

Lipovan Community Farming System in Târgu Frumos

First conclusions

Author: Julio Sa Rego

Date: 01 October 2025

Overview of the community farming system of the Lipovans in Târgu Frumos

The community farming system of the Lipovans in Târgu Frumos is a market-oriented, intensive family farming system in peri-urban gardens. It relies on the massive use of irrigated greenhouses, built in the gardens of Lipovan family houses, to produce vegetables with trellis and row planting systems.

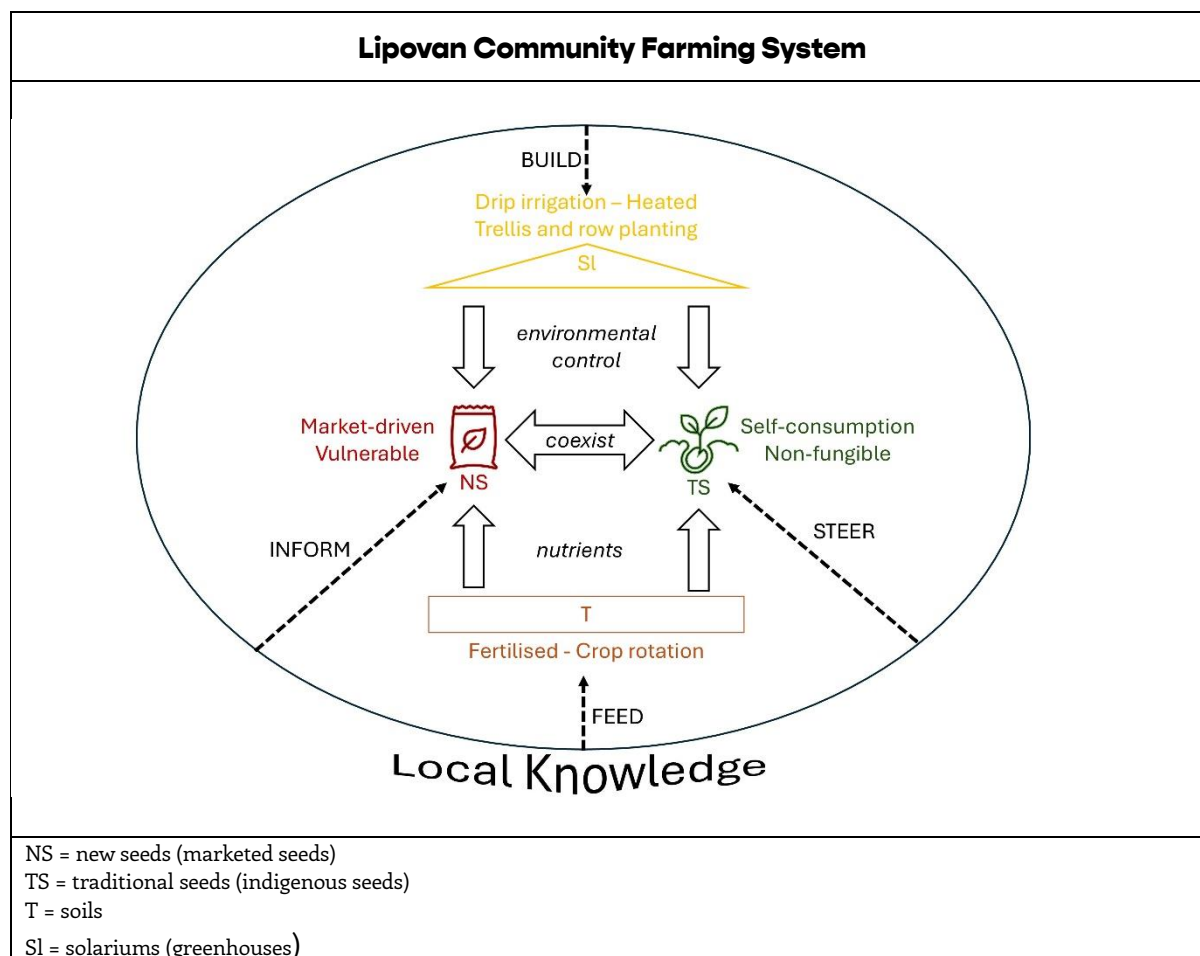
Agriculture is the main source of income for Lipovan farmers in Târgu Frumos. Production is principally intended for sale as raw and processed vegetables. Main products are tomatoes, peppers, aubergines and cucumbers, as well as pickles and tomato sauce, directly sold in the local markets of Târgu Frumos or Iasi.

Marketed vegetables are grown mainly from commercialised exotic seeds introduced into Târgu Frumos farming system in the last fifteen years. They are believed to be more productive, thus helping Lipovan family farmers to counter the price competitiveness imposed by supermarkets. Some clients also aesthetically prefer more uniform vegetables and tend to discard the irregular ones obtained with traditional seeds. Farming with commercialised seeds, however, requires higher financial investments to acquire the seeds and the necessary chemical treatments to combat new diseases associated with these exotic vegetables.

