



Science For A Better Life

Improving **quantity**
and **quality** to meet
market requirements



food chain partnership



The Serbian Potato Project



How it all started

Potatoes are a very important crop in Serbia since they are one of the country's staple foods. Although potatoes are grown almost everywhere in Serbia, the main areas are in the northern and western parts of the country. Potatoes are grown on around 50,000 hectares of land and the area under cultivation is relatively stable. They are usually planted in April and May, and harvested in September and October.

The market requirements potato farmers have to fulfill are first, produce sufficient quantities of potatoes to meet the market needs; secondly, achieve the required quality in terms of size, color, shape and firmness; thirdly, ensure adequate storage and packaging. Professional and market-oriented potato farmers also have to comply with HACCP (Hazard Analysis and Critical Control Points) and other standards, which require labeling and full traceability. Last but not least, one of the crucial requirements for all potato farmers is to ensure the optimal use of plant protection products and fertilizers to guarantee the safe production of healthy potatoes.

The company involved in this Food Chain Partnership project, Agro-Mobil, intended to start a commercial relationship with a wholesale chain in Serbia, Metro Cash & Carry. To this end, it was necessary to improve potato production in terms of both quantity and quality. Since Agro-Mobil had worked with Bayer CropScience before, they approached Bayer to cooperate in a Food Chain Partnership project to achieve these goals. The project was initiated in 2009 and fully implemented in 2010.

What we aim to achieve

The main goal of all those involved in this project is to produce high-quality potatoes and implement the required standards to increase the marketability and competitiveness of these potatoes for domestic supermarkets and to gain additional export opportunities. This overriding goal can be broken down into the following specific aims:

- Ensure stable production in quantity terms
- Meet the requirements of consistent high quality; shape, firm tubers of the required color and size; adequately stored and packaged; and reduce the level of residues in the final produce
- Optimize the spraying program
- Improve the farmers' technical knowledge and awareness of the importance of producing healthy and nutritious potatoes
- Ensure full traceability and transparency

As Agro-Mobil has already implemented HACCP and ISO 9001:2001 standard, another priority is the implementation of the IFS standards, as required by Metro Cash & Carry.



Who is involved

Agro-Mobil is a potato cooperative located in West Serbia, right at the heart of the most intensive potato-growing area. The company, which was set up in 1992, is mainly involved in the production, processing and marketing of seed potatoes and mercantile potatoes. Some 60 farmers form the core of this potato cooperative and are involved in the decision-making process. Agro-Mobil supplies the raw materials for potato production, provides technical assistance, takes care of warehousing, storage, processing, sales and marketing, and equips the farms with tractors and other mechanical equipment. Furthermore, they supply the farmers with potato seeds, fertilizers and crop protection products, and Agro-Mobil agronomists conduct regular field visits to advise farmers on site. Agro-Mobil's business is driven by the following factors:

- Readiness to accept and implement new technologies and solutions
- Need for continuous training of employees
- Sustainable business approach in accordance with quality standards and both environmental and legislative requirements
- Social responsibility

METRO GROUP is one of the most important international retailing companies with some 280,000 employees working at over 2,100 outlets in 33 countries in Europe, Africa and Asia. Metro Cash & Carry is the leading international player in self-service wholesale: customer-focused, international and innovative. The concept is oriented towards helping customers to successfully run their own businesses. Metro Cash & Carry, founded in 1964 in Germany, quickly spread to many countries in Europe, Asia and Northern Africa. Specifically, Metro Cash & Carry is focused on the dynamic growth markets in Asia and Eastern Europe as well as in the Middle East and Northern Africa. The majority of all new business locations are established in these growth regions.

Bayer CropScience is recognized in Serbia both as a leading innovative company and as a partner in providing comprehensive crop solutions for high-quality production through the development of customized spraying calendars. Bayer CropScience also runs training programs for farmers on the safe use of agrochemicals and the optimal use of plant protection products. Moreover, Bayer CropScience experts pay regular visits to farmers and provide them with technical support and advice.



The sustainable solution

This Food Chain Partnership project involved the development and implementation of a sustainable solution to meet the market's qualitative and quantitative requirements. The main pressure on potatoes in Serbia is caused by two diseases – late blight and early blight – and by the Colorado beetle. Farmers also have to deal with a broad range of weeds affecting the plant.

After analysis and discussion between Bayer CropScience and Agro-Mobil a customized crop protection program was developed and implemented. In order to control the mentioned pest and disease pressure, Bayer CropScience specialists recommended the use of plant protection products, such as the fungicides Consentio® (for early and late blight) and Infinito® (for late blight), the herbicides Sencor® (for weed control) and Basta® (for desiccation), as well as the insecticide Proteus® (for Colorado beetle). The overall farm activities were monitored during the growing season, enabling adaptations of the spraying program to the actual conditions in the field.

Bayer CropScience also organized regular programs for the farmers in order to train them on growing technology, the optimal and safe use of plant protection products, efficient spraying programs and proper application techniques. The training programs were followed by regular field visits of Bayer experts to provide farmers with further guidance about crop production and protection.



What we achieved

Through this successful Food Chain Partnership project the quantities and qualities of the potatoes grown complied with the market's requirements. Residue analyses have confirmed that the potatoes are healthy and safe – complying fully with MRL regulations. Hence Metro Cash & Carry Serbia decided to sell potatoes produced by Agro-Mobil under their own brand name, Horeca. During the 2010/11 season, Agro-Mobil became Metro's biggest supplier, delivering with 1,100 metric tons of potatoes – all produced in the frame of Food Chain Partnership.

The key factors in the success of this project were as follows:

- Open dialog and discussions
- Regular exchange of information and experience
- Creative atmosphere for new ideas and improvements
- Transparency
- Mutual trust

The project delivered clear added value for both Agro-Mobil and the potato farmers. Moreover, by providing potatoes of the required quality and in the quantities needed, the project generated added value for all food chain stakeholders: Metro Cash & Carry, Serbian retailers and, in the final analysis, consumers in Serbia as well. Last but not least, the mutual trust of all those involved in the project has been greatly strengthened, and this is the key element for future success.

Next steps

As a result of the successes so far, Agro-Mobil plans to supply Metro with 1,500 metric tons of potatoes in the 2011/12 season.



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Mirko Radović
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center:
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food chain partnership



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.



Bayer CropScience

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