



Faculty of Design

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Enrica, Ferrero, Giulia, Ferrero, Elisa, Ghignone, Martina, Motta and Marco, Ruffa

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A Systemic Project for a Local Fruit Farm and the Valorisation of By-products

A case study of a micro-enterprise in Piedmont, Italy

Ferrero Enrica, Ferrero Giulia,
Ghignone Elisa, Motta Martina
and Ruffa Marco

Azienda Agricola Magnarosa





Overview of the case study

The aim:

The case study shows the possibility of applying Systemic Design in a context with a strong identity.

The context:

The farm Magnarosa was explored as part of the Open System course of the "Aurelio Peccei" Master's Degree in Systemic Design at the Politecnico di Torino.

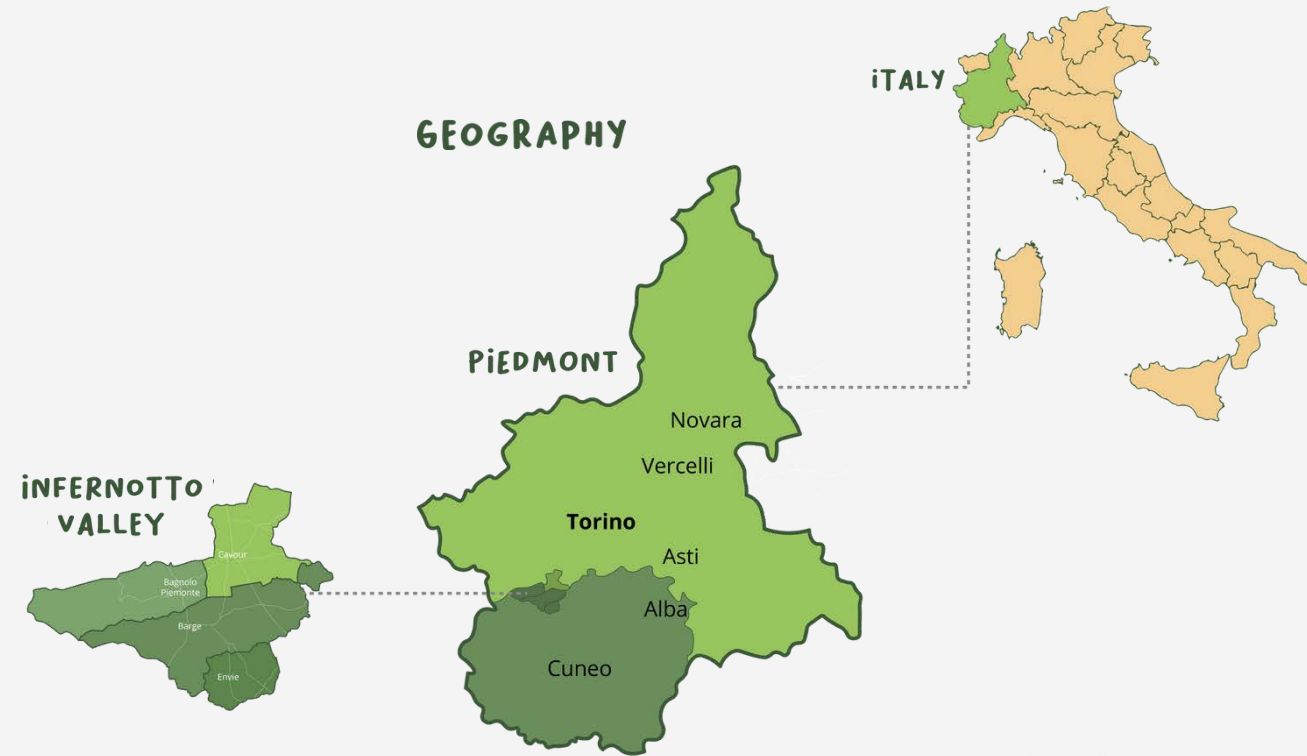
The company:

The farm is located in a small rural area in Piedmont, Italy,. It is a young, family-run micro enterprise specialised in organic production, mainly of fruit. Part of its activities have been influenced by the advent of covid-19 and the logic of the big market, which pushes producers to choose standard, non-seasonal products for export to various countries.

The analysed territory is the Infernotto Valley, which covers an area of about 20 km.

This territory is located close to the mountains and is known for its typical products, cultural events and tourism.

Many of the farms in the area are small and are involved in cultivations suited to the local climate. This area has a lower-than-average age: this is due to the fact that many businesses are family owned and therefore run also by young people. There are many schools concerning gastronomy and agriculture.



TERRITORY ECONOMY

- 94,7% Micro enterprises
- 4,9% Small enterprises
- 0,3% Medium enterprises
- 0,1% Large enterprises

