



# Center for Agribusiness and Rural Development MONTHLY NEWSLETTER

Volume 2, Issue 10, 2010



## New Food Safety Initiative in Armenia: Establishment of a Process Authority

Canned foods must be microbiologically stable. This state has been defined as the condition achieved by the application of heat, sufficient alone or in combination with other appropriate treatments, to render the food free from microorganisms capable of growing in the food at normal nonrefrigerated conditions at which the food is likely to be held during distribution and storage. Of the many critical control points in the canning of a food, none is more critical than thermal processing. Scheduled processes for canned foods should be established by competent persons that have an expert knowledge of thermal processing and acidification. They should have adequate facilities for making such determinations by employing accepted scientific methods. Currently, this requirement is not properly addressed in Armenia. Thermal processes are established based on old Soviet State Standards (GOSTs). They include process establishments for standard type of products that have standard product formulation, are packaged in standard size and shape jars and are processed in standard type of retorts. However, currently neither of these parameters remained unchanged. Based on new market demands products' formulation, as well as the packaging has changed. Furthermore, various parts of retorts (valves, tubes, baskets, etc) have changed as well, since spare parts to replace the worn out ones are no longer available and parts with different design (sometimes handmade) are being used instead. However, according to international regulations for canned foods (Codex Alimentarius, FDA, USDA), process schedule should be developed for each individual product, in each container size and shape, processed in a specific processing system. Thus, this critical food safety requirement is not being observed by local canned food producers.



To address this issue, CARD and LSU, within the framework of food safety project supported by USDA, initiated "Establishment of Process Authority in Armenia" activity. Initially, a US Process Authority TechniCal was identified by LSU to provide consulting and training services. Then, two employees from CARD attended training in the US. It was a special course conducted by the Grocery Manufacturers Association (GMA) in Washington, DC and a special on-the-job training by TechniCal. The latter training was conducted in San Antonio, where TechniCal provided hands on training in instrumentation of retorts/autoclaves; temperature distribution, data collection, and data analysis as a prelude to establishing a process schedule. In May 2010, CARD specialists participated in Basic Thermal Processing course, again conducted by TechniCal. In addition, equipment and software necessary to conduct tempera-

ture distribution (TD) and heat penetration (HP) studies required for process establishment were purchased from the same Company.

In general, TechniCal's services and products are used by food processors both in the U.S. and in foreign countries in order to meet the U.S. Food and Drug Administrations' food safety regulations. TechniCAL's services and products are especially valuable to processors in foreign countries as food safety to the level expected by the US FDA is usually a concern. Therefore, foreign companies quite often use Company's services, products, and training to improve their operations and make their exported product more in compliance with the US FDA regulations, thereby, making their exports more valuable.

In August 2010, TechniCal has dispatched Rommel Dorado to work with CARD specialists at local canneries. The selected companies either already export or are intended to export their production to the US and these studies should have helped them to comply with FDA regulations for canned foods. In addition, the activity served as a continuation of a series of hands-on trainings for CARD specialists. Particularly, CARD specialists learned how to conduct the HP and TD studies for local products, processed in local retorts using equipment set, purchased from TechniCAL. In addition, the training included performance of retort surveys.



One of the major observations made during the on-the-job training was that HP and TD studies that are required for the process establishment have never been conducted for any of the low acid or acidified products produced in these, as well as other canneries in the country. This observation is true not only regarding the two canneries visited on this assignment but it can be generalized for other canneries based on 13 years of experience of CARD specialists in this area.

The absence of locally available process authorities that have expert knowledge and equipment to conduct such studies and lack of knowledge of thermal processing requirements for acidified or low-acid foods in hermetically sealed containers among the production supervisors are the main causes for such violations. Therefore, it is strongly recommended that USDA continues supporting CARD in this initiative with an ultimate goal of establishing a process authority in the country. Particularly, it would be very important to consider conducting another on-the-job training by TechniCal to teach CARD specialists performing Plant Audits for compliance with FDA regulations for low-acid and acidified canned foods. Finally, it is recommended that CARD establishes a formal relationship with TechniCal for future process establishment and FDA filing work in Armenia.

## Building Cross-Border Cooperation

October 7<sup>th</sup> 2010 was a special day for Gyumri: already seventh time the traditional EXPO was organized for the local producers. This year the Autumn Fair EXPO 2010 was organized in the framework of “Poverty Reduction and Confidence-building in Border Areas of Georgia and Armenia by Strengthening Civil Societies in Sustainable Rural Development” (STAGE II) project with joint efforts of Shirak Competitiveness Centre and CARD Foundation.

The aim of the Autumn Fair on one hand was to address cross-border trade issues and on the other hand create an opportunity for cross-border cultural contacts. One agricultural fair was organized in Georgia in early November 2009 bringing together Georgian, ethnic and Armenian producers together, and this year it was organized in Armenia in a larger scope inviting more people and producers to this special event.

