



## Market oriented training on standards

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The project aimed to strengthen the certification system of accredited services and build capacity for the implementation of SPS measures for export-oriented crops in Nicaragua.

A result story on the project is available [here](#).

### STDF/PG/155

#### Status

Completed

#### Start Date

01/06/2010

#### End Date

31/12/2012

#### Project Value (US\$)

\$764,644

#### STDF Contribution (US\$)

\$560,994

#### Beneficiaries

Nicaragua

#### Implementing Entities

Inter-American Institute for Cooperation on Agriculture (IICA)

#### Partners

Nicaraguan Institute for Farming Technology (INTA)

Ministry of Agriculture (MAGFOR), Nicaragua

Ministry of Development, Industry and Trade (MIFIC), Nicaragua

National Accreditation Office (ONA), Nicaragua

National Agrarian University (UNA), Nicaragua

#### Background

Nicaragua has undergone a dynamic agricultural transformation with expanded exports towards Dominican Republic–Central America Free Trade Agreement (CAFTA) and EU markets, and the growth of supermarkets on the domestic market. As part of this transformation, farmers needed to meet more stringent requirements on quality and food safety, including international SPS measures. Important market opportunities which have been seized by small, medium and large Nicaraguan farmer groups have been at risk of being lost due to lack of awareness and know-how on how to meet international SPS measures. They needed also to get their farms certified, which in turn would help to protect the supply chain and ensure the consumers' health. Market-

oriented SPS training services were therefore essential to strengthen capacity gaps on Good Agricultural Practices (GAP) at governmental, academic and farmer cooperative level. This would be obtained through practical demonstrations to farmers (the use of in-field showcase plots), training courses developed by the project with the support of academia and certification of trainers using a standardised diploma course and a persons' competence certification system, as developed by the project.

## **Results**

### ***Increased awareness on SPS measures and improved agricultural practices***

Farmers and their families, agricultural technicians, government officers, university professors and accreditation personnel have all benefitted from the project, as a result their awareness on SPS and knowledge on GAP has improved. Farmers developed a better approach to reduce risks and dangers of chemically contaminated foods, as they became aware of how this affects health, environment and trade value. Producers exposed to the project have adopted better agronomic, health and safety measures, as well as pesticide handling and hygiene practices. This has led to increased crops' quality, better soil management, fertilization, integrated pest management, hygienic and harvesting/packing practices, safer working conditions, more environmental-friendly pesticide container disposals, reduced pesticide use, and cleaner water sources.

### ***Boosted market access***

Through greater confidence in the product sourced, the country's SPS profile was enhanced, allowing continued access to export markets, with the possibility to access new ones. The project has also formed an excellent base to extend GAP awareness and implementation to other crops/products and a step towards the overall institutional and private sector strengthening of the national SPS measures management system. For instance, pitahaya is now exported by around 60 farmers thanks to the project as a spillover effect. Trade volumes of sesame seeds saw a 48.5% growth in volume and 16.5% increase in price between 2013-2015.

The project paved the way for the GAP certification requirement for farmers. With the follow-up support, the number of GAP-certified farms rose from 3 to 125. Several farmers became certified following the insistence of national buyers (supermarkets, such as Walmart) or international customers that require compliance with GAP as part of their due diligence.

### ***High quality resources and trainings to build SPS capacity***

Thanks to a baseline study covering up to 385 producers, key challenges have been identified along the production and marketing phases of peanuts, beans, okra, root crops and tubers. Additionally, the exercise served to evaluate the geographical and structural spread of stakeholders working in the area.

Building upon the results of the study and with the support of IICA, MAGFOR and selected Nicaraguan cooperatives, 35 demonstration plots were built covering 11 provinces and involving 21 producer organizations and 3 universities. Thanks to this "learning by doing" approach, farmers were actively engaged in capacity building sessions where the showcase plots served as a learning tool in the process of GAP implementation.

SPS training units were set up to run trainings for farmer groups with practical manuals and user-friendly resources such as leaflets and videos. Manuals assist users on the implementation of GAP in general farming and also in four different crops (beans, peanuts, root crops and okra), as well as the implementation of good manufacturing practices (GMP), standard operating procedures (SOPs) and HACCP. The technical training reached out 6,347 farmers (30% of them women) and producers through 277 training events. Separately, 39 different trainings took place at participating universities where 1,043 students were reached out. Five different GAP "field days" were organized to bring together students and farmers, visiting exemplary organizations and thereby enriching knowledge uptake through discussions on GAP implementation issues.

Following the project, the infrastructure set up at the demonstration plots remains and is being used by the producers as a model of how to work following good practices on their own and in neighbouring community farms. Small groups of students continue to be trained at the facilities set up at the universities.

### ***Continuous dissemination of knowledge***

A university diploma curriculum - "The Diploma in Quality, Safety and Traceability of Agricultural Products" - was developed with the cooperation of project partners. 35 national experts were identified as diploma candidates and participated as trainers of farmers' groups in the production areas. Over 700 students have since received education on GAP and SPS, which in turn is supporting a more robust food production system nationwide. The courses still run today and continue to train students on GAP.

The knowledge dissemination is still ensured through the developed manuals, materials, videos, publication, leaflets, and

infrastructure, spreading the importance of good practices to other stakeholders who were not involved in the project.

### ***The establishment of certification bodies***

Based on ISO 17024 (standard for personnel certification programmes), the project aimed to establish two certification bodies of personnel trained in SPS related issues, which would have been housed in the UNA and in the MAGFOR. 65 professionals were trained on ISO 17024, including inspectors of the MAGFOR, personnel of the INTA, IICA and universities. A process of exchange amongst officials from the ONA, MIFIC, MAGFOR, UNA and IICA was carried out, including a study trip to Argentina. Thanks to the cooperation with the Argentine Accreditation Organization, the study trip served as a learning exercise on the implementation of the ISO 17024 standard. The certification system and procedure to verify the competencies of the person certification bodies were not finalised during the project implementation. However, the capacity of the ONA was strengthened and prepared for the next step in the development of accreditation services to person certification bodies.

### ***Evaluating the public sector's performance***

IICA's "Performance, Vision and Strategy" (PVS) tool was applied as part of the evaluation and strengthening of the public sector. The tool helped to gather data across all the departments of IPSA (Institute for Protection of Plant & Animal Health, within MAGFOR) – heads of departments, officials, inspectors and heads of regional offices - as well as 60 inspectors from the field. The results allowed planning and redirection of plant health actions in the medium term, ultimately improving plant health services. Due to the sensitivity of the information obtained, the results were not published.

### **Recommendations**

The project results can be consolidated further through follow up activities. These could include support for the MAGFOR in training of its staff. Building upon the "learning by doing" approach, the field demonstration plots can be extended further to other key demand-driven commercial crops (i.e. beef, milk) or to new geographic areas. The project helped to shape a core group of trainees who can scale up the results to strengthen further the efforts at national level and to boost the implementation of GAP, GMP and HACCP nationwide.

As a key to advance the local knowledge, publication of more crop-specific GAP manuals, continuous training of qualified staff, and additional training of trainers to foster even more the understanding of GAP and SPS measures should be considered moving forward.

A follow-up project to address the full development of the ONA as an accreditation body for personnel certification bodies should be prioritized by the country. This should be coordinated by the MIFIC, MAGFOR and IICA and could be supported by other interested donors such as the EU.