EDUCATION

in the Valley and surroundings

- 4 Educational farms
- 6 Schools about food and agriculture

CULTURE

Productive activities



Local dishes/food



Cultural events



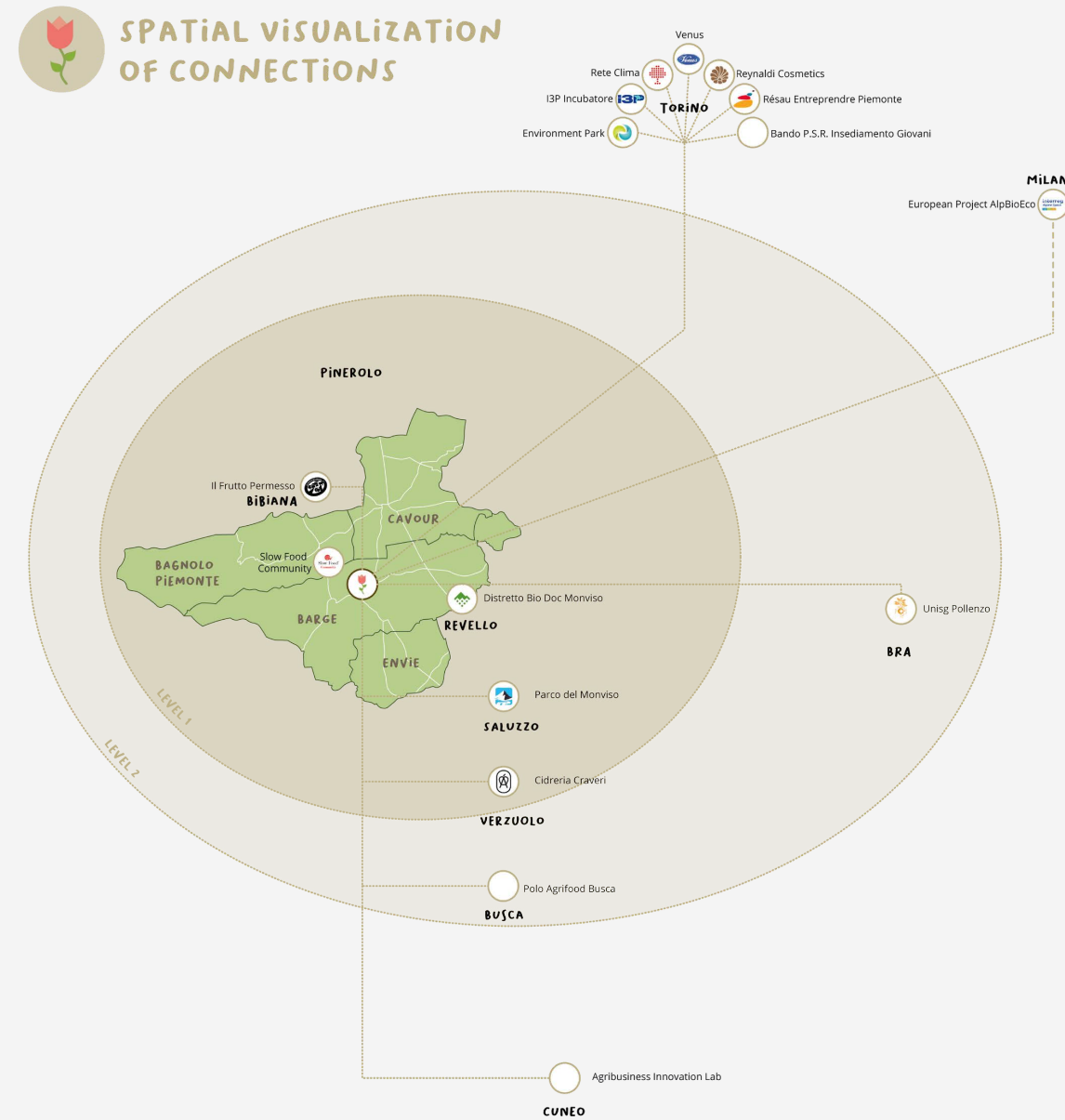
Points of interest

- Monte Bracco
- Rocca di Cavour
- Castello di Barge
- Chiesa Parrocchiale di San Giovanni Battista
- Castello di Envie
- Chiesa Parrocchiale di San Marcellino
- Castello di Bagnolo
- Cava - Pietra Luserna
- Abbazia Santa Maria di Cavour

Magnarosa produces many local organic products and is interested in proposing innovative and sustainable practices as an example to other producers.

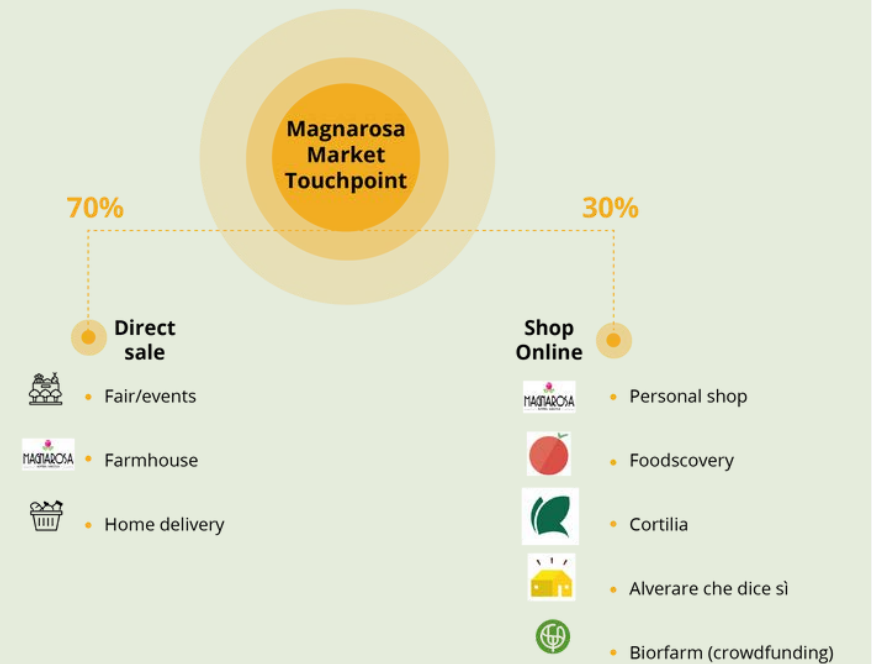
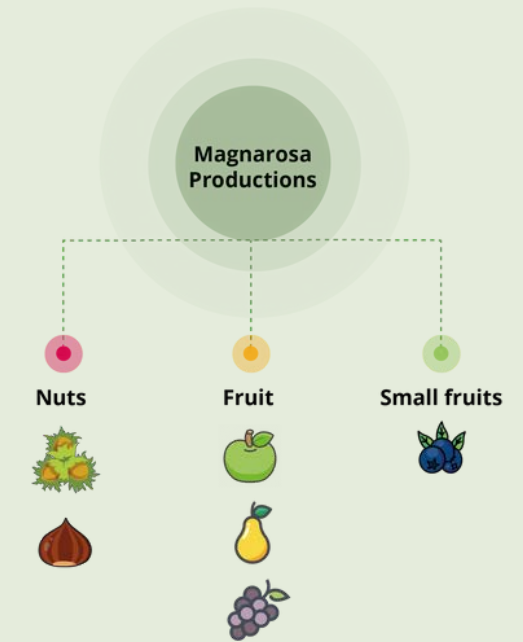
The company's attitude is based on the traditional knowledge and, on the other hand, it adopts a glocal vision, strongly enterprising, attentive to the needs of the territory and always willing to update itself.

