P5 - BEST PRACTICES

BP6 - Growing safe food in the backyard

Institutional information
Name of contact person Cezar Tomescu
Email of contact person tomcezar@yahoo.com
Name of institution University of Suceava

Region and Country where the case study took place North-East, Romania

Website www.silvic.usv.ro
Facebook: https://www.facebook.com/USV.Silvicultura/

Summary

Explain your case in one or two sentences
Organic farming is a reliable solution for small-scale properties where a large variety of plants can be cultivated for household needs, leaving a small surplus for the market. The main climatic constraints a farmer has to face is the drought and cold air waves that browses the region most of the winter. Compared to other regions, the time lag of vegetation may stretch over two weeks. This is not so dreadful from a physiological point of view unless exotic species are tested in the area, species with a different physiological memory, prone to start the vegetation season as soon as possible, whenever a climatic window is being open for more than ten running days

Background information: How was the situation previous to your actions?
Organic farming was not well-suited to the local conditions due to a narrow biodiversity of regular crops, the most cultivated plant being potato. Now, the outskirts of Suceava city is heavily populated with small to large households with a high potential to develop forest tourism, bicycling, or leisure. The landscape is diversified and organic farming could be a profitable business, given the experience gained during the two-month time window when the public markets were closed and door-to-door electronic commerce flourished.

What were the needs you identified?
Small farms and even backyard farming provide a good opportunity to train people to do the best of their small patches of land, given the demand for organic food. With or without getting an organic certificate of product, near a Natura 2000 site (Pădurea Pătrăuți, encompassing the neighborhoods of Suceava) every patch of land requires a special attention, in order to involve the local people in securing adequate measures of nature conservation. Hence we identified the need to promote some basic principles of organic farming.

What solution did you find to cover those needs?
The first step to promoting organic farming is to identify the specific needs of local households and farms. These needs consist of solutions to apply on small-scale (patches of tens of square meter), mostly aromatic herbs that can be harvested in small amounts all vegetation season, lesser or even free of herbicides. Another requirement came from the local apiculture, which requires a larger diversity of flora.

What actions did you take to reach the solution?
In order to come up with specific solutions, we have tested different combinations of plants, much before the commencement of VALOR project. We have also collected information from different other sources in order to improve the resilience of small farms placed in the area and we have tested different solutions found in literature.

If any, which partners or other organizations did you involve during the process?

No other organization was involved in this process, except for the stakeholders who attended the meetings organized by the local county office of National Forest Administration, who is in charge with implementing the management plan of Natura 2000 Padurea Patrauti management plan.

What were the main problems or difficulties you had to face?

Difficult acquisition of some breeding material and some aromatic herbs to install

What is the situation now, after your actions?

Capacity to produce, on small patches of land, enough quality food to reduce the market demand.

Main lessons learned along the way? *

- Produce your own compost.
- Produce natural pest repellents based on cool soaking of plants from spontaneous flora.
- Utilize the liquid component of farmyard manure produced by fermenting the excrement collected from hen-coups in a ratio 1:10.
- Interleaving the rows of crop with rows of aromatic plants, such as *Mentha, Lophanthus, Thymus, Ocimum, Melissa, Nicotiana, Artemisia*.
- Biologically control the Colorado beetle (*Leptinotarsa decemlineata*), responsible for heavy loss in potato and tomato with meleagris (*Numida meleagris*) and peacocks (*Pavo cristatus*), which are the only birds able to eat the adults and larvae of this insect.
- Dusting the soil with lime powder (especially in greenhouses) to control the snails and slugs, which is also recommended for acid soils.
- Water the crops from fish farms where chemicals are banned. In doing so the water is also a fertilizer.
- Interleave the crops with mosaics of woody vegetation (small trees and bushes) in order to diversify the avifauna.
- Rotate the crops and chop the vegetal residues on the spot, after harvesting, in order to improve the soil productivity. Mulch with vegetal residues, with hey and straws from husbandry, combined with mechanical control devices such as finger weeders (https://www.youtube.com/watch?v=x7Ioz7uOe60)
- Place beehives nearby cultivated lands.