The market gardening co-exists with garden farming for self-subsistence in the local community farming system. Garden farming concerns mainly onions, cabbages, garlic, parsley, dill and lettuces. They are referred to as the green ones. The production is predominantly intended for family consumption; only the surplus is marketed. The low economic return does not justify the financial investment in the commercialised seeds; the use of traditional seeds prevails. Additionally, Lipovan families consider vegetables grown from traditional seeds to be of better quality. Therefore, the level of self-consumption within the family production determines the propensity to use new seeds, regardless of the vegetable grown.

The community farming system is guided by the local agricultural knowledge of the Lipovan community. This is a compendium of learned experiences, mimicked processes and self-education, continuously accumulated over generations, on soil fertilisation, seed selection

and cultivation processes, including irrigation. This local knowledge is also applied to the cultivation of the commercialised exotic seeds.



The community farming system of the Lipovan community is nonetheless under severe threat in Târgu Frumos. Transmission of the related agricultural activity to the next generation is failing and Lipovan farmers are ageing as a consequence. Family farms are slowly tending towards self-subsistence production due to reduced work capacities and lesser reliance on agricultural income among the new generation of Lipovans in Târgu Frumos.

The price competitiveness imposed by supermarkets is the main hindrance to the transmission process. The economic return of family market gardening has been plunging over the decades, compromising the attractiveness of the activity. The local peasant economy is also dismantled, with the decline of livestock rearing, while it used to create positive synergies for soil fertility and reduce production costs for Lipovan farmers in the past. The use of more productive seeds is staunching the erosion of income but not entirely compensating for it. Market dynamics are therefore contributing to the replacement of the traditional seeds and the overall decline of the activity.

Some young Lipovan farmers are experimenting with containment strategies. The loss of the activity would mean a loss of cultural identity for them. The two main safeguarding measures

are scaling up the production, with bigger greenhouses to limit costs, or entering niche markets to sell higher value-added, differentiated agricultural products grown from traditional seeds.

Categories of the community farming system of the Lipovans in Târgu Frumos

New seeds

New seeds are commercially bought. They are exotic varieties. Main mentioned countries of origin are the Netherlands, Italy and Morocco. They also seem to be natural and not genetically modified.

New seeds have progressively been introduced since the last fifteen years only. It seems to be a spontaneous mimic movement among Lipovan farmers. Some of them were influenced by social media channels, other by neighbours. The main motivation to adopt the marketed seeds was a promised higher productivity, longer shelf life and greater transferability compared to the traditional seeds.

Main vegetables concerned by the replacement of seeds are tomatoes, peppers, aubergines and cucumbers. They are the main production oriented to the money economy and principal source of income of Lipovan farming families in Târgu Frumos.

The new seeds appear effectively to be more productive. They need less workforce and labour hours to produce the same volume of harvest as the traditional seeds. However, they are also mentioned to be more vulnerable to diseases.

New diseases are emerging. They mainly affect crops produced from the new seeds. The source is unknown, although many community members confabulate on a foreign origin brought through the introduction of exotic seeds. It seems there is no consideration of the possible impacts of climate change, nor of the inherent fragilities of the new seeds, in the emergence of these new diseases.

Lipovan farmers apply treatments to combat the new diseases. Treatments are produced by the same companies of the seeds and supplied by the local farming shop. The type of treatment depends on the disease, but they were mentioned to be all chemical.

Traditional seeds

Traditional seeds are kept from harvest to harvest since generations within families. They are also known locally as peasant seeds. Main vegetables concerned today are onions, cabbages, garlic, parsley, dill, orache, lovage and lettuces. Lipovan farmers refer to them as the green ones.

The green ones are mainly produced for self-consumption. Production volumes are low; mostly to satisfy family needs. The green ones do not generate much income then, neither require heavy workforce and labour hours. The economic return is therefore low and does not justify the financial investment to purchase new seeds. Additionally, seed extraction is relatively straightforward for the green ones; seeds of gymnosperm plants are exposed, in contrast to those of angiosperm plants, such as tomatoes, where the seeds are enclosed within a fruit.

Furthermore, vegetables from peasant seeds are also believed to be more tasty. Lipovan community makes a clear quality distinction between the new and the peasant seeds and does not consider their products as fungible commodities. However, farmers face a high price competitiveness from supermarkets and turn to the new seeds to increase the productivity of their marketed vegetables.

Thus, the level of self-consumption within the family production determines the propensity to use new seeds. More a family produces for their own food supply, less they turn to the new seeds. This rule applies to all the vegetables produced within the community farming system of the Lipovan community in Târgu Frumos.

Some farmers also conserve the peasant seeds of their marketed vegetables. They do use the new seeds for productivity reasons, but keep small plots cultivated with peasant seeds for their personal consumption and special clients.