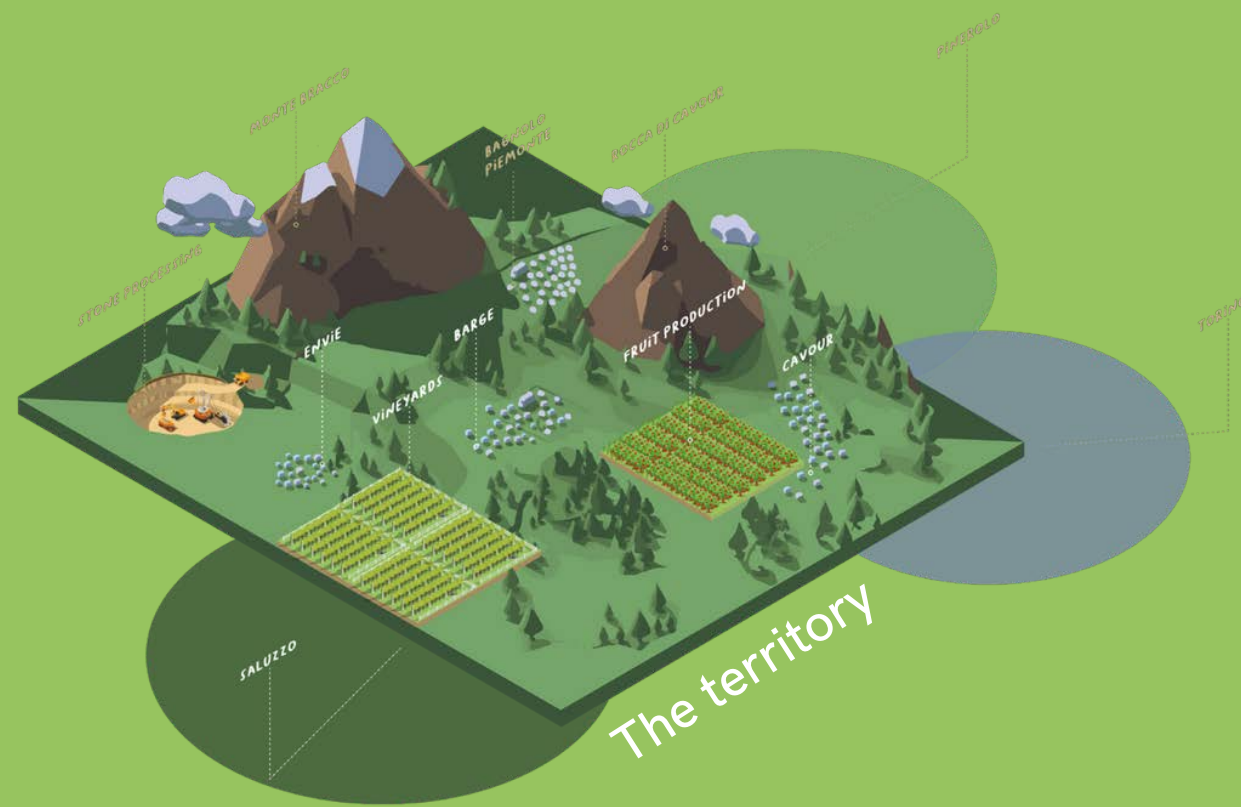
In addition to the farm, it also owns a farmhouse, which has been severely affected by the pandemic, and this factor has influenced the company's possibilities to invest in new projects. Most of its sales are to people who are sensitive to local and sustainable food.



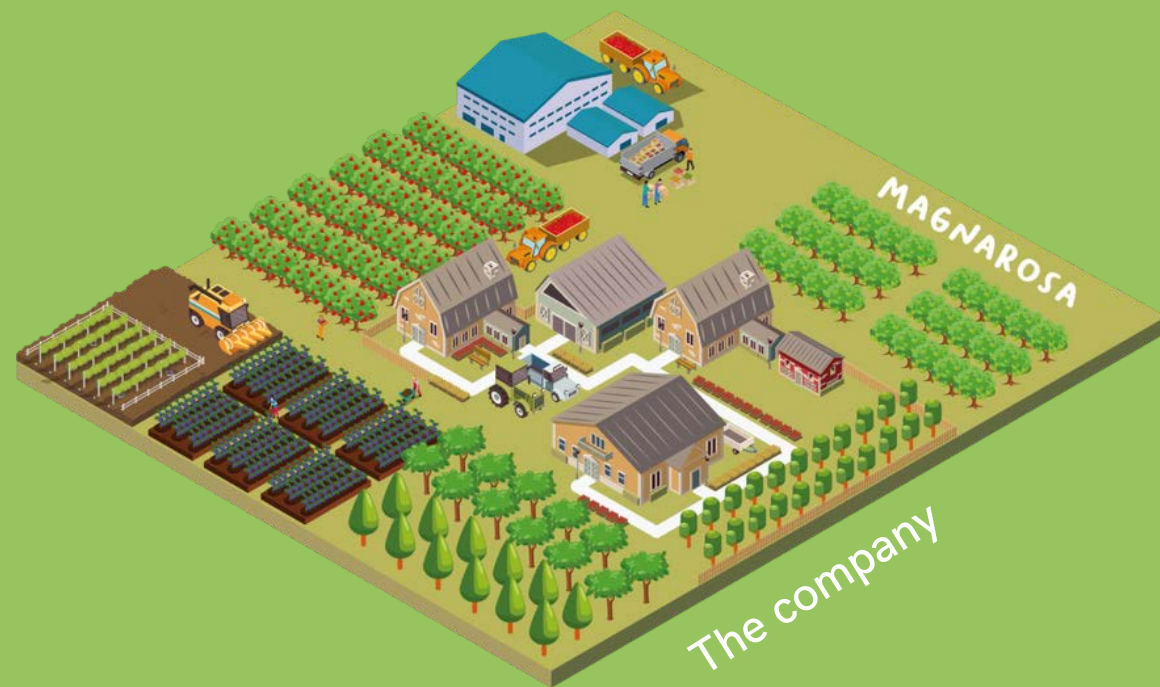
GLOCAL VISION

The company try to valorize local cultivars and traditions generating projects that consider environment, innovation and social responsibilities. In order to do that, it collaborate with actors outside the area analized, where there are companies interested in collaboration, initiatives to develop this kind of project and clients interest in its products.





