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DIST – Interuniversity Department of Regional and Urban Studies and Planning

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Master Thesis

Development opportunities in the rural landscape

Analysis of case studies in Yubune and Cella Monte

Supervisor:

Prof. Claudia Cassatella

Candidate:

Noémi Juhász

s26460

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Abstract

The rural areas face the danger of becoming more abandoned due to the recent transformative trends of more people choosing to live in urbanized areas and the decreasing, aging population.

The base of this thesis was born out of two workshops which were the result of a collaboration between Politecnico di Torino and Kyoto Institute of Technology. This research paper aims to find potential development opportunities in the rural landscapes with heritage focus through analyzing two case studies, of which both located in rural areas connected to traditional food production and consumption. One case study is located in a wine-production region in Italy while the other case study is in a tea-production area in Japan.

More emphasis is put on analyzing and understanding the landscape in both case studies. For this the Landscape Character Assessment is used in a comparative way. Then, a SWOT analysis and assessing scenarios are conducted as a method in this thesis. The similarities of the two case studies and the method allows to create a comprehensive set of interventions which suggest measures that can be transferrable to other similar case studies.

The proposed comprehensive set of measures aims to provide answer to the question on how to enhance the productive landscapes without compromising their value, their heritage. Defining the development goals is best attended with a well based knowledge on the area.

Keywords: rural development, heritage preservation, traditional cultural landscape, landscape character assessment

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List of abbreviations

CAP: Common Agricultural Policy

EAFRD: European Agricultural Fund for Rural Development

ENRD: European Network for Rural Development

ICOMOS: International Council on Monuments and Sites

IFLA: International Federation of Landscape Architects

IUCN: World Conservation Union (formerly the International Union for Conservation of Nature and Natural Resources)

KIT: Kyoto Institute of Technology

LAG: Local Actions Group

LCA: Landscape Character Assessment

NGO: Non-Governmental Organization

NPO: Non-Profit Organization (in Japan)

NRN: National Rural Network

NUA: New Urban Agenda

OECD: Organisation for Economic Co-operation and Development

OUV: Outstanding Universal Value

POLITO: Politecnico di Torino (Polytechnic University of Turin)

RDP: Rural Development Programme

UNESCO: United National Educational, Scientific and Cultural Organization

WHC: World Heritage Convention

WS: workshop

CHAPTER I.

1.1. Introduction

A joint international programme called 'Drinkscape' – which consisted of two workshops in two different locations – gave the base of my thesis. This collaboration was between the Polytechnic of Turin (POLITO) and the Kyoto Institute of Technology (KIT). It aimed to address and respond to the unique conditions and challenges of the two different locations. Furthermore, trying to propose actions which could contribute to a renewed territorial development agenda by exploring the relationship between urban and rural landscape, and highlighting their cultural values. Both of these landscapes are connected to traditional food production and consumption.

The first workshop dealt with a small Japanese village in the famous tea production region, Uji. The site of interest itself is a village called Yubune which is part of Wazuka-town. It is located in a peripheral rural area which faces issues connected to the rapid aging of rural communities and the possibility of slowly losing traditional, cultural values.

The second workshop took place in another village situated in the famous wine producing area of Langhe-Roero-Monferrato UNESCO site, in North-Italy. This area shares some similarities with the Japanese village in terms of being in a traditional productive landscape but in this case, Cella Monte – which is the name of the Italian settlement – is under the protection of UNESCO and it's not as marginalized as the first case, but it also faces some challenges.

This thesis does not intend to show fully and only the work made during the workshops but to step away and go further from its findings, possibly arriving to other conclusions.

Keeping in mind the global trend that more than half of the population of the world concentrates in cities and this tendency of people moving from the country side to bigger urbanized areas is growing. Even though the pandemic caused by Covid-19 already has and will have some effects in the formation of urban places in the near future, however this thesis isn't putting focus on it and follows the pre-pandemic trends. It is expected to almost double the world urban population until 2050 which makes the urbanization one of the most transformative trends of the 21st century. This global 'phenomena' creates many different challenges for both the big cities and the small villages, and since these problems are location specific, they also need specific solution. Globalization of the world economy creates opportunities and issues as well as uncertainties for the development processes. As the population, social and cultural interactions and economic activities concentrate in cities, it poses tremendous sustainability challenges in terms of infrastructure, housing, basic services, health, safety and so on (United Nations, 2017).

The rural areas face the danger of eventually becoming more and more abandoned due to depopulation to which contributes a lot of factors. The economic, social and cultural

background, the ability of innovation and the position in the city hierarchy influence this negative process (Forray, Kozma and Molnár, 2016).

Rural and urban development are interdependent, so they need to be handled together. Besides improving the urban habitat, it is further necessary to extend adequate infrastructure, public services and employment opportunities to rural area in order to enhance their attractiveness, develop an integrated network of settlements and minimize rural-to-urban migration. The New Urban Agenda also highlights that the small- and medium-sized towns need special focus (United Nations, 2017).

We entered an era when urban planning is more important than ever. Also, as Jason Corburn said "We're on an urban planet. The global economy is living and dying by what happens in cities" (Ellis, 2020) and even though urban and rural areas are inseparable, I find it important to give more emphasis to rural landscapes and to find solutions to preserve them through integrated developments. The two workshops gave me a good insight of two examples in both Japan and Italy, experiencing it up to so close, led me to put the focus on rural landscapes starting from the two locations and go further by expanding the research in more depth.

The objective of this thesis is to establish a detailed analysis, then explore potential development opportunities in the rural landscapes through analyzing case studies and creating scenarios to assess their feasibility. Identifying the problems and possible pitfalls to find a sustainable balance between urban and rural areas. Finding answers to the following questions: How to enhance the productive landscapes without compromising and damaging their value? How to make a transformation without losing their identity? The analysis of productive landscapes reveals the challenge of their development, how the balance can be kept.

1.2. Literature review

1.2.1. Concepts

In this section some concepts will be reviewed and explained that are important to understand the research more accurately as many concepts can be interpreted a bit differently.

Cultural heritage is „an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values." (ICOMOS, 2002)

According to the FARO Convention the cultural heritage is "a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time." (Council of Europe, 2005, Article 2)

Fortunately nowadays there are lots of different ways – for example through policies, fundings and programmes – the European Union tries to protect cultural heritage and make it more accessible (European Commission, 2021). The European Framework for Action on Cultural Heritage for example is one of the most important initiative to encourage and put into practice an integrated and participatory approach to cultural heritage and to contribute to the endorsing it at European level. Reaching this goal through series of short and medium-term actions. It establishes four key principles and five main areas of the continued action for the cultural heritage in Europe. The principles are the following: holistic approach; mainstreaming and integrated approach; evidence-based policy making; and multi-stakeholder cooperation. The actions are based on five pillars which are promoting cultural heritage for an inclusive, sustainable, resilient and innovative Europe and for stronger global partnership (European Commission, 2019).

The cultural landscapes usually mirror the location specific techniques of sustainable land-use, taking into account their natural environment's characteristics and limits in which they are created. Protecting the cultural landscapes can help the process of maintaining a modern sustainable land-use techniques and preserve or enhance the natural values of the landscape. Also, the protection of the cultural landscapes useful in conserving the biodiversity as they support the natural values of the landscape by the traditional forms of land-use (UNESCO World Heritage Center, 2019, Annex 3).

The Cultural Heritage and Sustainability Practical Guide says that some people go further from the regular definitions and "perceive cultural heritage as a vital resource for socio-economic and sustainable development, which can significantly contribute to smarter, environmentally friendly, socially aware and more inclusive societies." (Jelinčić and Glivetić, 2020, p 8.)

According to WHC cultural landscapes can be divided into three main categories. The first one is the obviously defined landscape designed and created on purpose by man. This category involves garden and parkland landscapes made for aesthetic reasons which are usually linked with religious or other monumental buildings.

"The second category is the organically evolved landscape. This results from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. Such landscapes reflect that process of evolution in their form and component features" (UNESCO World Heritage Center, 2019, Annex 3 Article 10). This can be further divided into two sub-categories:

"- a relict (or fossil) landscape is one in which an evolutionary process came to an end at some time in the past, either abruptly or over a period. Its significant distinguishing features are, however, still visible in material form.

- continuing landscape is one which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time" (UNESCO World Heritage Center, 2019, Annex 3 Article 10). In the thesis the organically evolved landscape, more specifically the continuing landscape will be put into focus, as rural landscapes are the most common types of continuing cultural landscapes therefore this is the category that is relevant in the analyzed case studies.

The associative cultural landscape is the third category. Including these landscapes on the World Heritage List is justified on the basis of strong religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be unimportant or even absent (UNESCO World Heritage Center, 2019, Annex 3).

In the Heritage planning: Principles and Process book written by Harold Kalman, he gives an overview of heritage planning, providing context and principles. According to him heritage conservation is a wide set of discipline "that addresses all aspects of retaining and enhancing historic places" (Kalman, 2014, p 4) and these historic places can mean many things like landscapes, buildings, cities, archeological sites, and other places that have a meaning to the community which they call heritage significance (ICOMOS, 2013b: Article 1.2).

Harold Kalman also says that the preservation is important because "losing the historic place would destroy both the thing and many of the powerful cultural associations that go with it". A crucial step for heritage conservation is advocacy, many well-known organizations started as advocacy groups. Furthermore, it is crucial to explain heritage planning as this is what this thesis is about and will give the guidance for the final decisions. Therefore, "heritage planning (also preservation planning, historic preservation planning, conservation planning, or heritage conservation planning) is the application of heritage conservation within the context of planning" (Kalman, 2014, p 4). The aim is to find solution to the anticipated loss of a historic place in a non-conflicting way. It's a collaborative process that seeks to channel the enthusiasm of advocates into a rational dialogue between different community interests. It is a sub-area of heritage protection and also urban planning (Kalman, 2014).

Moreover, according to the author, the goal of heritage planning is not to prevent change like how the conservation is defined in the Burra Charter where it says that "the aim of the conservation is to retain the cultural significance of a place" (ICOMOS, 2013b: Article 2.2) but the aim is to manage the

change of a historic place well. (Kalman, 2014, p 5)

Similarly, the European Landscape Convention defines landscape protection as actions that conserve and maintain the significance or the characteristics of the landscape, "justified by its heritage value derived from its natural configuration and/or from human activity" (European Landscape Convention, 2000). Also, at this point I would like to mention the definition of landscape management as it's related to heritage protection. It is an "action, from a perspective of sustainable development, to ensure the regular upkeep of a landscape, so as to guide and harmonise changes which are brought about by social, economic and environmental processes" (European Landscape Convention, 2000).

The Cultural Heritage and Sustainability Practical Guide provides guidelines on heritage management planning. It's a process which includes setting clear objectives for managing a heritage site and its sustainability and durability of investments in preservation in the future. The management plan conclusively aims to realize a full and coherent sustainable economic, social, spatial and environmental management of the heritage site in line with the needs and interests of people in the local community. "Based on the situation analysis and needs analysis, the heritage management plan, along with the process of planning and adjusting the views and wishes of different actors and discussing different scenarios, also enables the strengthening of knowledge and skills of stakeholders in planning and management" (Jelinčić and Glivetić, 2020, p 81.)

The final concept that is important to mention and to clarify what I mean by it in my thesis when using it is the sustainable development which "is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland, 1987)

1.2.2. Workshop literature review

The literature for the workshops were collected from various sources. In the Japanese workshop we relied mostly on the resources the KIT students (see the participants' name list in Annex 1) provided for us and the information we collected during the fieldwork which involved observation, interacting with locals and collecting paper-based information from the municipality, museums, stakeholders, etc.

The materials for the second workshop based in Italy was collected and elaborated by us – the POLITO students (see Annex 1). Different sources were used, one of the main ones is the Geoportale Piemonte (http://www.geoportale.piemonte.it/) from which it is possible to get different data for creating maps in geographic information system (ArcMap, QGIS).

During the fieldwork of the second WS much information were gathered onsite from observation and local actors.

In my individual work I continued to use many more sources which are collected and presented in the bibliography chapter at the end of this thesis.

1.3. Methodology

The method used to build up this thesis is described in this section. It can be divided into five main parts but before getting to it, it is important to mention the methodology of the two workshops to have a wider understanding of their process. Both workshops can be divided into three phases.

Throughout the phases the work happened mostly as a collective elaboration, working in three groups to reach a potential solution in both cases. In the first workshop each group consisted of students with similar field background: architects, landscape planners and designers. Whereas in the second workshop we formed three groups based on topics, so in the second case students with different study background were working as a team which let us to approach the project in a more multidisciplinary attitude.

The first phase was a desk-study which consisted of collecting and presenting information as well as developing maps to help to understand the areas in question better for all the participants. In the first WS the Japanese students provided the information while in the second one it was vice versa. In both cases the aim was to gain knowledge in advance on the two sites of interest, understanding the context and the possible issues which were to be faced on the location during the visit and the analysis.

The second phase consisted of the field surveys and interaction with local stakeholders. In both workshops the wider surroundings of the villages were visited as well to have a larger scale overview of the territories.

The third phase included the post-work stage on the area. Translating the collected information into maps to analyze and synthesize the material to reach a conclusion and to propose actions which contributes to the development of the area.

My individual work enters the picture here as in this paper my goal is to continue and go further with the research and arrive to my findings and conclusion. Thus, the five main parts of the thesis first aim to set the purpose of this study and explain some important concepts for a better understanding, the second part focuses on rural landscape preservation and development more in detail, the third chapter is the analysis part. As the two workshops give the base for this thesis, it is crucial to conduct analysis on the two area of interest more in depth for which the Landscape Character Assessment is used. Since the two site differs and due to language barrier and accessing to sources, the LCA is altered and adapted to fit better to what is important and what can be analyzed. As it can be seen on the figure 1 below the landscapes are very complex and consist of different characteristics hence it is important to highlight the most useful ones in this research.

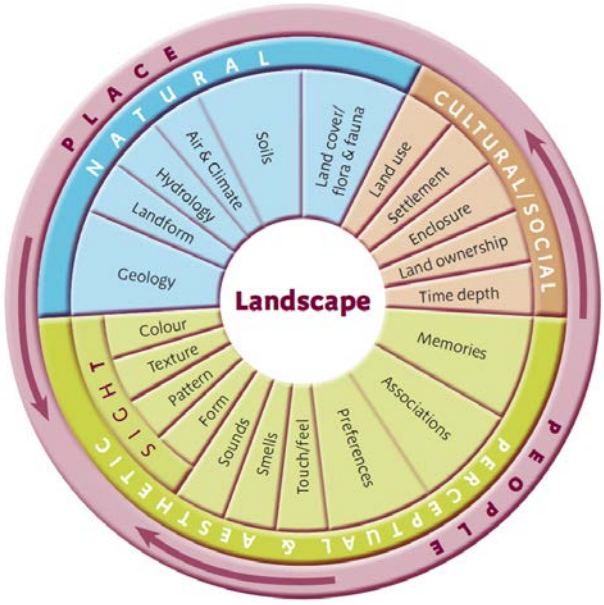

Figure 1: Components of landscapes
Source: Tudor, 2014, p 9.

