

## TRAINING COURSE IN ISRAEL ORGANIZED BY GALILEE INSTITUTE

On November 16-28, 2011 CARD foundation specialists Anna Karapetyan and Karen Harutyunyan have participated in the training organized by the Galilee International Management Institute in Israel.

The Institute has more than twenty years of experience in designing and implementing advanced leadership and management training programs and capacity building seminars for senior-level planners, managers and decision makers from transitional countries around the globe. It provides advanced leadership, management and capacity building seminars to professionals from more than 160 countries around the globe, designed a special training course for advanced solutions in horticulture and greenhouse sectors.

The training course on "Greenhouse management, post harvest technologies, marketing, cooling and storage facilities for fresh fruits and vegetables" took place in Kibbutz Mizra in Israel.

The training course was designed by CARD and included many topics related to the current urgent issues existing in Armenia.

Overall the training was well structured and informative. The training comprised of lectures, demonstrations and site visits.

It covered the following topics:

1. Modern research and developments in post harvest technologies
2. Technologies for intensive vegetable growing in greenhouses
3. Advanced technologies to increase quality of fruit production
4. Cooling and storage of fresh agricultural produce

The study course included visits to multiple companies working in the mentioned fields, which shared their knowledge and experience with the group.

The participants of the training visited the following companies:

1. Ginegar Plastic Products – the producer of plastic films for greenhouses and open fields.
2. Netafim – Producer of drip irrigation hoses and greenhouses.
3. Bio-Bee – producer of bio protection and natural pollination systems (bumblebees).
4. Origene Seeds – Producer of vegetable seeds.
5. Ovits Farm – Production of colored pepper.
6. Jordan Nurseries – tree nursery specialized Mango, Avocado, Kiwi, Pomegranate and Citrus.
7. Kibbutz Baram – Production, Cold Storage, Grading and Packaging of fruits (apples, pears, kiwi, etc.)
8. Supersal – Supermarket and supply chain that incorporates 258 large supermarkets in Israel.

The visits were made also to the research and development centers in various regions of Israel: Volcani, Eden and Matiteyagu R&D centers.

In addition, the program included visit to the Watec 2011 exhibition, related to the water technologies and irrigation as well as various greenhouses under plastic films and protection nets growing roses, peppers, and tomatoes.

The course included number of lectures provided by high quality specialists on the following topics:

1. Short introduction to the Agriculture of Israel and automation of technological processes
2. Marketing management of fresh produce
3. Greenhouse climate control
4. Greenhouse farming
5. Integration of bio control
6. Fertigation and irrigation systems
7. Orchard management systems
8. Plant genetic improvement
9. Decision making in agriculture

Participants from CARD foundation consider the training very valuable, but would like to emphasize several contacts and technologies, which are promising and are possible to be adapted for Armenian agriculture.

First of all we would like to mention Netafim Company, which produces plastic irrigation hoses and greenhouses. The company not only produces drip irrigation hoses but also offers complete solutions to the irrigation problems for the particular cases. It includes pumping and filtering systems, analyzing equipment, as well as multiple supplies for open fields and greenhouses. Advanced irrigation systems allow improving not only control over the water supply, but also over fertilization and diseases. Such systems facilitate supply of fertilizers and plant disease control solutions. Armenia is lacking such systems and introduction of drip irrigation will significantly improve the efficiency of local horticulture.

Another promising technology, which can be implemented in Armenia, was usage of nets as a protection against insects, hail, wind and direct sun radiation.

Besides the abovementioned technologies we would like to mention as well plastic film protection, bio-control methods, modern orchard management, modern machinery, equipment and tools, post –harvest handling and cold storage of the fresh produce.

The training course allowed understanding of nuances of the modern agricultural technologies used in Israel.

The knowledge and contacts made in Israel will allow further dissemination of the information and technology in Armenia.

The materials will be adapted to current Armenian agricultural issues and presented to local farmers. The knowledge gained during the training will be used for design and implementation of CARD foundation future projects.

In addition, the valuable contacts with the experts, lecturers and producers made in Israel will be used to guide and facilitate the implementation and development of the agricultural technologies in Armenia.