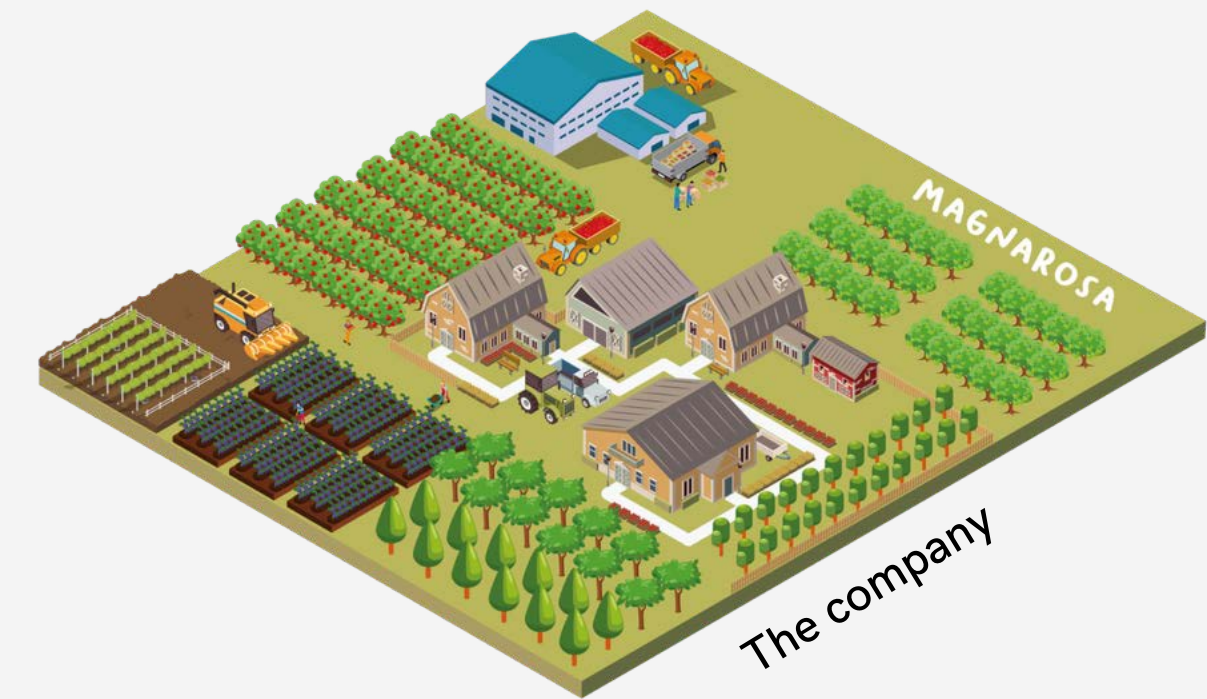
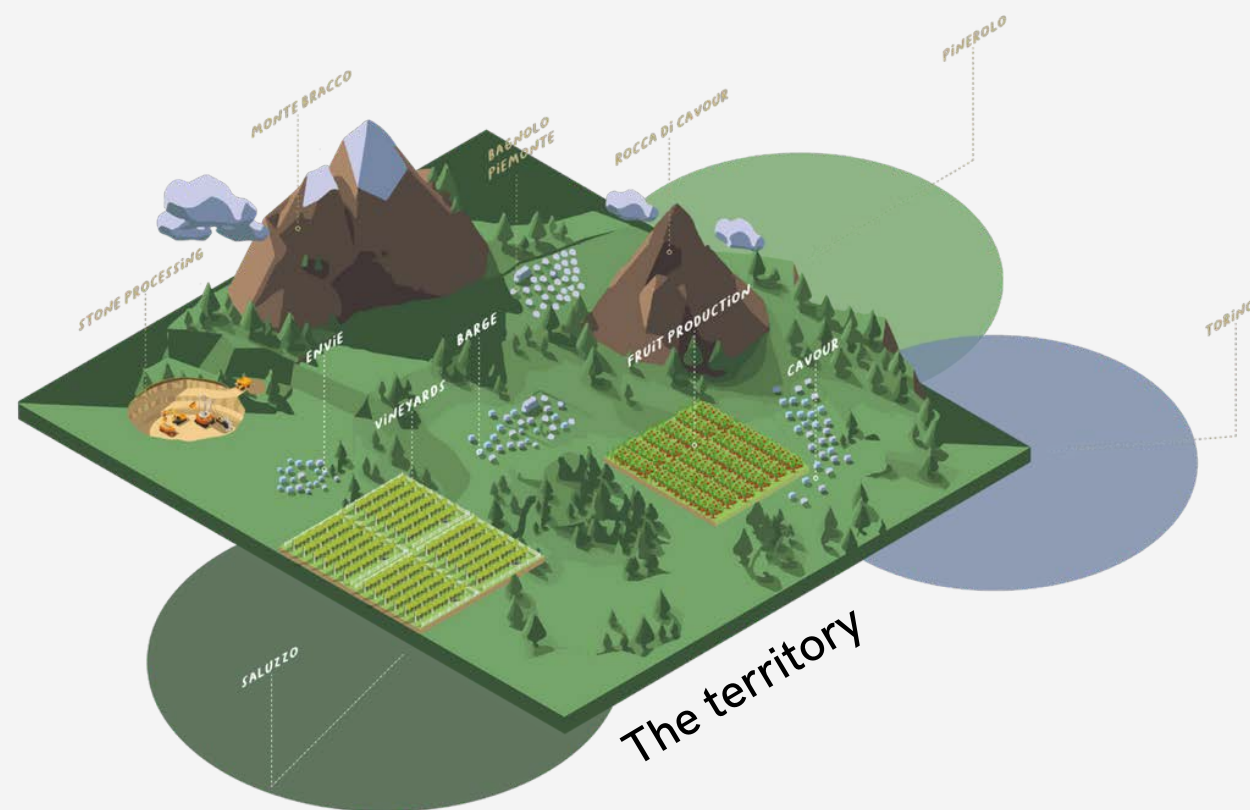
- high quantities of second choice
- fruit aesthetic paradigm
- difficulty in aggregation between micro-enterprises
- awareness of consumers and users
- climate change influence in cultivation



- production of waste derived from apple and hazelnuts
- dependence on the climate conditions
- poor relationships with local actors of the same productive sector
- lack of pesticides and nets against insects