Fourth part, as it was mentioned earlier that usually the problems the smaller towns and villages face are location specific, they need a specific solution. However, there are many good practices around the world on how medium and small municipalities enhanced their situation. For example, there are programmes that aims to foster sustainable

development. Reaching this by supporting and sharing the knowledge so that other places across Europe can answer to similar problems they are facing, basically creating a scheme or a framework that helps to tackle specific issues in rural areas and supports to be applied in different places with alternation. One of them is the HITSCAPE project within INTERREG, which is a programme, a community initiative to help European regions to work together by sharing experience and knowledge, with the help of funding. Searching for innovations and possible solutions especially for policy-makers (Eppich, 2014). Also, the LEADER programme was an initiative to help rural development projects by providing a toolkit.

In this thesis some good examples and other case studies are analyzed and synthetized but not just from Europe. The aim is to understand which initiatives and actions are good and whether they could be applied in the rural areas like Yubune or Cella Monte. Lastly, making evaluation by using the SWOT analysis and synthesizing the findings. After identifying the assets and unfolding the problems in the analyzed areas two scenarios will be showed for each. One is going to adumbrate how the future be like if there is no intervention or major changes in the municipalities and follows the current tendencies. The second one will show the optimized scenario where it is going to be explained what is needed for realizing that scenario. Summarizing and incorporating these actions and development ideas into a more comprehensive set of goals which can be transferrable to other similar cases in the rural areas.

CHAPTER II.

2. Rural landscape preservation

In chapter II. the main points of rural landscape preservation and development is discussed for further understanding as it is the core of the thesis. On European level there is a vast amount of policies, projects and frameworks. Firstly, the focus is on one specific paper, which reflects on this topic from an international level, not just from European point of view.

The *ICOMOS-IFLA Principles Concerning Rural Landscape as Heritage* titled paper targets to address loss and unfavorable changes affecting rural landscapes and their associated communities by recognizing, promoting and preserving the values of their heritage with the principles presented. It aims to promote the right balance between economic, cultural, social and environmental aspects. Furthermore, it defines rural landscape in the following way: they "are terrestrial and aquatic areas co-produced by human-nature interaction used for the production of food and other renewable natural resources, via agriculture, animal husbandry and pastoralism, fishing and aquaculture, forestry, wild food gathering, hunting, and extraction of other resources, such as salt. Rural landscapes are multifunctional resources. At the same time, all rural areas have cultural meanings attributed to them by people and communities: all rural areas are landscapes.

Rural landscapes are dynamic, living systems encompassing places produced and managed through traditional methods, techniques, accumulated knowledge, and cultural practices, as well as those places where traditional approaches to production have been changed" (ICOMOS, 2017, p 2.).

Also, the rural landscape as heritage implies both the tangible and intangible heritage of rural territories. They contain many features, the physical attributes like the morphology, hydrology, built environment and so on, but also the rural landscapes encompasses the wider physical, environmental linkages and the associated cultural values. Every rural area can be interpreted as heritage as it can be presented in different ways and extent and related to many historic period.

The importance of rural landscapes lies within what it represents – as they have been formed over periods of time and they embody important parts of our world's human and environmental history, the ways of living and heritage. As it was mentioned before, they are all kinds of resources, like food and renewable natural resources. Rural landscapes carry the opportunity for future adaptation and resilience (ICOMOS, 2017).

2.1. Issues, risks

According to the *ICOMOS-IFLA Concerning Rural Landscapes as Heritage* there are three main type of change - which are linked – that poses as threats to the rural areas. The first one is the demographic and cultural change. More specifically the trend of population growth in urban areas and decreasing population in rural areas; the urban expansion; the development pressures and the loss of the rural values like traditional practices, the cultures and local knowledge.

The second set of threats are structural like globalization, the change of tendencies in economy, growth of trade and relations,

intensifying agricultural performance and changing of the techniques.

The third change that affects the rural landscapes in a negative way is the environmental risk like the climate change itself, the degradation of environment due to pollution and over exploitation, the loss of local biodiversity.

"Heritage can contribute to sustaining and increasing the adaptation and resilience of rural landscapes by supporting rural and urban inhabitants, local communities, governments, industries, and corporations as integral aspect to managing the dynamic nature, threats, risks, strengths, and potentialities of such areas. Conservation of the integrity and authenticity of the heritage should focus on assuring the standard and quality of living of local populations working and living in rural landscapes. As all heritage, rural heritage is an economic resource: its use should be appropriate and should provide vital support to its long-term sustainability" (ICOMOS, 2017, p 3).

2.2. Rural development

2.2.1. LEADER

The LEADER programme was an EU initiative to fund rural development projects in rural urban and coastal areas. There were more programming periods, starting in 1991 and the last period ended in 2020 (European Commission, 2021). This programme is relevant in this research due to its method that extends rural areas (but not only) and how to develop rural communities.

"Rural development policy is an increasingly important component of the common agricultural policy (CAP). It promotes sustainable development in Europe's rural areas addressing economic, social and environmental concerns. Over half of the EU's population lives in rural areas, which cover 90 % of the EU's territory. Leader is an innovative approach within EU rural development policy" (European Commission, 2006, p 5.).

The LEADER programme built around the method of mobilizing and providing rural development in local rural communities instead of giving out a fixated set of measures and actions to be implemented. Reaching this goal through innovative actions for which they provide the platform so it serves as a sort of laboratory for experiencing these new ways out. As this programme was ongoing for almost three decades it evolved throughout the years and the information they gathered from evaluations and rural stakeholders show that LEADER as a tool can be used in many different situations and circumstances, so adapting rural policy-making to the extreme diversity of rural territories' needs.

The aim was to encourage the rural areas to try out new ways, to maximize their assets and to overcome the challenges they come across like ageing population or missing services. It lined up with other EU programmes so it would activate the local resources or support projects that improved the area.

The main idea was to involve the local stakeholders and implement the development strategies on a local level. The whole process had to be transparent and the other crucial difference this programmed put on the table is that it provided the 'how-to' rather than what to do. The seven key features explained in the following is important to see as a 'toolkit' (Figure 2).

The first feature is the area-based local development strategies which allows the actions to be more suitable, better matching

with the actual needs and the local competitive advantage. The second feature is the bottom-up approach which encourages the local actors to partake in the decision-making about the development strategy (European Commission, 2006).

The third feature is the public-private partnership: the local action groups (LAGs). The LAGs get financial support for realizing the local rural development strategy – which are primarily happen through supporting the local projects. The LAGs are smaller rural communities which are created by joining the public and private (or non-profit) sector. Their task is to make and elaborate on the local integrated development strategies for which they have to involve different local actors from social and economic areas and select which projects they will support. Through this they will share and exchange the information and experience of building networks and collaborating (European Court of Auditors, 2010).

The fourth key feature is facilitating innovation. Stimulating new approaches in the development of rural areas, this allows for the LAGs to make decisions more freely about the actions they want to support (European Commission, 2006).

The fifth feature is the integrated and multi-sectoral actions. It is important because "the actions and projects contained in local strategies should be linked and coordinated as a coherent whole. Integration may concern actions conducted in a single sector, all programme actions or specific groups of actions or, most importantly, links between the different economic, social, cultural, environmental players and sectors involved" (European Commission, 2006, p 13).

The sixth feature is networking which includes the information flow between LEADER groups, organizations involved in the rural development about exchanging achievements, experiences and the 'know-hows'. Exchanging knowledge is useful, also networking makes links between different stakeholders and areas which can stimulate cooperation.

The final key feature is the cooperation. It is more advanced from networking, it makes it possible for different LEADER groups to work together, boost their local activities and help to value their local resource.

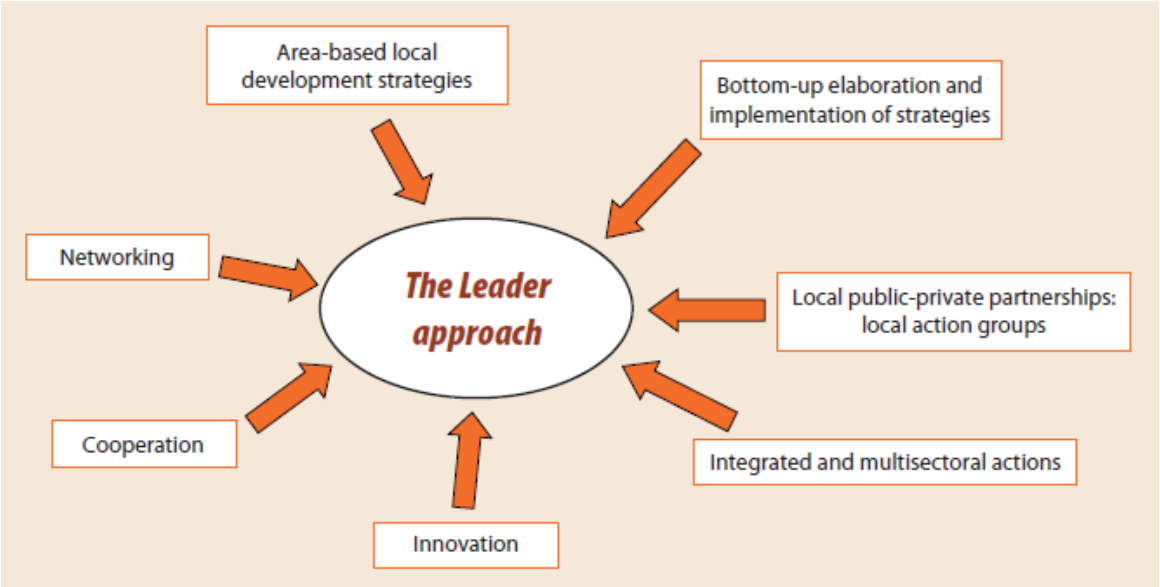

Figure 2: The 7 key features of the LEADER approach
Source: European Commisson, 2006

Several steps needs to be taken to implement LEADER at the local level. Normally, the following steps are required to go through in the implementation process: first capacity building and bringing the local actors together, then analyze the local rural territory with identifying existing activities and initiatives. Then creating partnership and prepare the local development strategy (European Commission, 2006).

2.2.2. RURITAGE

There is a funding programme made by the European Union to support projects that aims to protect cultural and natural heritage, more specifically it funds projects related to resilience sustainable reconstruction of heritage at risks. It is called Horizon 2020 and within this programme there are many projects, the one I would highlight here is called RURITAGE (European Commission, 2021). As heritage led development is an important concept in this research it is important to mention the outlines of this project. It has some similarities with the LEADER programme.

It is a four-year long research project, which started in 2018 and it will end in august 2022. RURITAGE seeks to turn rural areas in sustainable development laboratories to enhance their cultural and natural heritage and use it as an engine of regeneration. RURATAGE identifies six Systemic Innovation Areas as paradigms of heritage-led regeneration strategies which are the following: pilgrimages; sustainable local food production; migration; art and festivals; resilience; and integrated landscape management. They help to show the heritage as also economic, environmental and social development potential (RURITAGE, 2021). With the help of the project‘s framework and tools the aim is to help “knowledge building, providing evidence and supporting replication and up-scaling activities of the implemented heritage-led regeneration strategies and plans, contributing to mainstream heritage in Reginal, National, European and global policies” (European Commission, 2021).

2.2.3. European Network for Rural Development

In Europe the rural areas occupy around half of the European Union's territory, there are approximately 25 million farmers and agri-food sector is the fourth biggest export sector, thus rural regions provide more than 46 million of the EU jobs. The member states of the EU developed European Rural Development policy as part of the Common Agricultural Policy (CAP) to help out and improve the rural areas. The CAP has two pillars from which the first one supports farmers' incomes that are direct payments financed from the European Agricultural Guarantee Fund. The second pillar is the actual rural development that supports rural territories co-financed from the European Agricultural Fund for Rural Development (EAFRD). With this fund they aim to support modernization of farms, support business development for young farmers, increase biodiversity in farmlands, invest in renewable energy, improve access to rural information and communication technologies (ICT) services and create non-agricultural jobs as well (European Commission, 2016).

There are three main objectives for the European Rural Development policy to reach which are the following: "fostering competitiveness of agriculture; ensuring the sustainable management of natural resources and climate action; achieving a balanced territorial development of rural economies and communities, including the creation and maintenance of employment" (European Commission, 2016, p 3). Implementing the European Rural Development policy they launched 118 Rural Development Programmes (RDPs) and had the programming period between 2014-2020. These RDPs helped to create the main actions with the relating budget allocations for the specific locations. Making it easier for the whole process they established the rural networks across Europe so it would help to reach a better outcome from the RDPs. The European Network for Rural Development (ENRD) was created to support sharing information, exchange knowledge on an international level and help cross-border learning, so it functions as a hub for information exchange. The ENRD's four goal is to boost involvement of stakeholders in rural development; to enhance the quality of RDPs; help the information-flow on the benefits of Rural Development policy; and to help the evaluation of RDPs. There are two support units that helps the work of ENRD: one is the Evaluation Helpdesk which gives experts' support on how to enhance methods, tools and knowledge for evaluating RDPs. The other support unit is the ENRD Contact Point that helps the operation of the ENRD itself (European Commission, 2016).

The ENRD aimed to involve anyone who's interested and committed to rural development in the EU, so it's not based on membership. The main stakeholders include the National Rural Networks (NRNs); the RDP Managing Authorities and Paying Agencies; the LAGs; European organizations, Agricultural advisory services; Agricultural and rural researchers and any organization or individual that's interested in rural development (European Commission, 2021).

3. Comparative analysis of case studies

In chapter III. the two areas of interest is being introduced and analyzed in more depth using the LCA. It provides a framework in which it is possible to conduct the comparative analysis for both of the target area.

As all landscape has character, it is the process of identification and description of variations in the landscape's character. It helps to understand how the landscape is perceived and experienced. It consists of two stages. First is the characterization which involves defining the scope of the assessment, a desk study, a field survey and description of the landscape and its character and key issues. The second is making judgements based on the first stage. Involving stakeholders is also a key element as it will result in sounder decisions concerning the landscape (Tudor, 2014).

In this systematic analysis the order of the two case studies will be changed so the Italian – second – case study will be introduced first and then the Japanese case study due to the reason that the Italian case study is more advanced in a heritage protection as it is already part of UNESCO and not as marginalized as Yubune. This way, the Italian case study can stand as a sort of "front runner".

In both of the case studies the analysis will follow in a way the methodology of the heritage management plan: *The Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato - Nomination Format Book 1*, which divided the assessment of the landscape into three thematic category: first the natural physical elements are introduced, then the anthropogenic related features and lastly the perceptual and aesthetical features that are more intangible. In both case studies the personal experiences and the collected information on site will be included as well. This methodology is aligned with how the landscape components are categorized in LCA (see figure 1).

