compliance with all the requirements that are embedded in this standard. It helps access new markets – local and in particular international markets,” Kristian Moeller adds. One challenge to broad implementation remains: smallholder farmers in developing countries particularly lack expertise in good agricultural practices and need support and advice on crop growing during the season. GLOBALG.A.P. has therefore developed local assessment schemes, called localg.a.p., as an entry level for gradual recognition. Bayer partnered up with GLOBALG.A.P. and the two have now intensified their cooperation with the so-called new BayG.A.P. service program, customized to the needs of the new localg.a.p. standards. The program has three main pillars: intensive group training, individualized crop advice and Farm Assurance with localg.a.p. Participating farmers benefit from certified high-quality products that they can sell at higher prices, which contributes to higher farm incomes, while traders and retailers benefit from consistently high-quality products, safety and traceability.

“The demand for certified products is constantly increasing,” says Edgar Garcia. This Guatemalan farmer is specialized in legumes and exports to North America and Europe. Certifications are a great door-opener for farmers. “It is indispensable to establish alliances with partners that support us in fulfilling the quality requirements demanded by our customers. In this way, we can produce high-quality food in a sustainable manner,” he explains. By now, Garcia’s farming business Siesa has received three certifications: Global G.A.P., Tesco Nurture (for Tesco supermarkets in the United Kingdom) and From Field to Fork by Marks & Spencer.



Transparency to ensure quality

“Consumers want to know where their food is coming from. The big challenge for us, especially in developing markets, is the reliable sourcing of products in terms of volume, safety and quality,” says Karolina Otto, head of sustainability at Metro AG. The retailer Metro is one of the global companies that collaborates with Bayer in several Food Chain Partnership projects around the globe. “Together with Bayer, we provide support to our supplier partners: we have helped them to improve their produce to make it internationally marketable and helped them to implement best production practices.” This increased traceability and transparency allows Metro to identify weak spots in the supply chain and build up consumer confidence in their produce. “The partnership with Bayer helped us a lot to establish close collaborations with local producers,” explains Karolina Otto.

Help farmers help themselves

“To address the needs of our growers, we start by understanding the needs of the food value chain and the consumers at the very end of it,” says Silke Friebe. “Having this understanding allows us to provide growers with the tools to meet those needs, from planting to harvest and storage.” Besides regulatory standards and certifications, Bayer also supports farmers in their daily work. With its deep knowledge of crops as well as its know-how in tackling farming challenges such as pests and fungal diseases, or weeds competing with crops for resources like water, soil and sunlight, the company is focused on providing growers with new technology and expert advice.

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With customized, integrated solutions and effective traditional and biological crop protection products, Bayer provides growers around the globe with key assets for higher yields and helps them to meet the demands of today's consumers. One of them is John Said of Fresh Select. This Australian farmer has more than 40 years of experience in growing cauliflower, lettuce, broccoli and other vegetables. His family farm business started to work together with Bayer in 2012. He knows: "Consumer demand needs more attention." When asked about the benefits of this partnership, he said: "Bayer is thinking well outside the box. They are not only focused on sales but also what is right for the community. Their social responsibility extends into their product development, so they are always very conscious about the consumer and the farmer."

Solutions for individual needs

The Food Chain Managers also meet on-site with farmers to give them hands-on advice on ways of implementing biodiversity or innovative water management solutions, for instance. Gregorio Aznar of Antas Export in Spain has worked with Bayer since 2014. His family business in the south of the European sunshine state produces 12,000-14,000 metric tons of citrus fruit each year, exporting them mainly to countries like Germany and Italy. Because of the dryness of the region, Antas Export has to grow its plants with less water. For this reason, the grower implemented a better irrigation technology in cooperation with Bayer. "We work closely with the Food Chain managers. They visit our farm regularly and give us good advice. It feels like they are almost part of our family," Gregorio Aznar says.

These are just a few examples of the many ways in which the Food Chain Partnership brings together partners along the value chain. Bayer is currently in the process of initiating new projects to include more countries and arable crops like cereals and rice. "Given the strong positive feedback we have received from our customers, we intend to further expand this initiative over the coming years," says Liam Condon.