The identified opportunities are linked to the characteristic features that can create points of contact between the various local actors and make them key elements in relation to the surrounding areas

- 1 Local products
- 2 Characteristic identity
- 3 Tourist interest in the area
- 4 Contact with nature
- 5 Interest in transmitting local values





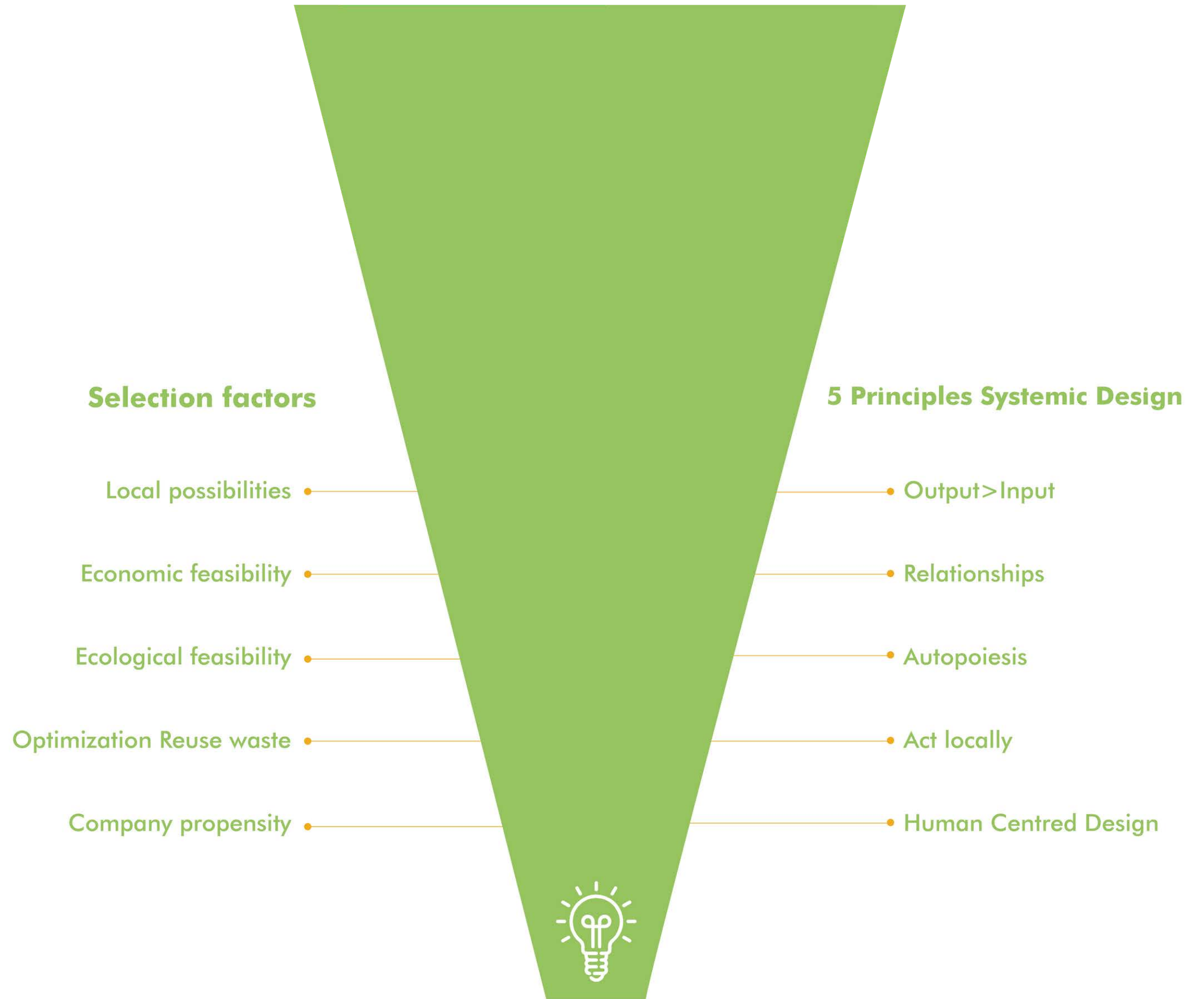
The most suitable solution for the company was selected through a multi-criteria analysis on the basis of the 5 Principles of Systemic Design and selected project-specific factors.

Design consideration:

Sensitivity is required in understanding which aspects are considered a priority for the context because they can determine the effective implementation of the project.

In our case, economic feasibility was the discriminating element for the company, because it makes the project feasible.

While for the actors in the area, economic feedback can determine the incentive to participate.