3.1. Case study I. - Italy

The Italian workshop's emphasis was on the vineyards in the famous Langhe-Roero-Monferrato UNESCO site in Italy in September 2019. There were three main focuses connected to the area: the 'Village-house' in Cella Monte, the 'Quarry' and the 'Paths'. The groups formed according to these topics and I only find it important to mention this because as I was working in the team that dealt with the topic 'Paths', it viewed Cella Monte on a bigger scale which fits better into my analysis as it was focusing on the viewpoints in the municipality and not just on one specific location in small scale. In my opinion the findings and suggestions were interesting and useful, but as it was much focused on vistas I will extend the research to be more holistic and comprehensive.

3.1.1. General context

Italy is located in the south-central part of Europe on a peninsula reaching into the Mediterranean Sea (Wickham et al., 2021). Its land area is 294,140 km^2 with 60.3 million inhabitants which has been decreasing since 2017 (World Population Review, 2021).

Interestingly and unfortunately it is the current trend in many countries and Italy it is the worst in a very long time (OECD, 2020).

The percentage of people over 65 years old is 22.7 % which is second most high after Japan and the number of new borns in 2020 was the lowest in almost two centuries (since the Unification), and the immigration has also decreased therefore the future calculations predict the population to drop from 60.8 million people (in 2014) to 54.1 million by 2065 (ISTAT, 2018).

In the urban areas – which occupies 25% of the total territory – 70% of the population lives which leave the rural areas very scarcely populated with 30% of the inhabitants in ¾ of the total Italian land area (Figure 3) (The World Bank Group, 2021).

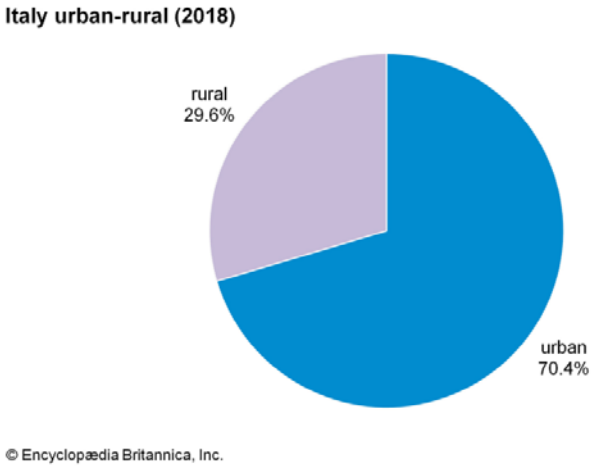

Figure 3: Population distribution in urban & rural areas
Source: Wickham et al., 2021

There has been some significant land-use change happening from which the most outstanding one is the increase of forested areas due to the desertion of marginal and rural areas (ISPRA, 2018; Thaitakoo, Cassatella and Chang, n.d.)

According to the Word Bank database in Italy the agricultural land use is around 40% of the total land (The World Bank Group, 2021). There are four types of agricultural land use: field crops (e.g. wheat, rice, corn, tomato, etc.); pasture where they graze animals like cattle; forestry (which occupies around 1/3 of the total territory and as it was mentioned before it has been increasing in the past years); and the fourth type is tree crop which is the most important in this case because it includes the vineyards (and olives) (Wickham et al., 2021).

The economy has changed a lot in the past decades, becoming stronger and more influential. The strength lies within the engineering and metallurgical industries and the weakness roots from the lack of raw materials and energy sources as most of these are imported. The textile industry is the largest in the country but also tourism and related services are significant. It is also important to highlight that Italy is not independent agriculturally but some commodities represent important part of the export market such as exporting olive oil – Italy is world leader in it – also a major exported product is the wine, therefore the Italian vineyards hold a remarkable value (Wickham et al., 2021).

Figure 4: Italy's wine regions
source: Vineyards Media LLC, 2021

Vineyards spread across 6,950 km^2 and they can be found in all the regions of Italy, so there's 20 wine regions (Figure 4) (Vineyards Media LLC, 2021). In 2018 7.67 million tons of grapes were harvested from which they

produced 5.66 billion liters of wine (Amfori, 2020). In this research the significant one is the Piedmont region as the area which is being analyzed can be found in the eastern part of Piedmont region (Figure 5).

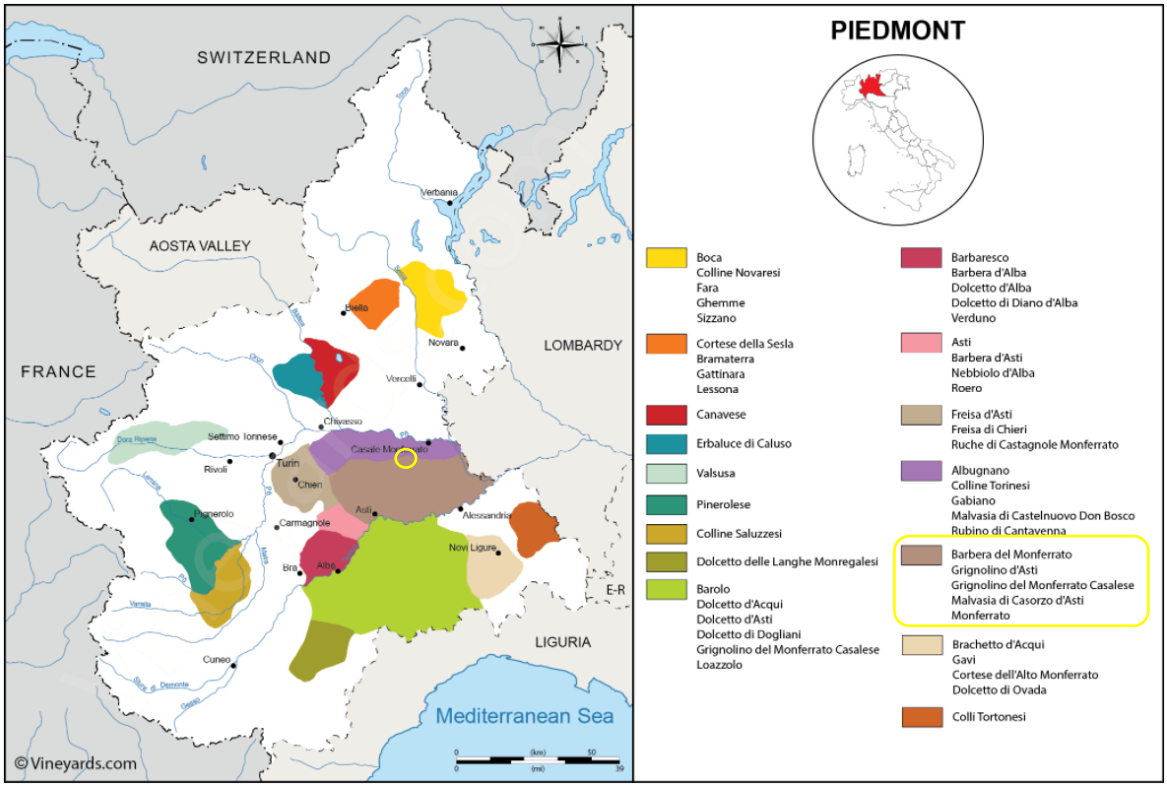

Figure 5: Piedmont Wine Map (yellow circle shows Cella Monte)
source: Vineyards Media LLC, 2021

As the focus area is in the northwest of Italy, it is essential to discuss about the heritage located there. The *Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato* became UNESCO World Heritage Site on the 22 June 2014 with the decision no. 38 COM8B.41. This landscape consist of five distinct winegrowing areas and a castle (World Heritage Committee, 2014).

These six component of the serial site are the following: “La Langa del Barolo”; “Le colline del Barbaresco”; Nizza Monferrato e il Barera; Canelli e l’Asti spumante”; “Il Monferrato degli infernot” and the “Il Castello di Grinzane Cavour” (figure 6) (Regione Piemonte, 2021).

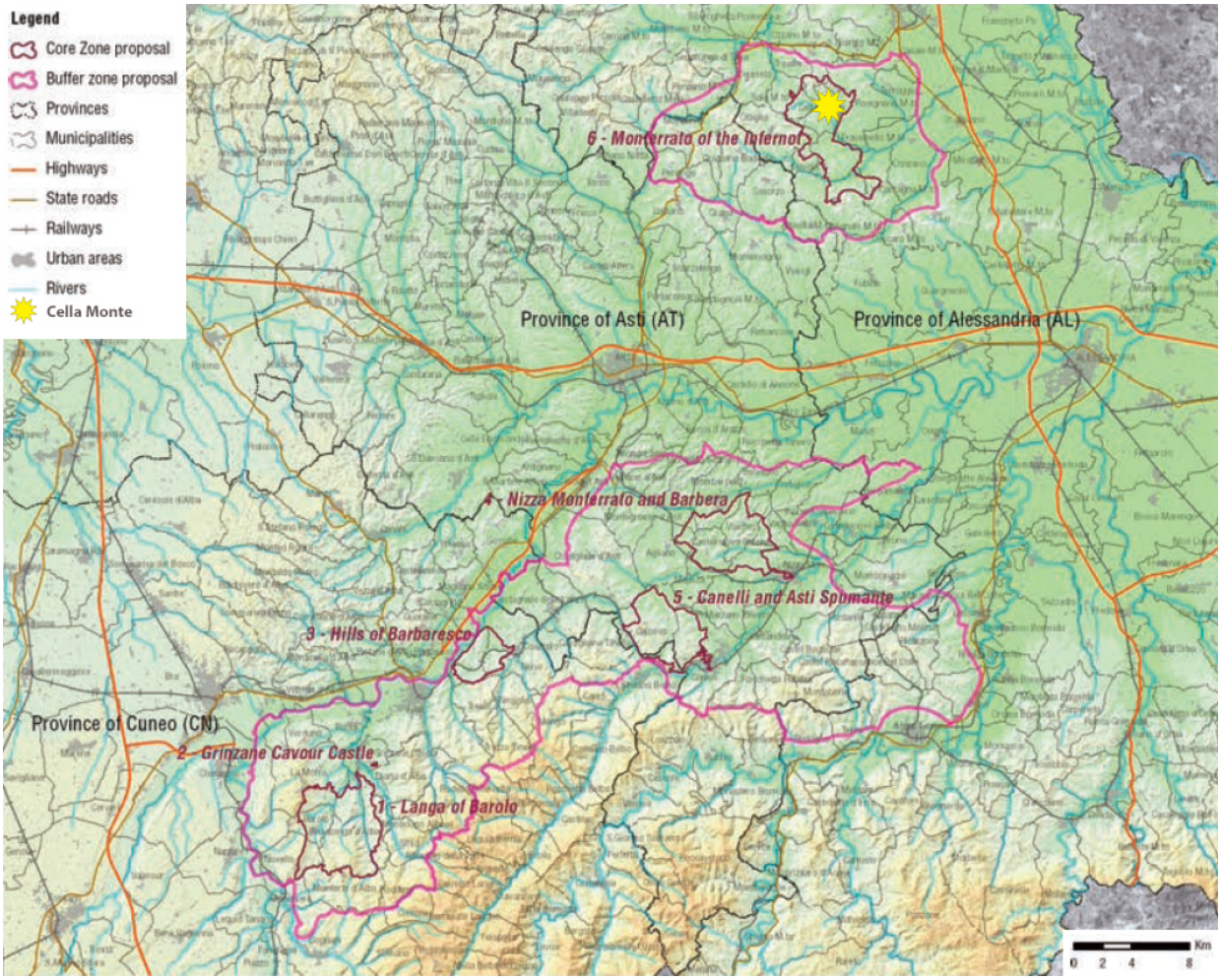

Figure 6: The 6 components of the site
Source: UNESCO, 2014, p 20-21.

"They reflect a slowly developed association between a diverse range of soils, grape varieties that are often native, and suitable winemaking processes. They offer panoramas of carefully cultivated hillsides, following ancient land divisions punctuated with buildings that lend structure to the visual space: hilltop villages, castles, Romanesque churches, farms, ciabots[1], cellars and storehouses for cellaring and for the commercial distribution of the wine in the small towns and larger towns on the margins of the vineyards." The outstanding value is the harmony and balance between aesthetical qualities of this landscape, the various built features related to winemaking activities (World Heritage Committee, 2014, p. 236).

Cella Monte is included in the 'Il Monferrato degli infernot" site which is one of the five winegrowing areas. It is characterized by the singular typology of vernacular architecture, the infernot which is an underground wine cellar dug into the canton stone that geologically characterizes the area (Regione Piemonte, 2021).

[1] "Ciabot: small building situated in the vineyard, used to house farm tools and repair people from inclement weather." (UNESCO, 2014, p 668.)

3.1.2. LCA of Cella Monte

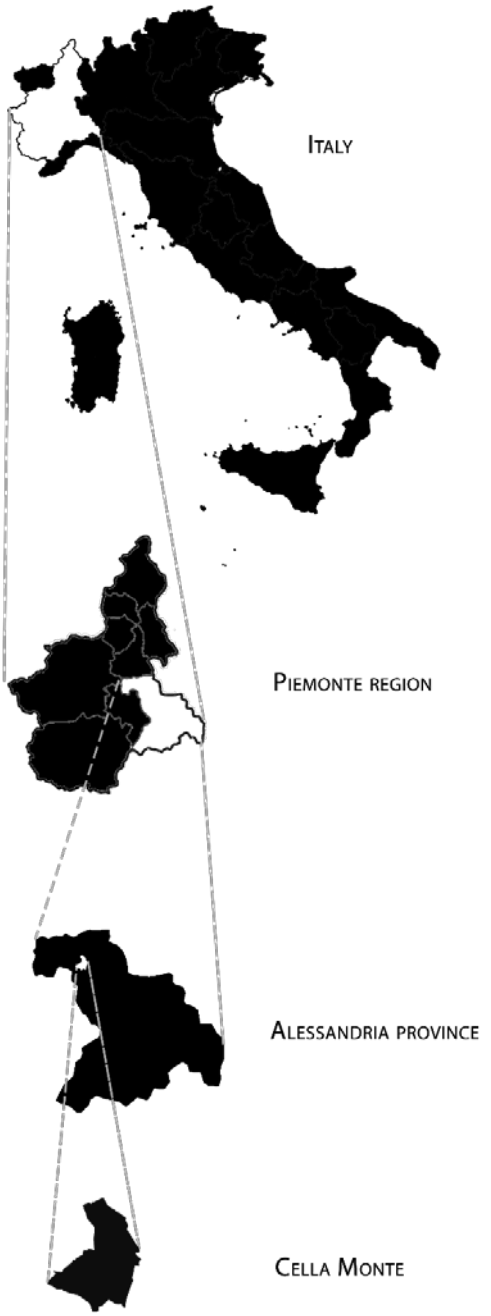

Figure 7: Location of Cella Monte
Source: Elaborated by author

Cella Monte is a commune – a municipality – situated in Piedmont region, in the northwest of Italy. Within Piedmont – which is consist of eight provinces – the municipality is located in Alessandria province (Figure 7). Cella Monte's neighbouring municipalities are the following: Rosignano Monferrato, Sala Monferrato, Ozzano Monferrato, Ottiglio and Frassinello Monferrato (Tuttitalia, 2021).

