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Success story of Laghodekhi Orchard

David Bertrand is a pioneer to set up first organic apple orchard for cider production in Georgia.

FinExCoop took a leading role in providing technical assistance for the establishment of organic apple orchard which is taking place first time in Georgia with this pilot. The owner had carefully chosen the virgin land to ensure there is forest around and no agriculture production nearby.



From the beginning the main principles of organic agriculture were applied: health, ecology, fairness and care. For that purpose, he picked 50 ha land in Lagodekhi, formerly forest where prior no agriculture activity took place.

FinExCoop project started support from guiding the land preparation and technical process for setting up organic orchard.

He took very pragmatic approach and followed all the technical guidance of FinExCoop project very carefully. Soil management is central to organic farming, understanding your soil through digging, observation and analysis is an essential start to stimulating soil biological activity and ensuring that there are no underlying nutrient deficiencies which might need the use of organic inputs. First six months were spent to prepare the land: clean the land from stones and send the soil sample for tests to Italy, bring river sand and cow manure for a good recovery of the trees and improve the soil, levelling the land and set up irrigation channel. The orchard was established in



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extensive and biodynamic way. When growing organically, it is necessary to know your soil very well. For this, holes were made at different places to make soil profiles in order to measure their depth, their composition and their degree of humidity. The use of natural bio-indicator plants such as the *Lythrum salicaria* has made it possible to detect wetlands and select species more suitable as pears.



Later, together with FinExCoop project different cider and table apple varieties were chosen and imported from Italy and France for planting. Over the last two years from 50 ha, steadily 10 ha of land were planted with trees. They are carefully monitored and there are local Lagodekhi village people trained to take care of orchards. Since this is a new method, local Georgians were trained specifically to take care of orchards in an organic way.

FinExCoop project extensively provided consultation training and every visit was followed by action steps that were followed carefully by local agronomist and orchard staff.

David mentioned that “FinExCoop expert Marc Lancien always gave two options: - shorter way of doing things and the best way of managing and establishing the organic orchard. Even though the better way is longer, we keep following the better way to ensure quality of our organic apple production”.



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Laghodekhi orchard plants 5 ha of land each year to ensure adaptation of fruit varieties to Georgian climate and to test what is the best approach. Small nursery was established on site to manage the seedlings. Local apple varieties will be also added to the orchard this year.

The organic way of growing apples forbids usage of chemical pesticide and therefore, many efforts were put to figure out organic pesticides. To control pests, many alternative methods to chemical pesticides were implemented.

For example, sexual confusion to fight codling moth, observation and multiplication of auxiliary insects, mechanical desherbage etc

Overall, the owner of the organic orchard was well prepared to face challenges since this is a new experience in Georgia and the main focus is quality, he put very systematic approach in managing the plot.

- From the very beginning the quality of soil was very poor, it was regularly flooded, despite that they were able to set up an orchard which developed very well.
- Getting organic fruit production in an area where there are no any references and giving work to local people on land that were uneducated.
- Systematic way of soil management, weed management, disease management and biological pest control established from day one.
- When trees are detected by disease, they are immediately removed from the plot and burned, new seedlings are prepared in nursery to replace the diseased.

Each year organic orchard management keeps getting better for the owner and list of seasonal work is proposed based on visit of the FinExCoop technical expert: autumn work, winter work, spring work.



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This year they have managed to obtain permission for land to establish a cider factory. The owner is aiming for the factory to be built near the orchard garden to avoid long transportation and manage high-level quality production. He is actively looking for partners and grants for the cider factory establishment. In the garden, he would like to also set up a practical training center where Georgians can learn and practice organic orchard production on-site. The orchards will start bearing fruits this year, and it is important to start the technological process of cider making, including analyzing the process, testing, training, bottling, advertising, and marketing.

Cider is an ancient beverage, which is a fermented alcoholic beverage made from the unfiltered juice of apples. The first recorded reference to cider dates back to Julius Caesar's first attempt to invade Britain in 55 BCE, where he found the native Celts fermenting crabapples. It is a relatively new drink produced in Georgia, and there are few companies who make this drink in Georgia using European technology and qvevri. Both types of cider have their own fans. So far, there is no company that is making organic cider, and the main market for Lagodekhi organic apple orchard farm is the organic export market.

David comes from a family whose background is of cider makers in France and is determined to create the best quality organic cider and export as a pioneer from Georgia to European and world markets.

This orchard could become a very important experimental platform to introduce in Georgia all the natural methods to obtain a healthy and sustainable fruit production.