Selection factors

Local possibilities

Economic feasibility

Ecological feasibility

Optimization Reuse waste

Company propensity

5 Principles Systemic Design

Output > Input

Relationships

Autopoiesis

Act locally

Human Centred Design

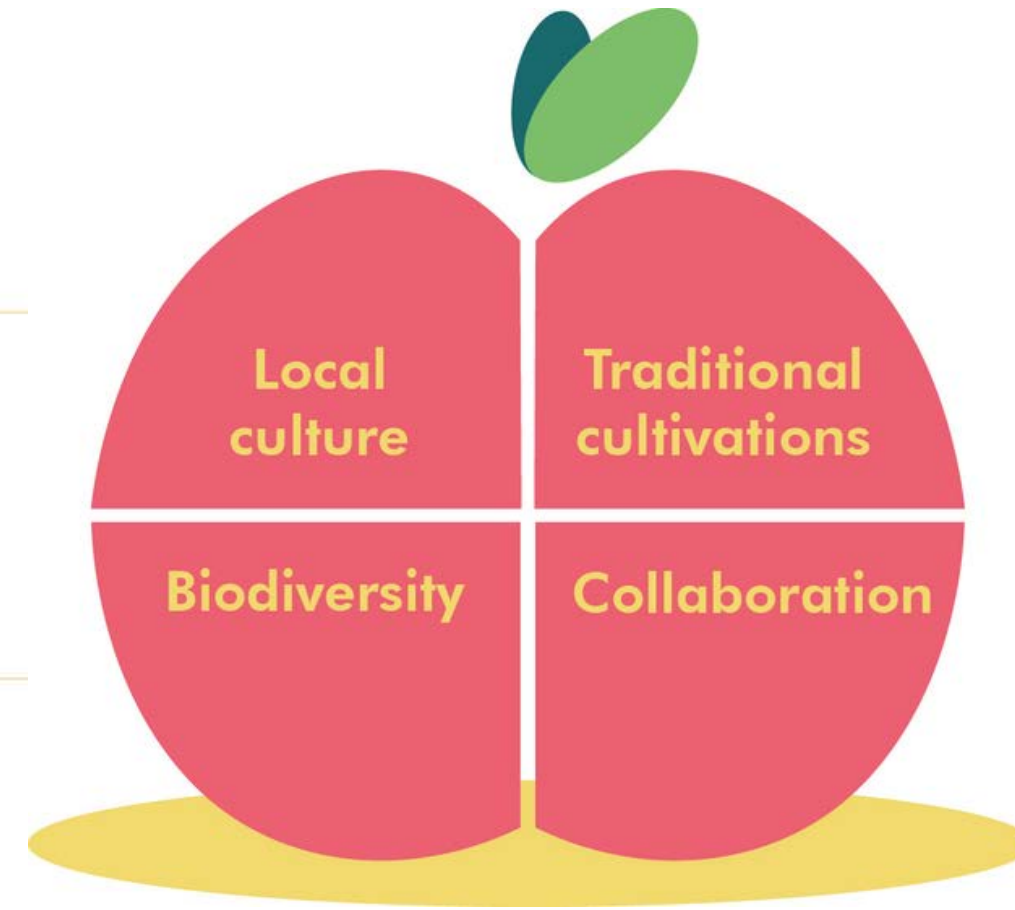


The final solution is the creation of a network of local actors that enhances typical aspects and territoriality.

This strategy can facilitate the development of collaborative projects in the area by creating a bridge between the various actors and is based on the core values of local culture, biodiversity, collaboration and traditional cultivars. These values are shared in the area and are a source of local pride.

The area has a strong and characteristic identity that is already a source of tourism to the area

Through actors and actions in the area, examples can be proposed to explain the theme of the importance of biodiversity



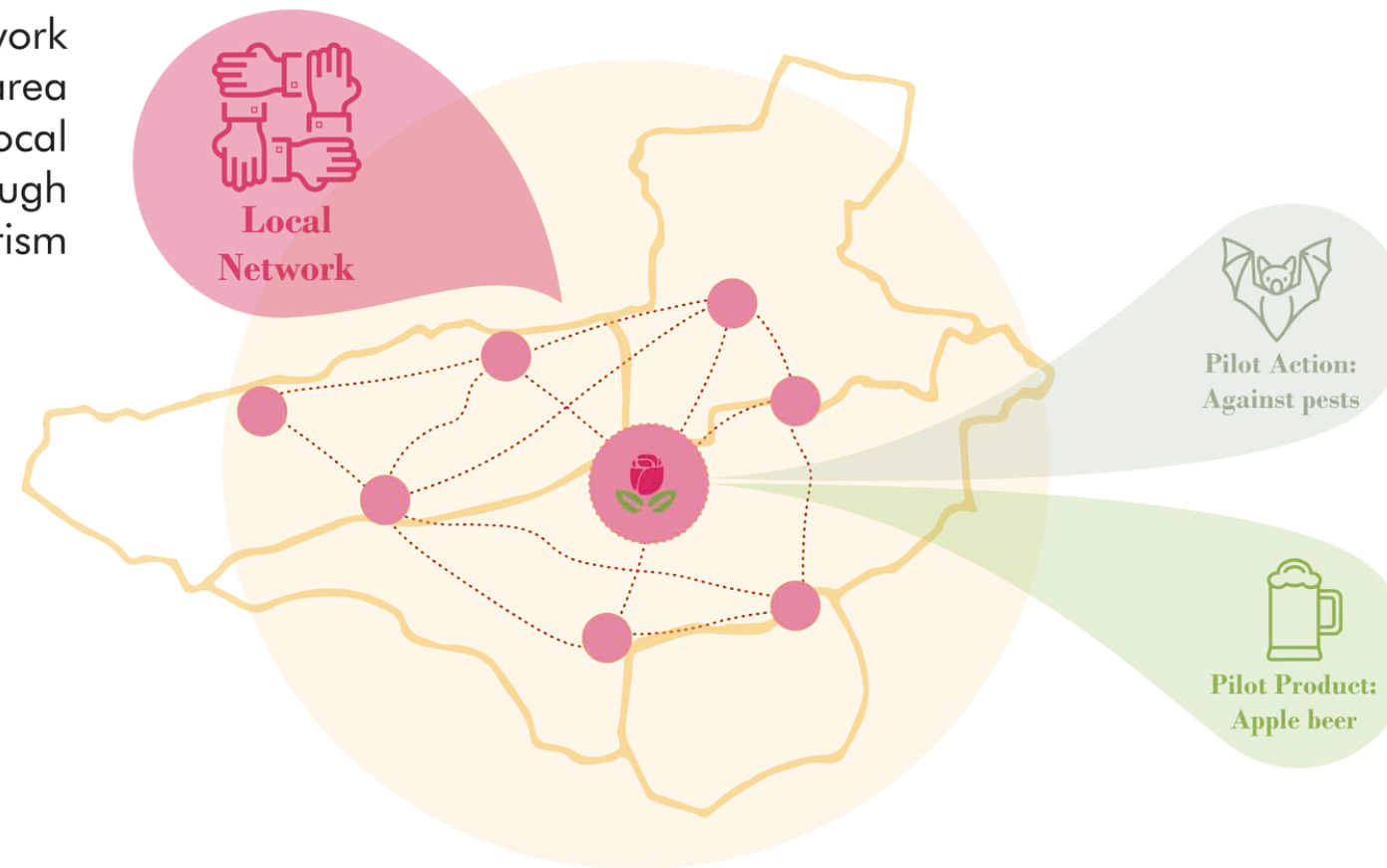
The territory's identity is linked to specific products and cultivars that are at the heart of slow tourism.

Collaboration in the area can create resilient links and allow the local area to prosper while preserving its identity.