Natural physical features

The physical attributes of the landscape will be assessed in this section, like the geomorphological, hydrogeographical, soil and climate features. Cella Monte is occupying 5.6 km^2 area (Geoportale Piemonte, 2020). It's located on the southern part of Po Plain as the municipality is about 6 km to the south from the Po River (Figure 8).

Figure 8: Cella Monte's location
Source: Bing Satellite, 2021

The climate in this area according to the Köppen-Geiger climate classification is Cfa – which is temperate, no dry season, hot summer (Beck et al., 2018). To be more precise the climate is temperate continental that is characterized by fairly different temperatures in the summer (maximum ~35°C) and winter (minimum around -15°C). The average rainfall is less than 700 mm/year which is the driest in Piedmont region.

The scope area zooms into the Monferrato area which can be divided into two parts: the “Basso Monferrato” (lower height of the hills) and “Alto Monferrato” (higher hills area). Cella Monte is in the lower part – Basso Monferrato – which lies between the Rivers Po and Tanaro. The characteristic soil in this area is mostly fine or very fine textured soils that are rich in lime and sand that mostly has marine origin. This pedological characteristic (rich in minerals) and the local climate conditions create a very favorable circumstance for the cultivation of vines. This area is characterized by gentle hilly landforms (below 300 m above mean sea level), which is the trait of the Monferrato wine region, it is part of the vast hill system of Langhe-Roero and Monferrato (Figure 9) (see also Annex 2) (UNESCO, 2014).

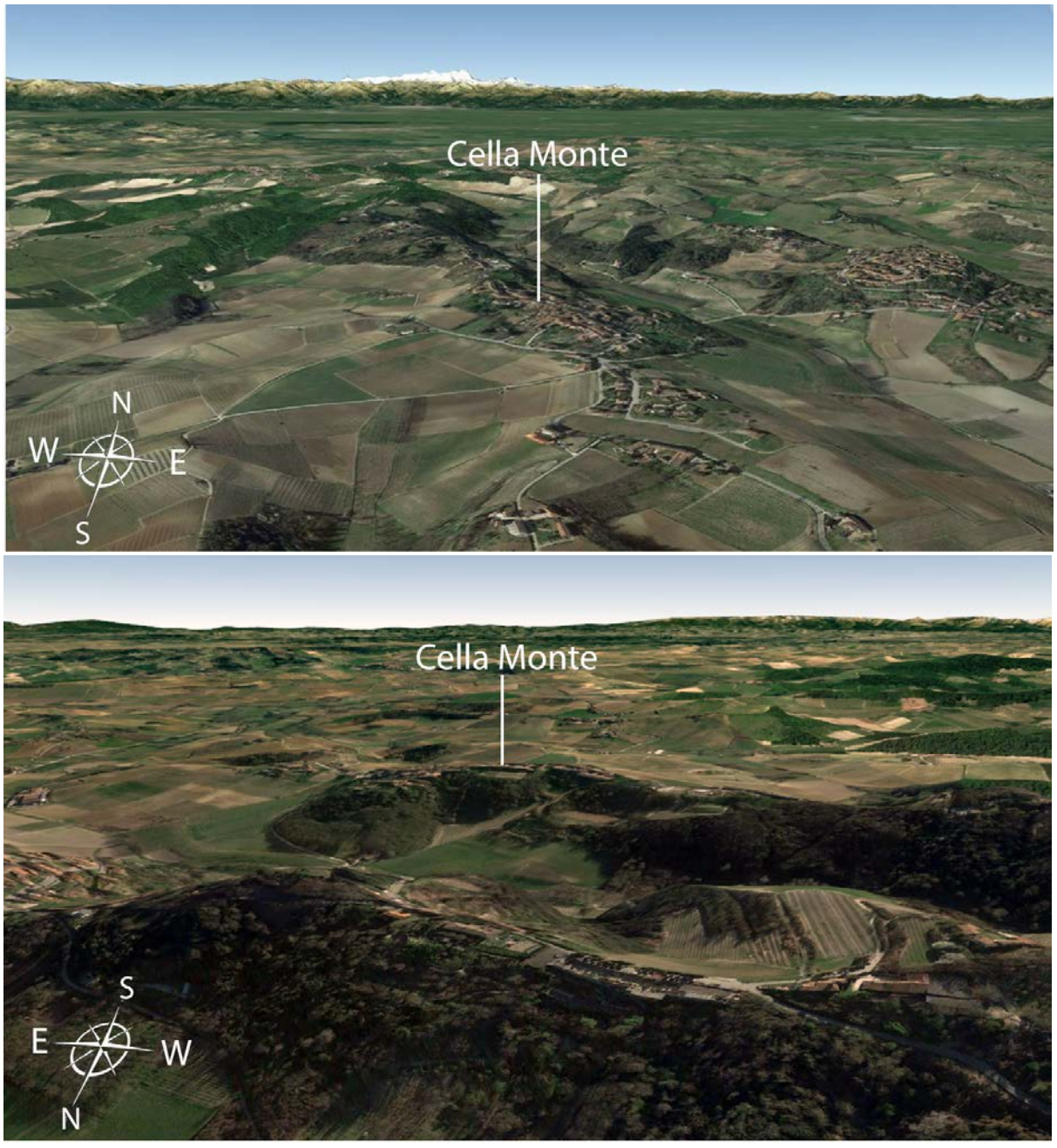

Figure 9: The landform of Cella Monte
Source: Google Earth, 2021

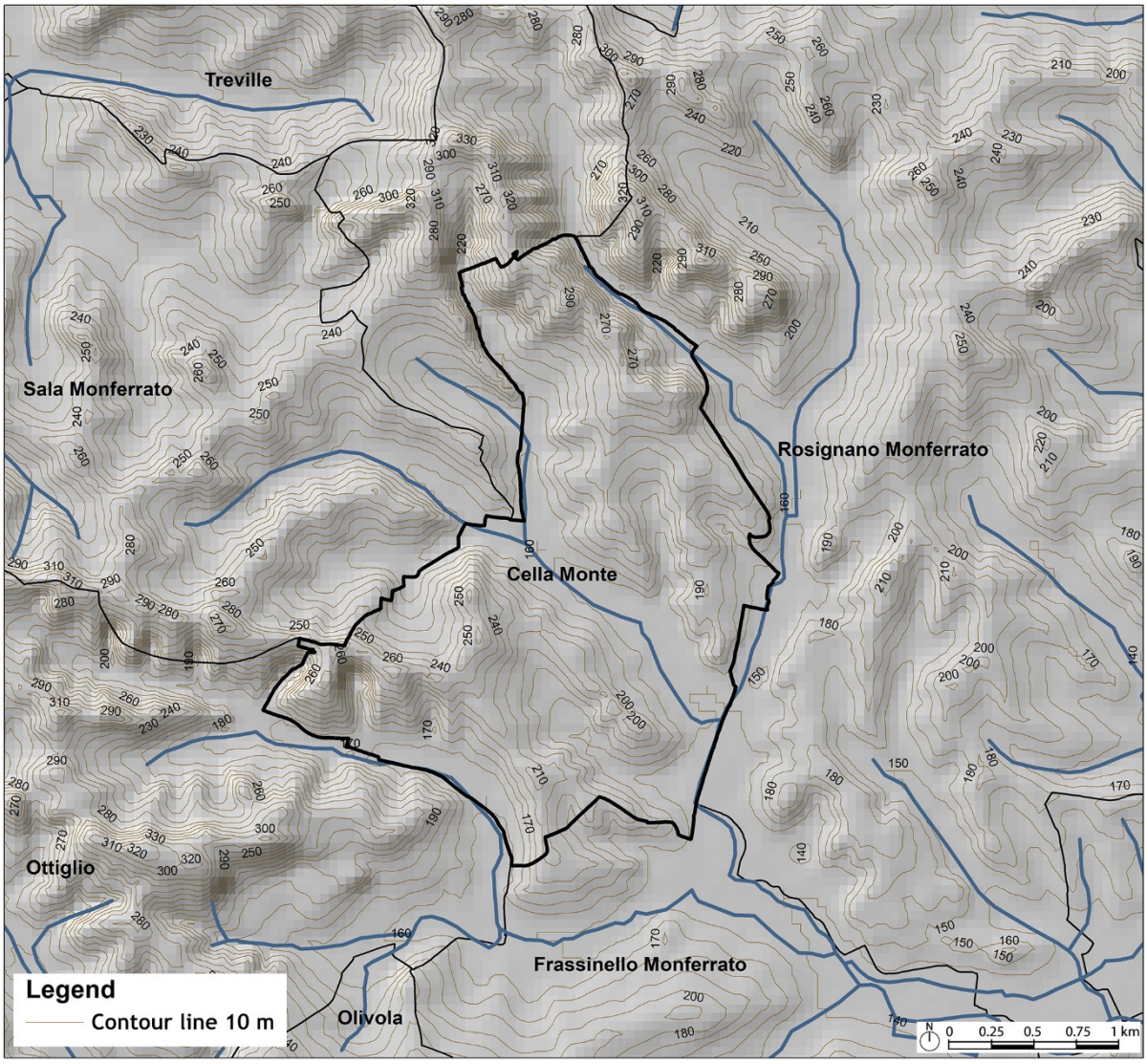

Figure 10: Topography and hydrology of Cella Monte
Source: Geoportale Regione Piemonte

The lowest area above mean sea level is 150m in the southeast part of Cella Monte and the highest point is 305m which is located in the northwest edge of the municipality (figure 10).

There is not many hydrological features in Cella Monte, basically the only one is the Canneto di V.ne which is a small channel flowing in the ditch alongside the provincial road 41. In the PRGI (General Regulation Plan) this part of the municipality is highlighted as a hydrological upheaval zone and also the northeastern hills landslides can occur (figure 11).

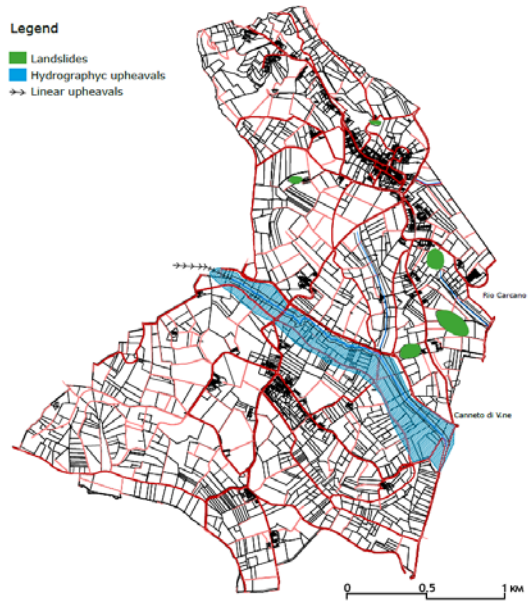

Figure 11: General Regulation Plan

As the land cover shows the vegetation tracks the shape of the hills, this pattern is the following: on top of the hill is the urban areas and on the northern and southwestern part there are some smaller woodlands, on the lower part there are some shrubs and herbaceous vegetation. The most outstanding land use is the cultivated lands which include arable lands, permanent crops and heterogeneous agricultural areas. From these the majority is vineyards, corn and other types of wheat fields (figure 12). On the southwestern part of the municipality there is a bigger connected pasture land (figure 13).

Figure 12: Characteristic landscape elements: vineyards, crop fields
Source: Photos taken by the author

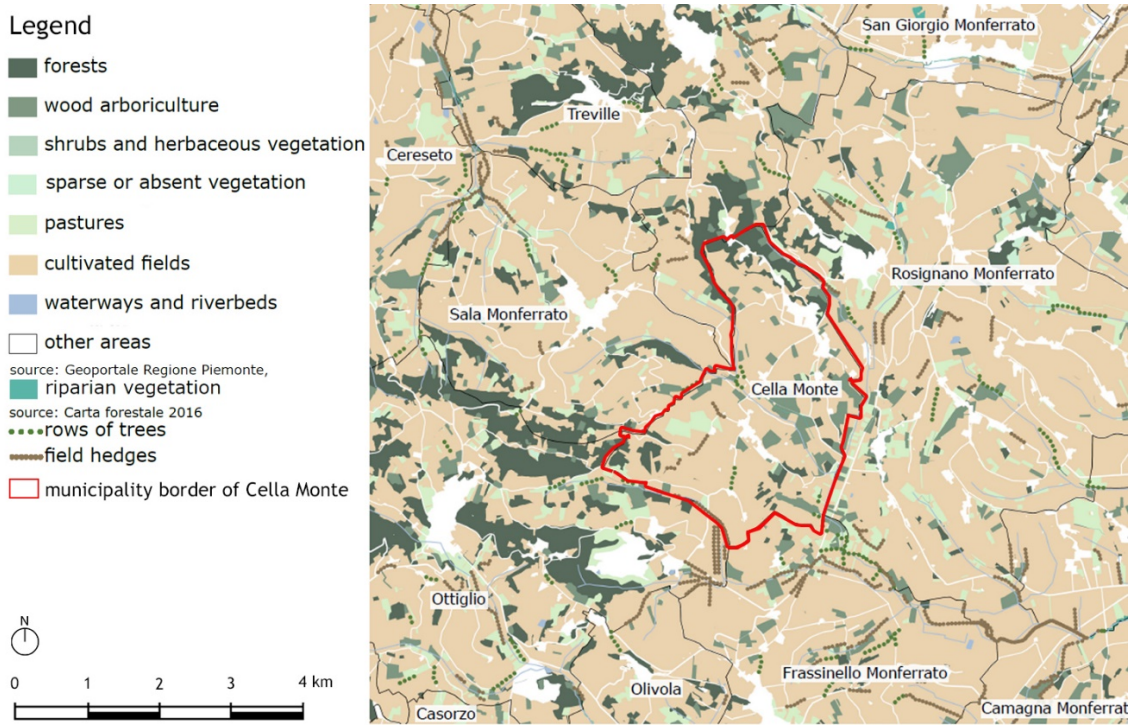

Figure 13: Land cover
Source: Elaborated during the WS, Geoportale Regione Piemonte, CORINE land cover 2010

Cultural, social features

In this section the cultural and social attributes are analyzed, which are basically the anthropogenic related features. Man-made structures, settlement-architectural system, social and cultural values – including heritage – developed around them.

Cella Monte according to the latest estimation (2019) has 495 inhabitants and the trend shows decreasing in the recent years (Tuttitalia, 2021). However, interestingly, according to the census (which is done every 10 years) shows that from 1991 and 2011 the population increased slowly (City Population, 2021) and since the newest census of 2021 hasn't been published yet only estimations can show how many people leave in that area and following the trends on bigger scale (that is decreasing) it assumes decline in Cella Monte's and in general in Alessandria province's population as well.

The inhabited area has grown throughout the time and even though the urban areas spread twice as big since 1880 to nowadays, it's still considered a small town (Figure 14).