Soils

Lipovan farmers consider the soils of Târgu Frumos as fertile. However, they recognise that these soils are not suitable for every vegetable and have learned the local agricultural features through a process of trial and error across generations. Thus, potatoes are not sown, while tomatoes are the star vegetable of the community.

Local soils, however, need to be fertilised to increase their productivity. The community mostly applies marketed fertilisers supplied by the local farming shop. Traditional fertilisers are applied only by few farmers. The use of traditional fertilisers seems to depend on farmers' access to manure and on the expected economic return of the crops. All farmers apply crop rotation system to improve soil fertility.

Greenhouses

The community farming system of the Lipovan community in Târgu Frumos relies on the use of greenhouses. They are vernacularly called, solar (solarii, plural). Historically, the local community farming system relied on open field agriculture. Romanian collectivisation process in the 1950', however, resulted in the state appropriation of the agricultural lands across the country. Lipovans in Târgu Frumos had to surrender their lands and were only

allowed to continue their farming activity in their house gardens. The use of solarii spread to intensify the production and compensate the loss of cultivable area.

First, solarii were built close to the ground to cover holes in which the vegetables were cultivated. This structure was not the most appropriated, as farmers had to work crouched, and slowly evolved to gain more height. It is unclear who introduced first the solar technique in the local community farming system, but elders remember a period of mutual training and help to build everyone's solar, between the 1950' and 1960'. Today, the neighbourhood of the Lipovan community in Târgu Frumos is clearly identifiable from the sky due to the massive presence of solarii in garden houses surrounding the Lipovan church.



Old solarii were made with recovered materials from waste disposals. The community was impoverished and resources were scarce due to the regime transition. Glass and plastic were the most coveted resources to create the greenhouse effect. Access to materials evolved, in the following decades, and all the solarii were progressively rebuilt with better materials. Two types of solarii construction exist today: traditional solarii made from robust wood and modern solarii made from aluminium. None of them rely anymore on recovered glass windows or plastic bags for the greenhouse effect, but on professional tarps.

Solarii increase the local agriculture productivity. It favours a verticalized mode of cultivation, with trellis systems, in strictly systematised row planting. Watering is provided through rudimentary but efficient drip irrigation systems on the ground or suspended. Water supply comes generally from private wells. Wood-fired boilers are also used to warm inside during winters.

The local community perceives the effects of climate change in their region. However, its impact on harvests is often dismissed because humidity and temperature are strictly

controlled in the solarii according to them. The impact of climate change on crop disease, soil nutrients and water supply is not considered.

Local agricultural knowledge

The decision-making process in the local community farming system is grounded in local knowledge. This is a compendium of learned experiences, mimicked processes and self-education, continuously accumulated over generations. Local knowledge informs soil fertilisation, seed selection and cultivation processes, including irrigation.

Lipovan farmers understand the soil nutrient cycle. They apply rotational cropping, intercalated with fallows and bean cultivation as an azote fixer. This allows the soil to rest, reduces pests and diseases and improves fertility by varying the plants' nutrient demands.

Soils are also fertilised to increase productivity. The use of animal-origin fertilisers was well spread in the past but the decay of the local peasant economy turned manure into a scarce resource. The economy of Târgu Frumos used to comprise farming and livestock rearing. The latter has almost disappeared and manure is no longer easily available. Industrial fertilisers are now widely used, but a few farmers managed to secure the supply of manure from chicken or sheep with neighbours.

Local knowledge is also applied to the seeds. Lipovan farmers learn from children how to select the best vegetables, extract, clean and dry the seeds, conserve them, sow, grow and transplant seedlings. They also know the necessity to exchange seeds between neighbours to favour the genetic diversity of their crops.

This knowledge is originally related to the traditional seeds and is still in use for their cultivation. More surprisingly, many farmers also apply it on the new seeds, principally the techniques of sowing, growing and transplanting seedlings. Seed selection, extraction, cleaning and drying may be occasionally used on the exotic varieties to save money.

Crops are not automatically treated. Solarii are located in the house gardens, close to where families gather and children play. Lipovan farmers are conscious of the need to keep the environment safe and have over time developed practices to minimise the use of treatments. The main solution is to dedicate more working hours to control the crops and anticipate possible diseases. They also used to have nature-based treatments.

The introduction of the new needs has favoured the emergence of new diseases. Traditional nature-based treatments appear to be ineffective and Lipovan farmers turn to the chemical treatments. However, their local knowledge still informs the use of chemical treatments, restricting it to localised reactive applications in case of early-detected diseases. The local farming shop complements the local knowledge with advice on chemical treatments

according to detected symptoms. Farms functioning mainly for self-subsistence tend to keep using nature-based treatments for economic reasons.

Products

Lipovan farmers produce mainly raw vegetables for commercialisation and some transformed products. These are pickles, from cucumber and cabbages, and tomato sauce. Raw and transformed products are almost entirely sold in the market of Târgu Frumos and Iasi.