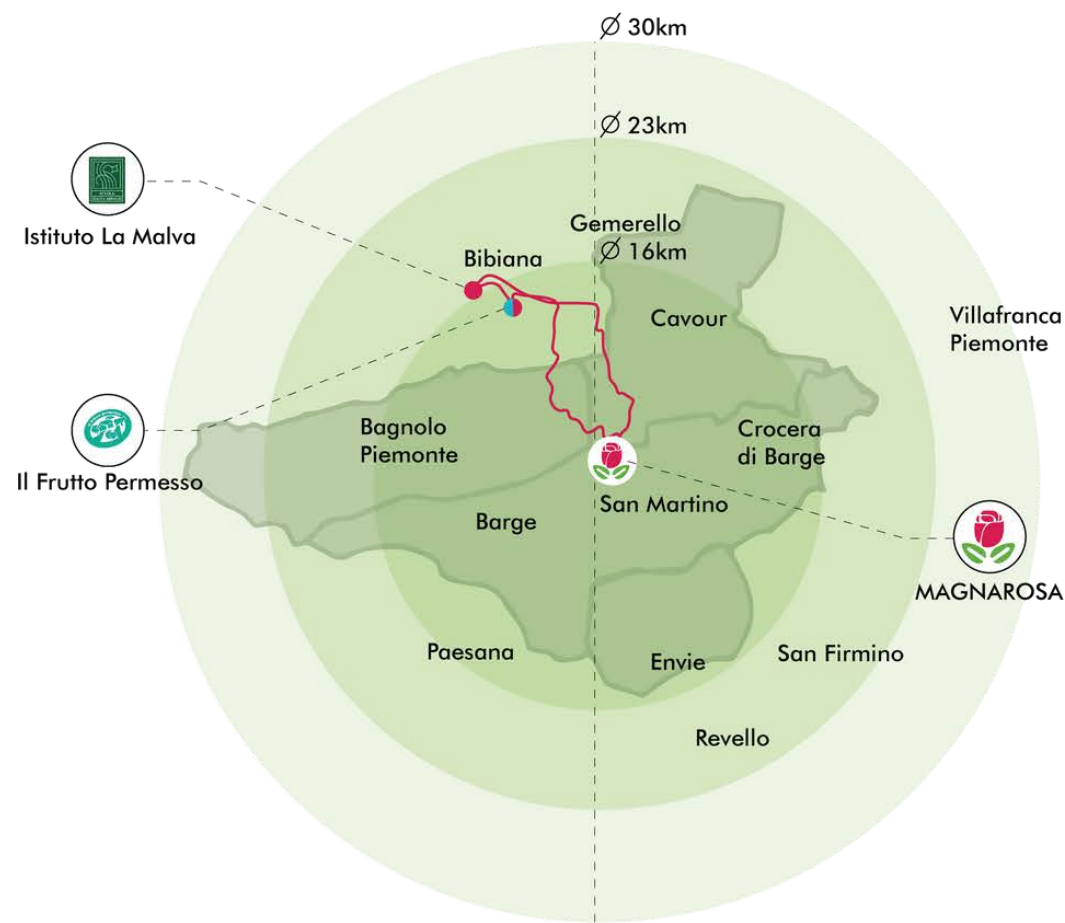
The creation of a local network allows to define a fertile ground for relations and new projects and is based on the definition of slowtourism proposals in the area. This network can allow member actors to create further collaborations, in this sense two pilot demonstration projects designed for the partner company were proposed: a beer from apple waste and the use of agroecology to fight pests.

Creation of a network of actors in the area to enhance local production through slow tourism proposals



Use of agroecological techniques to combat crop pests with bats and friendly insects

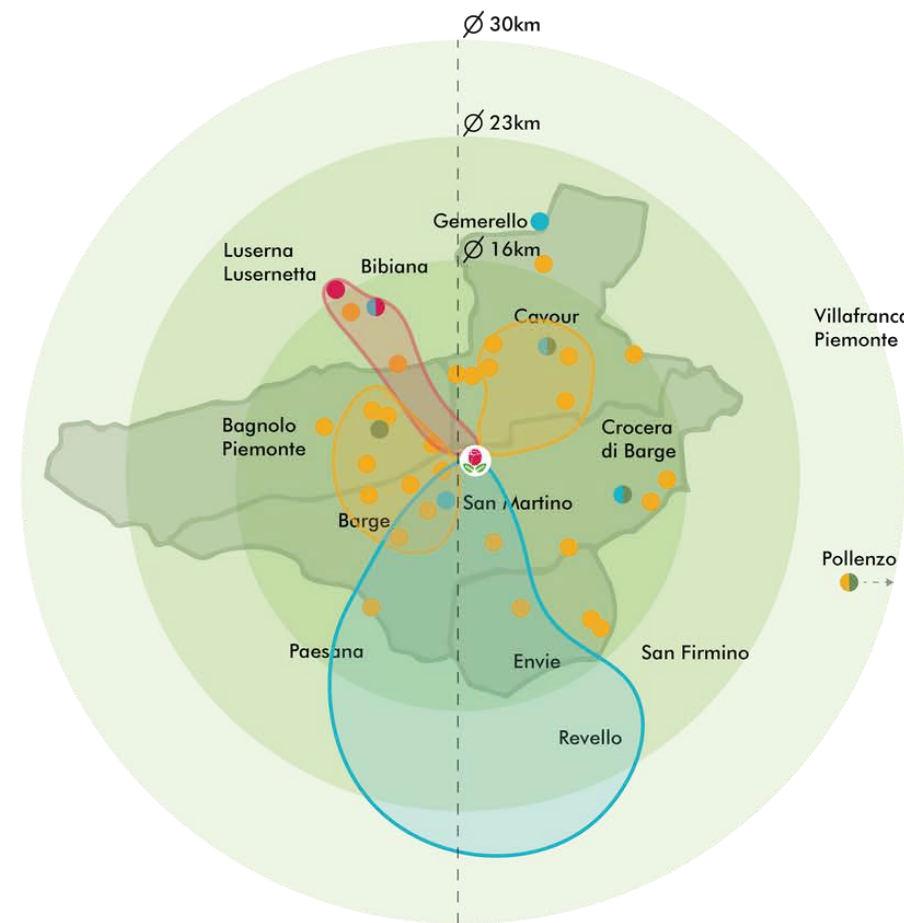
Production of a craft beer made from apple waste (pomace or flour) with a micro brewery in the area



SHORT TERM (2021-2024)



MEDIUM TERM (2025-2027)



LONG TERM (2028-2030)