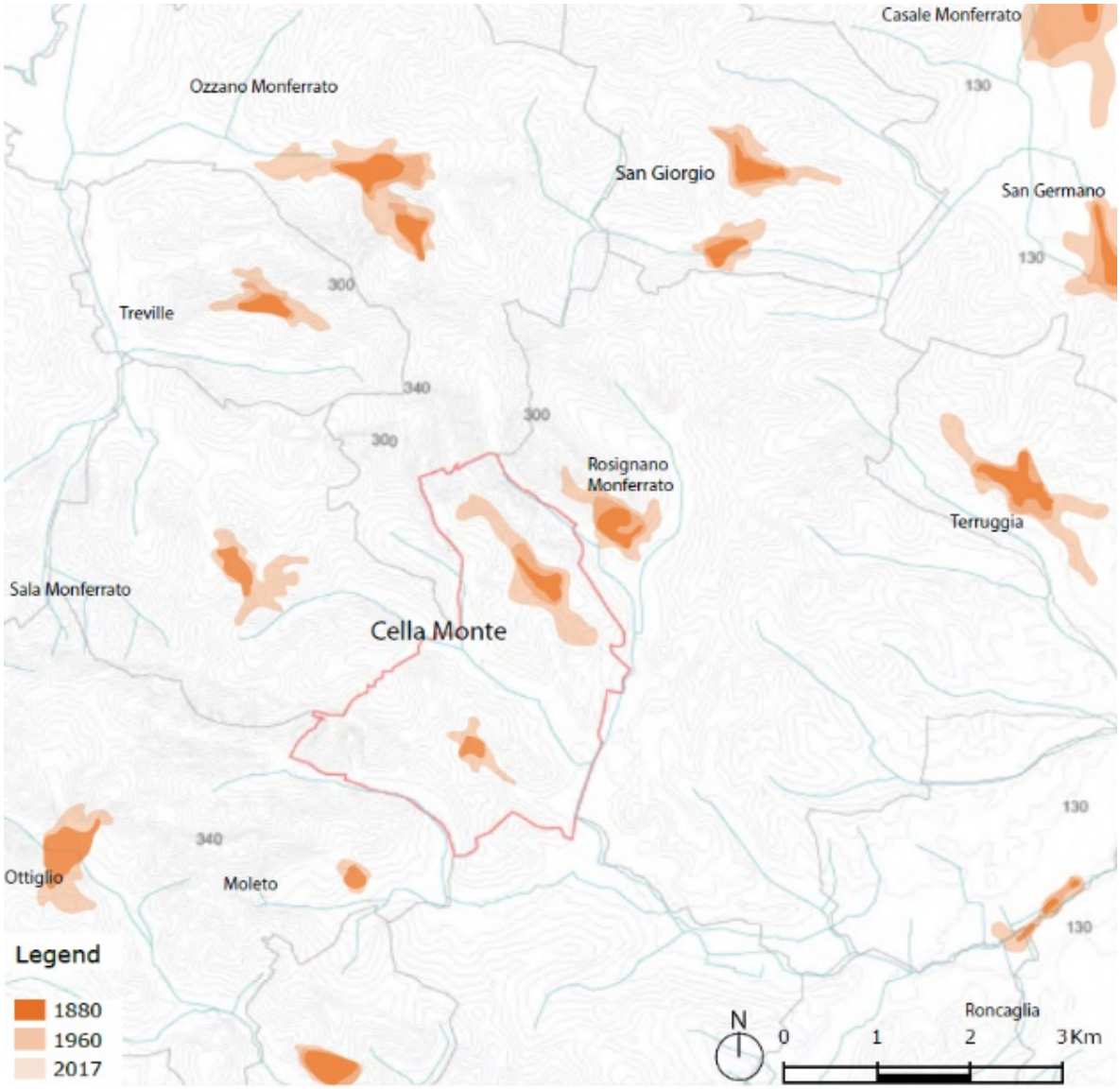

Figure 14: Historic development of the settlements

Source: Geoportale_CTR (Carta Tecnica Regionale) 2017; IGM 1880-1960; elaborated during the WS

The location of Cella Monte is quite favourable as it's situated not far from some bigger cities and due to the fact that it's in the north of Italy, it is close to other European countries but in this sense the public transportation is not considered, only the distances. As it can be seen from Annex 4, the closest important municipality is Casale Monferrato which is only 10 km away, then the cities of Asti and Alessandria are located approximately the same distance to the southeast and southwest. The problem is the lack of available public transportation. There is one bus that connects Cella Monte to the neighboring municipalities, this bus line is between Casale-Terruggia-Rosignano-Frasinello-Ottiglio-Grazzano-Moncalvo, and this one passes only a few times a day and stops in 4 different stops in Cella Monte (Comune. di Cella Monte, 2021; GruppoStat, 2021; OrariAutobus.org, 2021). The railroad passes 3km to the north from Cella Monte but the closest train station is in Casale Monferrato.

In a bigger distance –which can be reached within 1.5 hour of driving – there is Milano to the northeast, Torino to the west and Genova to the south. These big cities has all the services and airport connections, also Genova has the harbor connection. Casale Monferrato also has an airport but it isn't international, it's for smaller airplanes only.

The border of France is 130 km, the Swiss border is 160 km away as the crow flies. Also, straight to the south the Liguria Sea is 80 km away (Annex 4).

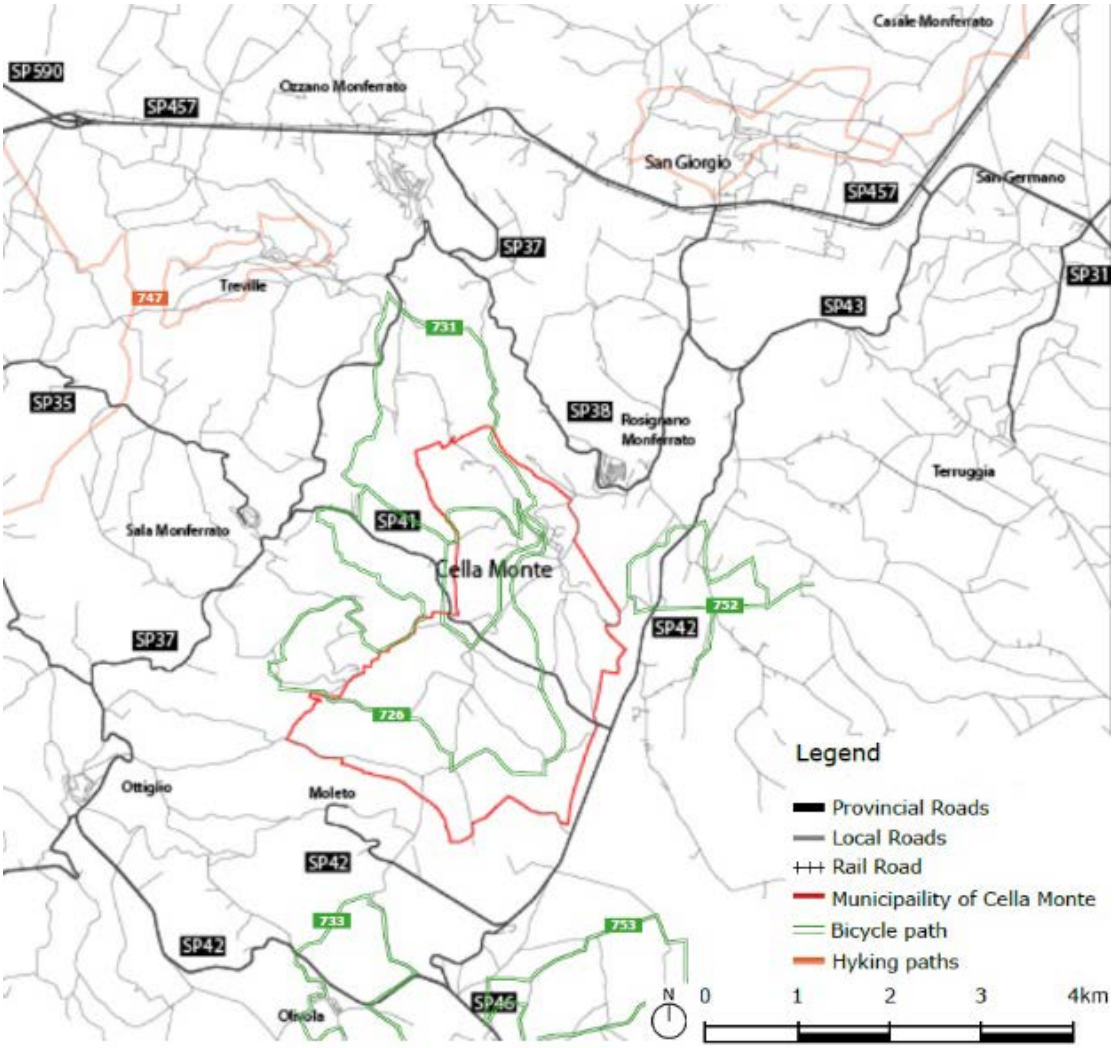

Figure 15: Infrastructure
Source: Elaborated during the WS, Geoportale Regione Piemonte

The main provincial roads around Cella Monte is SP42, SP41, Sp38 and SP37. The closest highway is the A26 (Autostrada dei Trafori) which can be reached within 20 minutes by car (~15km) from the center of Cella Monte. There is a group of hiking paths, called “Camminare il Monferrato” which was born out of a collaboration between CAI (Club Alpino Italiano) of Casale Monferrato. These routes are passing though picturesque landscape and vineyards. In Cella Monte there is the hiking path no. 726 which is called the Vineyard and infernot route and it is 14 km long, the path no. 731 is the Cella Monte Ring which is 8.7 km long (figure 15) (Parcocrea.it. 2021.). There is also an app developed as a guide for these tracking routes (Google Play, 2021).

After analyzing the available services (from experiences during the site visit, researching on Google Maps and other sources) in the area it can be said that the agrotourism is very outstanding as it is related to the wine farms and wine production. Agrotourism is the combination of agricultural activities with tourism that’s located in the rural areas. There’s quite a few accommodation scattered in the municipality’s territory, restaurants and wine tasting places, mostly on the upper part of Cella Monte, but close to the vineyards as they are related to the landscape, the vineyards and the wine processing estates. Usually in the wineries there wine tasting activities, sometimes combined with restaurant and accommodation services (Agriturismo Italia, 2021).

There is a lack of other services, just to list a few: there is only one pharmacy in Cella Monte, no healthcare institution, no supermarkets. For these services the people living there and the visiting tourists have to go to the neighboring municipalities.

As it was mentioned earlier there are many commodities and services related to vineyards and wine production. Many architectures are connected to wine production as well and some are very specific to this region. There are many of these rural built structures in Cella Monte. The casot and ciabots are small buildings located close to the vineyards and were used as temporary warehouse or to live until the farmers were far from their homes. These are typical piedmontese architecture (figure 16) (Wikimapia, 2021).

Figure 16: Ciabots in the vineyard
Source: Wikimapia.org, 2021.

Cascina is also a typical rural architecture in this region but it’s bigger than the casot or ciabot. It usually has two floors and functions as a residential (not temporary) and working space. The shape of the building can vary from a simple linear to L-shaped or with enclosed courtyard. It usually has cellar, kitchen, bedrooms and the ground floor connected to stable (figure 17).

Figure 17: Part of a still in use cascina
Source: taken by the author

The infernot is the most important structure that is unique to this region and creates one of the most valuable element of this UNESCO site. As it was mentioned earlier they are hand dug into the sandstone (Pietra da Cantoni) beneath the surface, either under the house or under the street and the access to it can differ as well. It was used for storing wine (figure 18).

Figure 18: Infernot in Cella Monte
Source: Photos taken by the author

It's important to mention the ecomuseum of "Pietra da Cantoni" as well. It's functioning since 2003 and a French model was the origin idea. It's an institution that contains more things such as a part of territory which includes the kind of sandstone that can be found there only, also traditions and ways of life. It's a system of connected built structures like the infernots. The term ecomuseum indicates a territory characterized by traditional living environments, particularly relevant naturalistic and historical-artistic heritage and worthy of protection, restoration and enhancement. The physical museum that introduces these is located in the northern part of Cella Monte (Ecomuseo della Pietra da Cantoni, 2021) (Annex 3 picture no. 4).

Other buildings are also important, as the religion is strongly present in Italy, there's multiple churches or sacred built structures. In Cella Monte there's seven: Church of San Quirico, The Parish Church, Church of Sant'Antonio abate, Church of San Rocco, Church of Sant'Anna, Church of San Giuseppe, Church of Madonna di Loreto (Comune di Cella Monte, 2021).

Moreover, analyzing the built environment, there is one more important feature: the abandoned building(s). The 'village house' has been without use for some years now and it is deteriorating as time passes (figure 19). This building specifically is highlighted due to locating in the central part of Cella Monte and the municipality would like to reuse it somehow. Some of the ciabots and casots are most likely to be without use as well.

Figure 19: The abandoned village house
Source: Photos taken by the author

As the vineyards have a huge impact on the area it's important to mention the protection of the territory (Annex 5). The figure 20 below shows the vineyards in the area of Monferrato of the Infernot UNESCO site. Cella Monte is in the core zone and it can be seen that there are many vineyards.

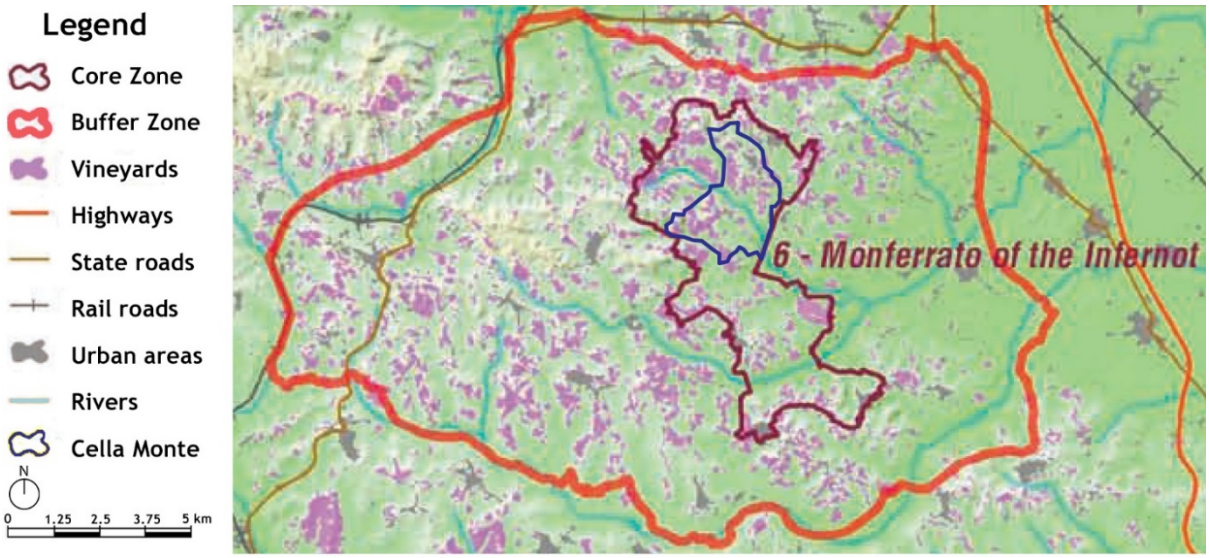

Figure 20: Core & buffer zone of Monferrato of the Infernot
Source: UNESCO, 2014, p 23

One of the estate that was visited during the fieldwork was a family's property where the five siblings took over the family's "wine business" from the grandparents and started to expand. They run under the *Cinque Quinti* name (Cinque Quinti, 2021.). It is interesting because it shows that the younger generation is also interested in keeping and continuing the traditions even if they add their own small innovations. They started small and as they added more hectares of vineyard to their property it also means that they maintain and manage more fields. This is good for the municipality as well because as they are invested in it, it is the interest for both side. It's always good to have some fresh eyes and younger people in production because they will find a new way to promote and even educate. This can reach wider target groups.