Over 45 producers from Armenia and Georgia had an opportunity to demonstrate their products of dairy, confectionary, textile, fish-breeding, beverages, shoe production, honey production, construction, herbal production and handicrafts sectors.

The fair was coupled with a cultural event involving local folklore teams and modern dance groups performing Armenian and Georgian modern and traditional dances and songs.



The cultural performances ensured lively environment among all invitees and producers. They shared their experiences, challenges and achievements during their long way of establishing their businesses and also established fundaments for future cooperation.

Linking the EXPO and future cooperation under the STAGE II Project, a workshop on “Coalition Building, Networking and Advocacy” was organized for the target CSOs from Armenia and Georgia after the Autumn Fair EXPO 2010. The workshop aimed at contributing to the identification of the advocacy issues in the communities of the northern Armenia and southern Georgia, respectively in Lori, Shirak and Tavush, and Smatskhe-Javakheti and Kvemo-Kartli, strengthening the capacities of the CSO representatives from the aforementioned regions and supporting them in developing advocacy strategies and planning campaigns.

As a result of this workshop, three strategic dimensions were identified and step by step developed for advocacy campaign aiming at (a) improving animal breeding and animal health services provided by the state in the areas of Samtskhe-Javakheti and Kvemo-Kartli, Georgia; (b) enhancing the waste collection practices and greening cities of Noyemberyan, Spitak and Gyumri; (c) overcoming the difficulties in crossing the Armenian-Georgian border.

The participants considered all three plans realistic and will strive to implement them with joint efforts by the end of the project. We believe that events like Autumn Fair EXPO 2010 and joint workshops within the STAGE II project will contribute to foster their partnership and cooperation between the Armenian and Georgian CSOs and local governments on a higher level and in a long run.

*“Poverty Reduction and Confidence-building in Border Areas of Georgia and Armenia by Strengthening Civil Societies in Sustainable Rural Development” (STAGE II) Project is financed by the Austrian Development Cooperation and Cooperation with Eastern Europe (ADC) (for more information please visit: [www.mfa.at/adc](http://www.mfa.at/adc), [www.ada.gv.at](http://www.ada.gv.at)), implemented by CARE Osterreich and CARE International in the Caucasus, along with the partner organizations – Civil Development Agency (CiDA) in Georgia and Center for Agribusiness and Rural Development (CARD) in Armenia.*



financed by:  
Austrian  
Development Cooperation

## Bumble Bee Pollination Now in Greenhouse Vegetable Crops in Armenia

CARD launched a new initiative on introduction of new pollination systems for greenhouse vegetables through bumble bees. CARD specialists learnt about the new technology at the Study tour in the Netherlands supported and organized by Dutch governmental organization PUM - Netherlands Senior Experts (having over thirty years of experience in advising businesses in developing countries and emerging markets). During this study tour a visit was paid to Koppert B.V. - the international market leader in the field of biological crop protection. Thanks to the highly effective cooperation established between Koppert B.V and CARD natural pollination reared bumble bee colonies were imported from the Netherlands in completely maintenance-free hives.

Proper pollination is needed for optimal fruit set and production. In the past, all greenhouse tomato growers relied on manual pollination, which was time consuming. Using bumble bees for pollination is an effective alternative and can completely replace the manual pollination. In addition to saving on labor, bumble bee pollination has many advantages, including: active at low temperatures (5°C), and windy and cloudy conditions; effective in greenhouses, high tunnels and in open air; higher yields (up to 50%) and large, high quality fruit in crops such as tomatoes, peppers and blueberries.

Currently, about 40 bumble beehives are pollinating more than 20 greenhouses in Armenia, among them also MCC credit clients who have built new greenhouses through CARD AgroCredit. The initiative will allow reducing the labor intensiveness, increasing the yield of tomato and “Nazrvan” local variety of cucumber, and improving the quality of the vegetables.

It will also make it possible to increase the competitiveness of local greenhouse production, especially under the circumstances of the high natural gas cost and stronger competition of imported vegetables during off season.



Right after the distribution of the bumblebees to local greenhouses, Monique van Kessel, the pollination specialist from Koppert, visited all greenhouses provided with bumblebees to consult on the new method of pollination.

Very soon the Armenian customers will have the chance to taste tomatoes and cucumbers pollinated by “Koppert” Bumble bees.

Supported by



#74 Teryan Str., Yerevan 0009, Armenia  
Tel. (374 10) 54-57-11, 54-57-12, 54-57-13, 52-52-34, 54-00-16; Fax: (374 10) 58-79-28;  
E-mail: [card@card.am](mailto:card@card.am); Website: [www.card.am](http://www.card.am)