- From the basis of the network: the first path
- Selected partners were already linked to Magnarosa and connected to the theme
- *Aim*: to show to other actors the possibilities that can emerge from its future enlargement

Involved partners:

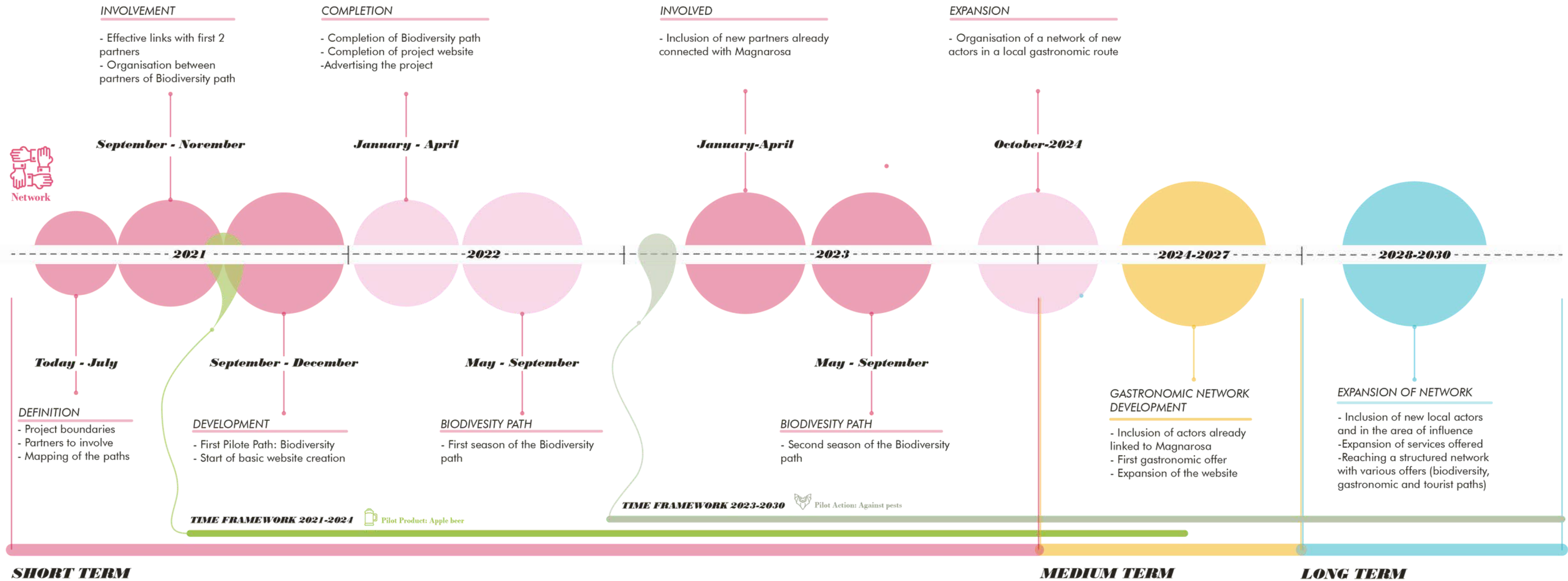
- 1) agriculture cooperative,
- 2) educational institute

- The project can start to expand: the second path
- The partners within the project can start to propose additional services
- *Aim*: to develop a network of local realities to enhance the territoriality through slow tourism proposals

Categories of partners involved:

- 1) food production,
- 2) education,
- 3) catering

- The project will achieve a cohesive network: a fertile ground to *enhance tradition* and culture through sustainability and innovation, stimulated by the tourism possibilities of the area.
- *Aim*: to achieve a network that can grow and prosper by improving links and the local economy.



The timeline of the network development is detailed more in the short term actions, that is between 2021 and 2024. In parallel, the pilot projects for the company were organised over time. Beer from apple waste is planned from 2021 to 2024 with the production of 3000 artisanal bottles. While the agroecology action is included from 2023 with monitoring and field research phases.

The project outputs are the design of the first path and the definition of the necessary elements for the network. For the first one, the outputs concern the definition of the programme and the involvement of the first actors. The second one foresees the creation of a dedicated website, guidelines for participation with stickers to belong to the network. In the long term, the development of an app is envisaged in order to propose the whole tourist offer.





The proposed project can generate benefits at various levels: environmental, socio-cultural, logistical, local empowerment and economic. The company obtains benefits from the creation of the network and from the pilot projects, while the local actors obtain benefits from participation in the network.

Conclusion

Case study insights:

1

the relevance of productive dialogue with the company to make use of its know-how.

2

understand the origin of certain perceptions of the company in relation to the territory

3

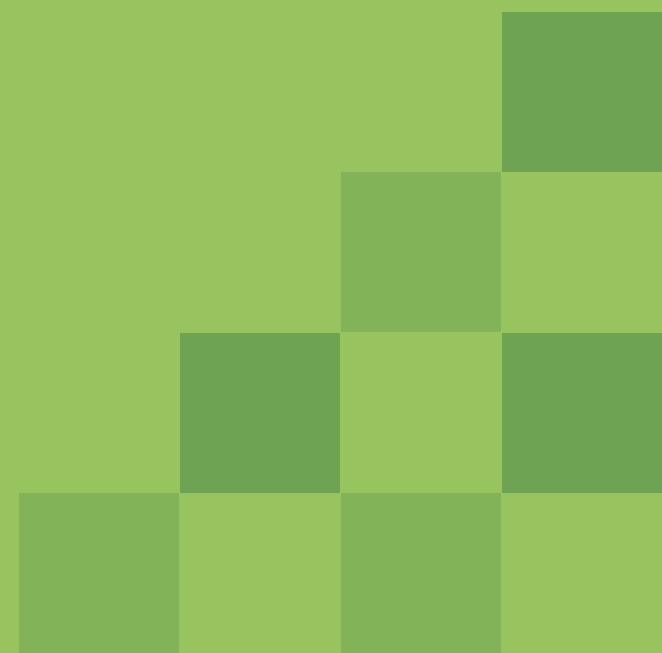
adapting the systemic method to a very small reality

4

The collaboration on the territory can be a driver to create a valuable project and not only an end result of a project

5

potential for enhancing the intangible heritage of a territory



Thanks for your attention