Perceptual & aesthetical features

This paragraph is discussing the more intangible, abstract attributes of the area. The visual information, how the observer can perceive the landscape is very subjective. Basing it on the experiences collected throughout the field visit, a "repeating pattern" was observed and identified. The "rules" that are characterizing this area is the order and location of different landscape elements. On the crest of the hills the buildings agglomerate, the center of the village with churches or with a few taller tower-like buildings. Based on the general observation, the buildings – as they were built from the same local material – gives uniformity to the landscape. The vineyards, the arable lands (with corn or some kind of a wheat) and the pastures alternate. Usually, the vineyards are located on the southern side of the slopes as the sun exposure on this side is better for the grapes. Patch-like wooded areas and scattered farms also appear in the landscape (figure 21).

Figure 21: Pattern - scheme sketch
Source: elaborated by the author

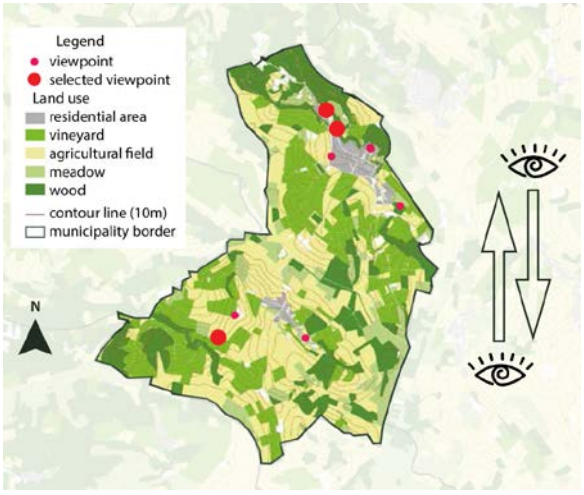

Figure 22: Viewpoints
Source: Elaborated during the workshop

There's usually a panoramic view from the hill crests (Annex 2). The view is furthermore characterized by the shape of the division of the lands and the direction of the rows of vines, and towards which direction is the viewpoint allows to look. If we gaze towards north, the vineyards are visible as they are mostly located on the southern side of the hills, and if we look towards southern direction, the forests and meadows are shown more (figure 22).

During the site visit there were three main viewpoints highlighted from the eight (which are pinpointed in the data from Geoportale Piemonte): Nuovo Carpino, San Quirico and Sant'Anna (Annex 6).

The streets and roads follow the shape of the hills and they form in the center of Cella Monte, where the buildings agglomerate, quite narrow view "corridors" with some openings to the landscape (Annex 3).

There are other senses that can be activated in these areas besides the rhythm of the landscape, the texture, color, smell and sound can also add to the perceptual features. Harmony of colors both of the built environment (buildings) and the natural features (figure 23).

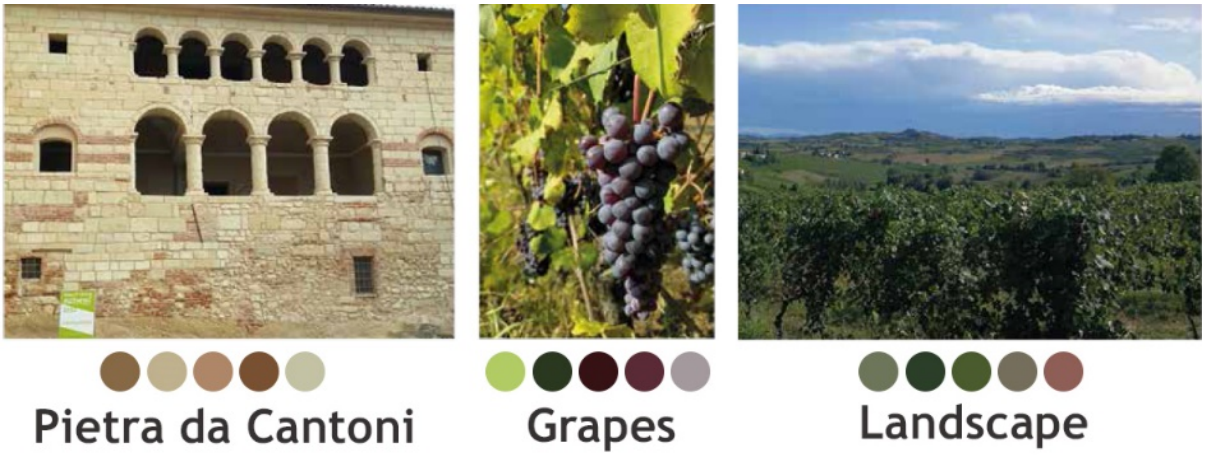

Figure 23: Colors of the area
Source: Elaborated during the WS

3.2. Case study II. - Japan

The Japanese participatory workshop took place in February 2019 in a hamlet called Iwakura within Yubune – which is the northeastern part of Wazuka city – located in the southern part of Kyoto prefecture, in the Uji area which is one of the most famous tea production areas in Japan. The workshop focused on the tea fields as a traditional landscape in the rural areas, the value of it and the contrast between the more exploited and 'globalized' areas in Uji for tourists and the more distant and marginalized villages. In this case study the analysis is more relied on the field survey and the information collected there as the language barrier and access to Japanese databases.

3.2.1. General context

Japan – which is an island country – is located in East-Asia, occupying an area of 364,500 km^2 with the population of 125.8 million (in 2020). In the past decade the trend is decreasing for Japan's population slowly but steady (The World Bank Group, 2021).

More than 90% of the population live in urban areas and only a small fracture of the inhabitants live still in rural areas according to the World Bank database (figure 24) (The World Bank Group, 2021).

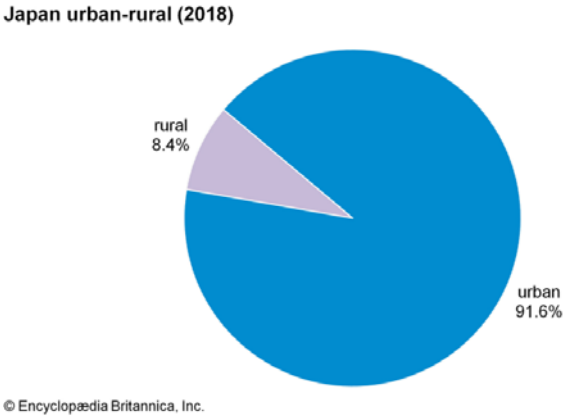

Figure 24: Population distribution in urban & rural areas (2018)
Source: Toyoda et al., 2021

Yet interestingly, Japan's urban area occupies only 1/3 of the total land area which means the density is very high in these places whereas in the rural areas it is extremely sparsely populated (The World Bank Group, 2021).

More than ¾ of the land is used for forestry and agriculture which is not only has economic value but also they contribute to prevent the landslides, soil erosion and increase the water retention capability of soils and purifying air (Kato, Yokohari and Brown, 1997).

To be more specific the agricultural land use is 44,200 km^2 (in 2018) which is around 12% of the total area. According to the World Data Atlas in 1969 the agricultural land area was 66,520 km^2, therefore in the last five decades it dropped steadily. The forest occupies 68% of the land area (Knoema, 2021).

In Japan there are many villages in marginalized position as the industrialization and globalization happened quickly in the 1960s, this rapid transformation with people moving away from the villages to cities resulted with the traditions, the values of the rural landscapes and settlement – also as heritage – becoming more neglected as they are fading away. The essence of culture is best conserved and practiced in rural areas, culture is an important element of agricultural communities 'rurality'. In countries where the declining of traditional rural communities are present, there is the possibility to turn this 'trend' around and reconnect the marginalized productive areas back to the flow by using culture as a tool to attract tourism and create a sustainable development to revitalize its economic significance (Tani, Hashimoto and Ochiai, 2016).

The tourism in Japan was mostly domestic before 2000, they focused on hot spring facilities, golf courses and theme park creation. Only later they started to transit towards adopting foreign tourists, improving and promoting sightseeing in the country. The number of foreign guests visiting the rural area in Japan in 2015 was 25.1 million nights and the trend is that this number is increasing drastically (author's note: not considering the negative effects on tourism due to Covid-19). In the recent years they started to expand the tourism towards a new, less conventional way which is based on experiential and interactive type of activities. The aim of this was to attract tourists while also creating a stable employment in rural areas, linking regions and understanding the young generation's family plan (Kyoto Design Lab, 2019).

In Japan the tea-production is very outstanding, it is the 10th tea producing country in the world (World Atlas, 2021). There are six main tea-producing prefectures: Shizuoka, Kagoshima, Mie, Kyoto, Fukuoka and Miyazaki. The biggest tea-producing area is in Shizuoka prefecture. As it can be seen from the figure 25, all these areas are situated in the southern part of Japan (Global Japanese Rea Association, 2021).

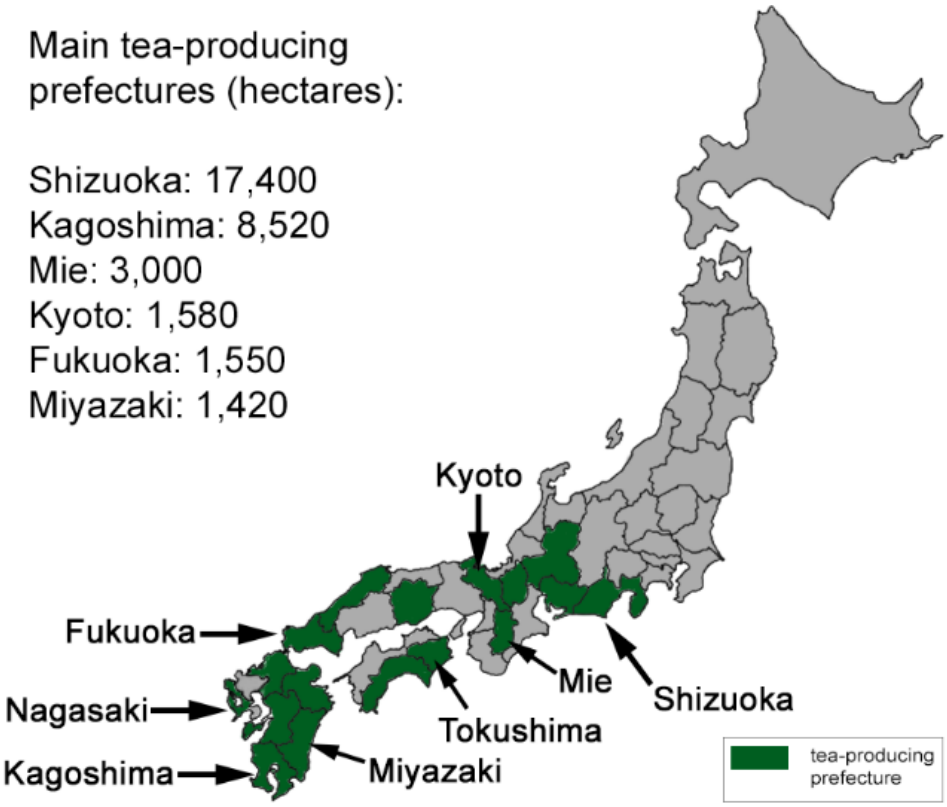

Figure 25: Tea-producing areas in Japan
Source: gjtea.org; MAFF "Statistics on Farmland and Crop Acreage" 2016

In 2019 the domestic tea-production volume was 81.7 thousand tons which was 5,000 tons less than in the previous year (Statista, 2021)

"A walk through the 800-year History of Japanese Tea" was registered as Japanese Heritage in 2015. It is basically a collection of touristic activities and sights (like the different development stages of the tea and the plantation itself) stretched across in multiple cities (Uji, Joyo, Yawata, Kyotanabe, Kizugawa, Ujitawara, Wazuka and Minamiyamashiro) in Kyoto's Minamiyamashiro region. For more than 800 years, this region has been the leader in tea production and processing as the people living here have developed various first-class teas (Japan heritage, 2021).

Tea cultivation has been present in Japan for many centuries, it is believed that it was transmitted from China during the Tang Dynasty. There are many areas where they produce tea and their quality and taste vary depending on where it was cultivated and how. The tea ceremony is practiced as Japanese high culture.

The Japanese green tea originated from the Yamashiro area in the Southern part of Kyoto Prefecture as its hilly surface is favorable for tea plantation. Though, the climate, geographical and geological features are peculiar in each area which results in creating a diversity of tea taste. There are three types of Japanese green tea: the Maccha which is a powdered tea used in the tea ceremony, the Sencha which is for daily consumption and Gyokuro which is regarded as the finest grades of green tea.

The Maccha is planted in Ohishita tea fields that are shaded with reeds and rice straws to harvest better leaves, whereas the rest grows better in open-air plantation which are called Roji plantation. After the

modernization reached the area and the mechanization of production became a trend, it affected and caused historical changes in the cultural landscape of Uji (Kyoto Design Lab, 2019) (Uji-cha Kyoto, 2020).

3.2.2. LCA of Yubune

In this paragraph not only Yubune is analyzed but in some points Wazuka as a whole unit as well due to the fact that Yubune is not an independent unit, it is part of Wazuka, therefore it makes it more comprehensive to mention some data and information on Wazuka to get a wholesome picture on the smaller scope. Also, the administrative hierarchy and units are a bit more complicated in this Japanese case study as it has many smaller divisions and parts.

Zooming in to the target area from the Uji area, Yubune is part of Wazuka city (Wazuka-cho), which has the area of 64.96 km^2 altogether (figure 26). They used to be three separated villages but during the 1950s there was a municipal action to integrate local communities of which Yubune joined last (figure 27) (*Life in Wazuka, Life with Tea*, n.d.). In this section the focus will be more on Yubune than Wazuka. Yubune's area is 6.9 km^2 (Kyoto Design Lab, 2019).

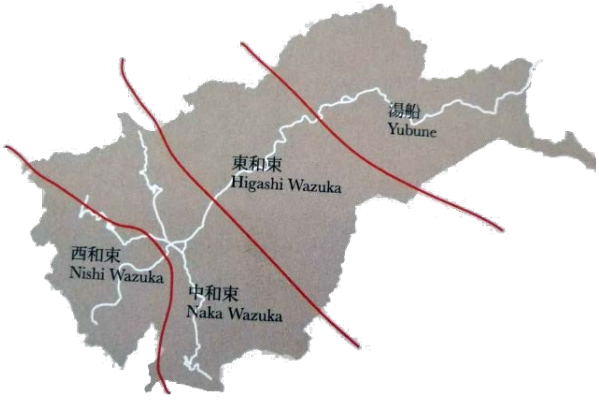

Figure 27: Wazuka-cho was established by combining three villages
Source: Brochure from Wazuka's municipality

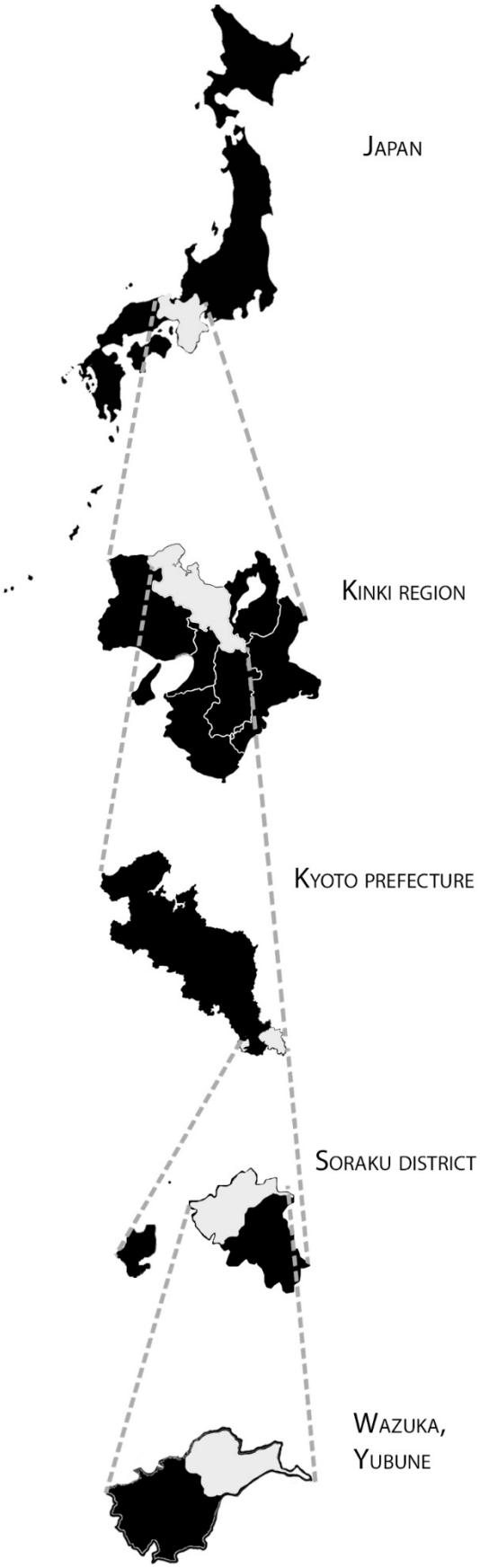

Figure 26: Yubune's location
Source: elaborated by author

Natural physical features

Wazuka is situated in a valley area where the Wazuka River flows through its center. As the Wazuka River flows from northeast towards southwest the valley widens and spreads more, hence Wazuka's city center is located in the southwestern part within the administrative border, the river and the valley is the widest here. Yubune –as it is located in the upper, northeastern part of Wazuka – is characterized by narrower valley with steep mountains surrounding it (Figure 27-28).

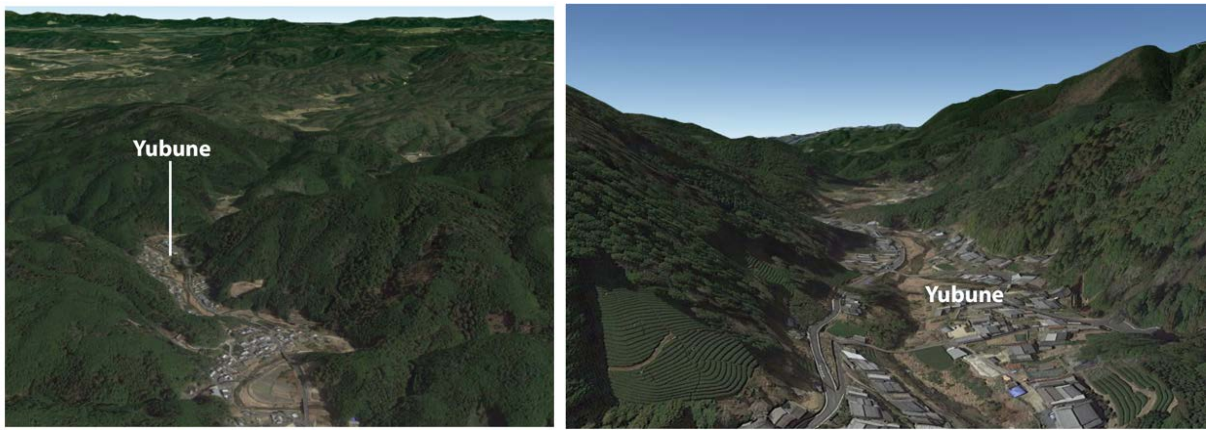

Figure 27: Yubune located in the valley
Source: Google Earth, 2021

Figure 28: Narrow road through Yubune
Source: Google Maps - Street View, 2013

In Yubune along the river there are some smaller settlements located, these are further divided parts of Yubune. The main focus is on Iwakura which is the second village from the west after the center of Wazuka. The first is Gonose and the third (after Iwakura) is Nakayama (annex 7). Iwakura is at the bifurcation of the Wazuka and Shiihara River (figure 29).

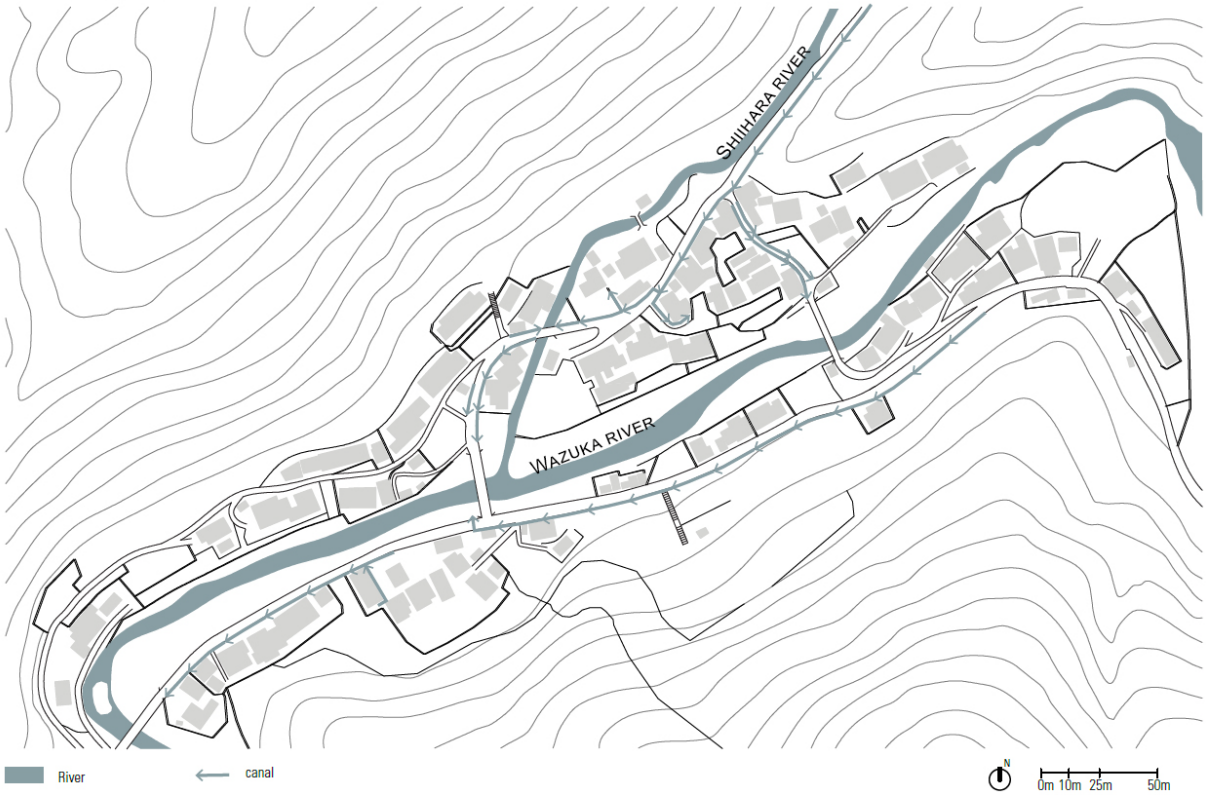

Figure 29: Hydrology of Iwakura
Source: Elaborated during WS

As it was mentioned before, the area's morphology and topography is characterized by the mountains and valleys. In Wazuka the highest peak is Mount Jubu which is 660 m above mean sea level. The lowest point is 100 m above mean sea level which is in the most southern part of the valley. Focusing on Yubune, the altitude level is between 200-660 m (figure 30).

The climate in this area according to the Köppen-Geiger climate classification is Cfa – which is temperate, no dry season, hot summer (Beck et al., 2018).

The morphology and the climate of the area is favorable for the tea field as they are usually located on the slopes due to the fact that the plantations need good drainage and ventilation.

The ¾ of the area of Wazuka is covered with woods. In the past years the natural forest is decreasing slowly but the amount of new plantations are increasing but they don't balance it out (Global Forest Watch, 2021). The most characteristic are the sugi and bamboo forest but also there are broadleaf wood as well.

The remaining 1/3 of the area includes the urbanized areas and the agricultural land. There are no or only negligible amount of pastures, instead there are rice and wheat fields besides the tea plantations. In Yubune, more specifically in Iwakura the land use shows that the forestry is on the slopes and surrounds the village where there are some tea fields scattered along with rice and vegetable gardens (annex 8).

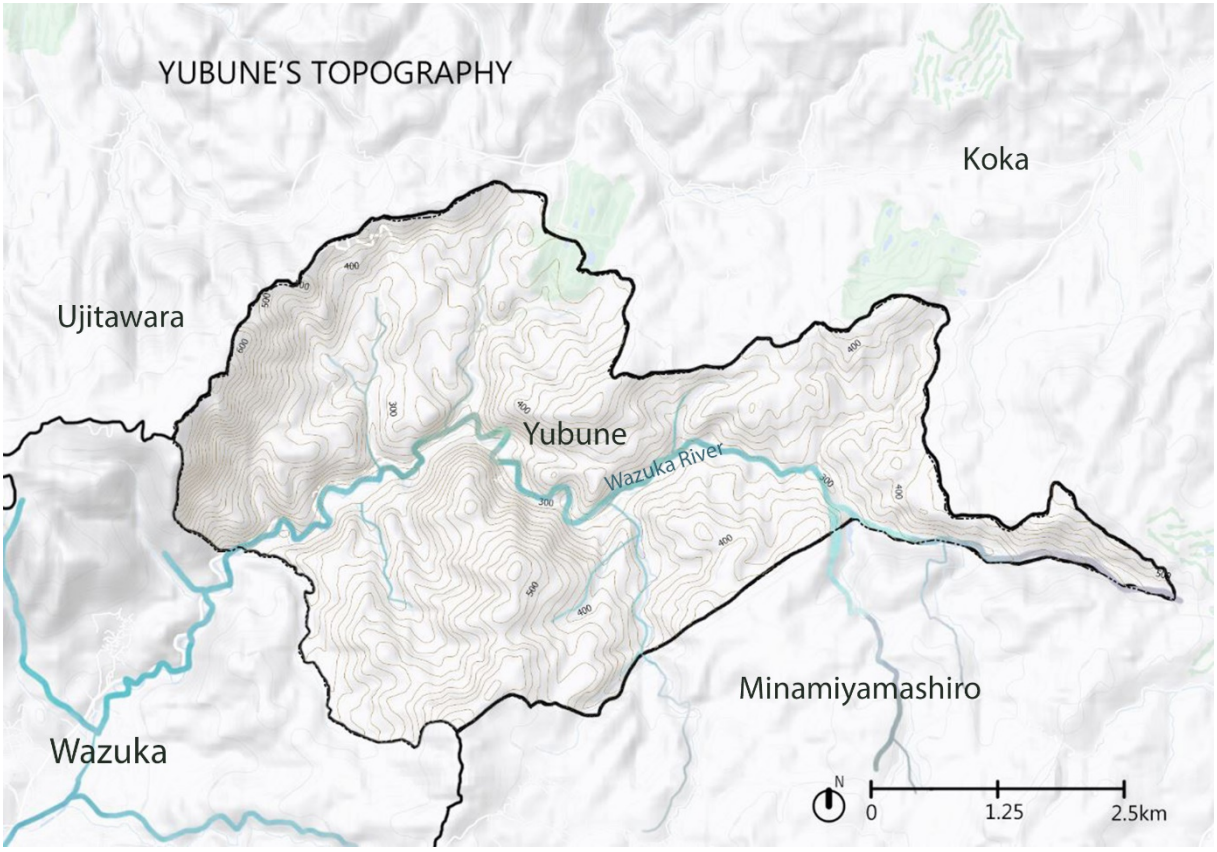

Figure 30: Yubune's topography
Source: elaborated by the author based on GoogleMaps topography

Cultural, social features

Similarly as in the first case study, here the anthropogenic related attributes are being analyzed of the area.

Wazuka according to the 2020 census has the population of 3,483. It has decreased with almost 40% since 1995 as the number of inhabitants was 5,921. The overall decline in population is also true for the region except for Seika town (in Soraku district). In the district in the past three decades the population dropped with ~10,000, in Seika town the number of inhabitants increased (City Population, 2021). Yubune in 2015 had a population of 330 with a high ratio of elder people (Kyoto Design Lab, 2019).

This region has a long history as the tea culture has been introduced here centuries ago. The export of tea started in Wazuka-cho at the end of the Edo period and it is when the wholesale stores were established. After the World War II the tea-production increased drastically and started to expand also due to mechanization of process. Therefore more people started to settle down here (Uji-cha Kyoto, 2020). In Yubune many of the buildings were built in these times.

Wazuka's location is favorable from many aspects. It is situated close to some main bigger cities and also it is in the important tea-producing area. The neighboring municipalities of Wazuka are the following: Kyoto, Kizugawa City, Kasagi-cho, Minamiyamashiro Village, Ujitawara Town, Ide-cho, and Koka City (Google Maps, 2021).

In contrast with Europe, other countries are more difficult to reach as Japan is an island country. Annex 9 shows the main connections and infrastructure system with Wazuka, therefore with Yubune as well. From Iwakura to reach the center of Wazuka takes less than 10 minutes with car

as it's ~7km away down the Prefectural Road no. 5, there's also the Kizu-Shikaragi bus line which would take around 20 minutes to go between the two parts of the city. The disadvantage is that Yubune is only reachable through this road no. 5 and a road without a number – that connects Prefectural Road no. 5 to the national highway no. 307 – due to the valley's limitation (annex 7) (figure 28) and also there is only a few buses passing this road. Within an hour driving distance it is possible to reach Kyoto, Koka, Nara and Osaka. If we expand the diameter of the area to 150km distance to observe the connections, then also Nagoya and Kobe is reachable. With these cities the connection to airports and harbors are also provided. In Wazuka there is no train stations, the closest one is to the south – Kansai Main Line – in Kizugawa and Kasagi town. The national highway no. 307 passes close to the north of the administrative border of Wazuka, while in the south the national highway no. 163 can be found. From Yubune the fastest to reach is either Wazuka's center or Koka city, the latter is more equipped with services and institutions.

It is possible to walk between some tea plantations and usually there are outlook points. The best view is from the highest point of Wazuka which is the Mt Jubu (Annex 12; 10 picture no. 8).

In the southeast part of Yubune there is a Mountain Bike (MTB) Park which has been opened since 2013 (Kyoto Tourism Federation, 2021). In the northern upper part there is a golf club which partially belongs to Koka but also there are two more golf clubs close to the administrative border of Wazuka but they also within the border of Koka city. Along the Prefecture Road no. 5 more to the west in Yubune there is Yubune Forest Park where people can do barbeque and other recreational activities along the Wazuka River (Yubune, 2021). In general Japanese rural areas have many shrines and temples, Wazuka is no exception either, and from annex 12 their location can be seen. Altogether it can be said based on the observation as well, that in the central part of Wazuka there are more services and touristic attractions whereas in Yubune the available commodities are more in line with soft tourism. Analyzing the municipalities between Wazuka and Uji and themselves from available services point of view it can be said that seeing Wazuka as a whole unit it is well "equipped" but focusing only Yubune would conclude that it has a lot of unavailable services (Annex 13). It is probably due to the fact that how transportation connections and infrastructure is limited by the narrow valley. In annex 14 the dynamics of the relation between river and inhabited areas can be seen, it shows how the shape of the valley defines the land use. In Uji the river spreads more and has a wide valley hence there's more open space for built structures which includes infrastructure, in contrast with this, Yubune is quite the opposite where the valley is narrow (annex 10; 11).

After analyzing the available services it is obvious that the ones related with tea production and consumption are way more present than others. There are many tea cafes where tourists can taste the locally produced tea and also most of these cafes has tea shop inside where it is possible the purchase the tea like Wazukacha Café (annex 10 picture no. 5) or Dandan Café which are both quite new and located in Wazuka (Kateigaho International Japan Edition, 2021). During the fieldwork we also visited d:matcha Kyoto Café & Kitchen which is both a café and shop place but furthermore a restaurant as well (IITOKO-WAZUKA, 2020). I would highlight this café place because it is similar in a way to the Cinque Quinti in Cella Monte in a sense that this is also managed by local people from

the younger generation and they think in a similar way trying to preserve the traditional values but adding some modern twist to it that can stand firmly nowadays in an area that has lot of heritage.

Now the focus will be put on tea-production and the heritage around it. As it was mentioned earlier the natural features are favorable for the tea plantation. In Wazuka there are ~301 tea farm houses (2016) and the tea cultivation area covers 5.95 km^2. It is believed that the first tea bushes were planted in the 12^{th} century at Harayama. The landscape of Wazuka-cho was registered as the first Scenic Property of Kyoto Prefecture, furthermore, it was selected as the Cultural Scenery of Kyoto Prefectural Government. In 2013 the NPO gave 'the most beautiful villages in Japan' title to Wazuka to promote and help preserving the rich rural areas for the future (*Life in Wazuka, Life with Tea*, n.d.). Throughout the years of production, after mechanization entered the process, it changed the whole production a lot but it is part of the diversity of this cultural landscape. "The cultural landscape of the Uji tea has value without an equal as that in which the element of nature, history, and an occupation made as one" (Uji-cha Kyoto, 2020).As I was mentioned in chapter 3.2.1. Wazuka – along with other municipalities – is part of a national Japanese heritage site: "A walk through the 800-year History of Japanese Tea". Furthermore, there is another initiative: make the area of Uji as a UNESCO WHS called „The Landscapes of Uji-cha tea production". This process is a stalled as the registration was made in 2011-2012 (twice). The present phase is basically on hold as in 2015 the revision of the proposal was happening and after that there is not much information (at least in English) (Uji-cha Kyoto, 2021).

There are 25 UNESCO WHS in Japan and there are five additional more on the tentative list (UNESCO, 2021).

In Yubune the resident buildings are complemented with a warehouses and tea factories (annex 11 picture no. 2-6). The buildings were built using the local materials, the main structure is made with wood. Unfortunately, as it was observed in Iwakura during the site survey many of these warehouses' condition became deteriorated as the people living there didn't use it anymore (figure 31).

Figure 31: Abandoned, degraded structures
Source: Taken by the author

In the past, there were greater emphasis on the forestry but as the transported wood became cheaper imported, the forest management decreased. In the village the richer families owned forested lands and also tea plantations. There were also rice terraces and to water the rice nurseries they built canals to pass the water through. Now, these became abandoned, overgrown fields, especially along the riverbed.

The abandoned buildings in the degraded conditions show the decay of the settlement as the fact that there are no services or shops (there used to be one or two shops and a gas station but they are all abandoned now). At the western side of Iwakura stands the closed and neglected market space with some stalls still standing.

Perceptual & aesthetical features

Similarly to Cella Monte, this part aims to showcase the more intangible aspects of the area, the perception of the landscape. There are many unique visual features.

The main particularities of the village – which distinguish this space from the other tea producing areas – are embedded in the way of how narrow, enclosed is this part of the valley, the space is limited as it is densely surrounded by forest. The tree species' sequence also gives a specific characteristics (figure 32). The bamboo acts as a boundary between gardens and "urbanized" area and forestry (which could be possibly either to protect from landslides or to have easy access to the local raw material the bamboo provides for making different tools). The sugi cedar trees – which are native – have no other vegetation on lower levels, they don't form dense barrier which makes passing through easy for the animals. The broadleaf trees have deep roots which helps to stabilize the soil from landslides.

A specific 'phenomenon' that gives the unique vibe of the place is called "kirika" in Japanese with which they refer to the „scent of fog" to describe the essence of tea produced in Wazuka. This is due to the geographic conditions and the river, it creates a certain microclimate with high temperature gap between day and night which leads of the formation of mist or fog (*Life in Wazuka, Life with Tea*, n.d.) (Annex 11 picture no. 2).

Another characteristics is the pattern of the three main land use, the fragmentation of the tea plantation, the woods and the urban area. There are also small plots of vegetable gardens with protective net against the animals like monkeys. The presence of decorative private gardens with ornamental plants, especially on the northwestern side of the village. The accessibility within the area itself is difficult, hard to approach the river in most of Iwakura as also to move from certain parts to another due to the lack of direct connection.

The tranquility of the space is very strong as it is very nature-close (annex 15). The sound and smell of the river and the forest contributes to perceive better the uniqueness of the place. The calm everyday life of the locals, how they habit and move in and between the spaces. The fishermen fishing in the west side of the river which is more or less the lowest point of the village whereas the religious places – the shrine and the temple – located on the higher parts with viewpoints.

The texture of the tea plantation rows is quite characteristic and similar to the rows of vineyards. The color palette has a cooler tone due to the color of the buildings being gray (figure 33). The observed scheme's main characters the slopes covered with tea plants with scattered groups of trees and the linear element – the pillars placed in the tea fields (figure 34). The settlements in this case is usually located in the valleys and not on top of the hills.

Figure 33: Texture & colors of landscape
Source: elaborated by the author

Figure 34: Pattern - scheme sketch
Source: elaborated by the author

Iwakura can be divided into four “parts” based on observation. In figure 32 the different divisions are highlighted with different colors. The northwest area (red) is characterized by very narrow and very steep features, the northeast area (orange) is the oldest part of this village. It is denser and more flat compared to the other three parts. The southeast area (blue) is quite steep, narrow, and dense as the houses erected close to each other (they were built after the II. WW). This part is at a curve of the valley so there is less light. The southwest area (green) is more flat, more spacious, houses are more spread due to the more space.

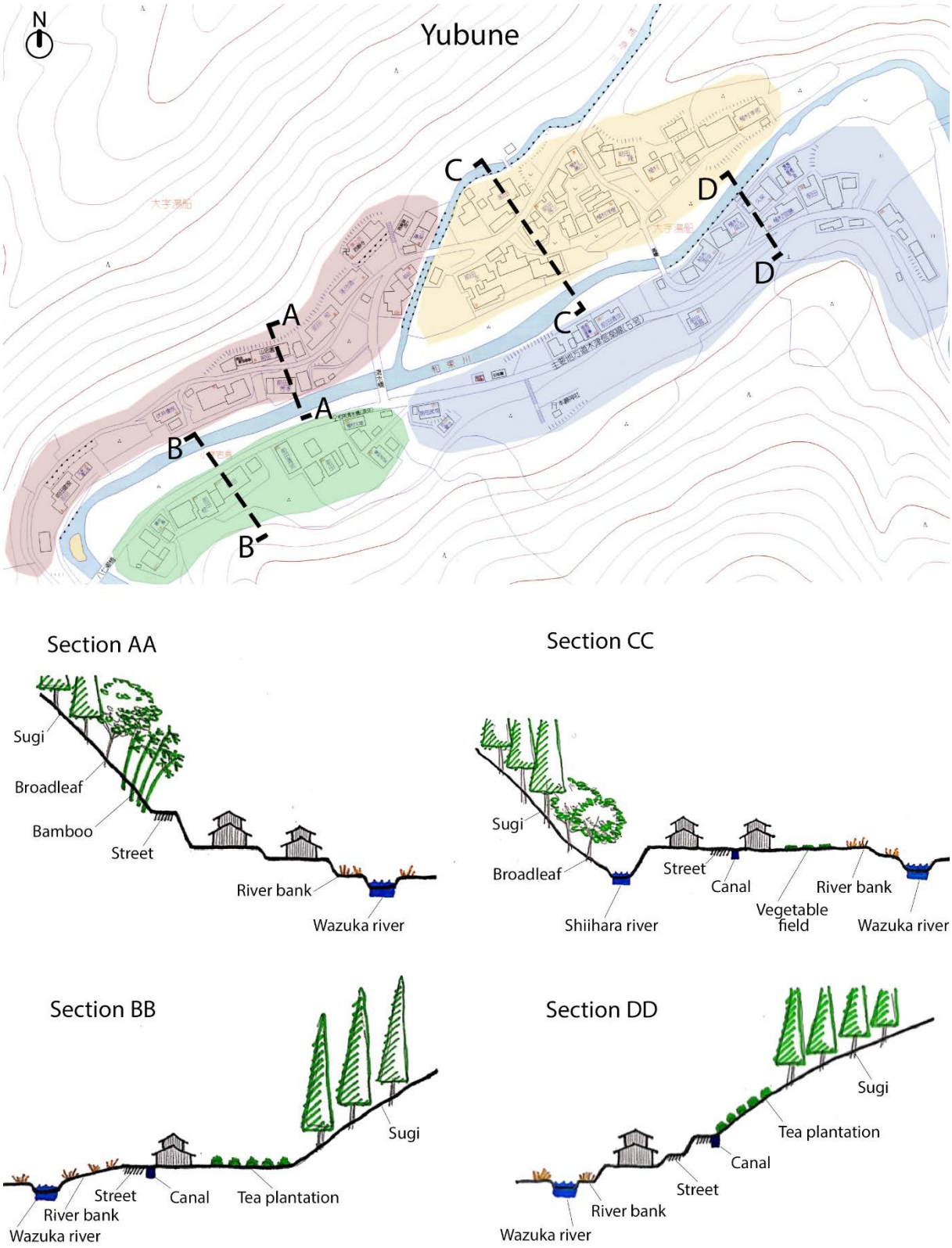

Figure 32: Division of Yubune with sections
Source: Elaborated by participants of workshop, landscape team

CHAPTER IV.

4. Evaluation

In this chapter the previously showed findings from the analysis is being evaluated by firstly synthetizing the results in a comparative layout, in a table. This helps to summarize, highlight the main similarities and differences in an arranged way. Then, taking it further and conducting two SWOT analysis for both case studies in order to pinpoint the specific problems, challenges, opportunities and positive attributes in each area. Finally, introducing some good practices that are related to rural development and heritage preservation to see what works in other case studies. Doing so will help to make the proposal in the following chapter.

4.1. Comparative synthesis

In this section the result of the analysis of the two case studies are shown in the table below in a more summarized and rearranged way. Not every analyzed element is presented in this synthesis, but only the most relevant and important ones. This makes it possible to compare them easier and draw a parallel between the Japanese and Italian location. The analyzed features are divided into four groups: global, national, regional and local. This implies that each attribute of the two case study has affect and impact on different levels starting from the global level and narrowing it down to the small scaled local level.

Comparative synthesis		
Italy	**Japan**	
South-central part of Europe (peninsula)	East-Asia (island country)	**global**
within ~150km France, Switzerland border, Liguria Sea	surrounded by sea, closest border: South Korea (~600km)	
294,140 km^2 with 60.3 million inhabitants	364,500 km^2 with 125.8 million inhabitants	
decreasing population trend in the past years	decreasing population trend in the past decade	
second highest % of elder people	first highest % of elder people	
world leader in wine production (2020)	10th largest tea producer in the world (2020)	
58 UNESCO WHS	25 UNESCO WHS	
'The Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato' UNESCO WHS (2014)	(initiative to register for the UNESCO WHS Tentative List as 'The Landscapes of Uji-cha tea production')	
'The Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato' UNESCO WHS (2014)	'A walk through the 800-year History of Japanese Tea' Japanese Heritage (2015); 'The Most Beautiful Villages in Japan' (2013)	**national**

urban areas 25% of the total area	urban areas 30% of the total area	
70% of the population lives in urbanized area	90% of the population lives in urbanized area	
rural areas 75% of total area	rural areas 70% of total area	
30% of the population lives in rural area	10% of the population lives in rural area	
land use: agricultural lands ~40% of total area	land use: agricultural lands ~10% of total area (trend: decreasing)	
forest ~30% of the total land (trend: increasing)	forest ~70% of total area (trend: decreasing)	
vineyards in all regions (~7000 km^2), 7.67 million tons of grapes were harvested (in 2018)	tea plantation in 17 prefecture (out of 47) 81.7 thousand tons of tea leaves were harvested (in 2019)	
'The Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato' UNESCO WHS (2014)	'A walk through the 800-year History of Japanese Tea' Japanese Heritage'(2015); 'The Most Beautiful Villages in Japan' (2013); 'Cultural Scenery of Kyoto Prefecture'	regional
within 1.5 hours of driving: 3 big city with airport and harbor (Milano, Torino, Genoa)	within 1.5 hours of driving: 5 big cities with airports and harbor (Kobe, Osaka, Kyoto, Koka, Nagoya)	
many provincial roads (one passes through Cella Monte), one close highway, limited railway connection	many prefectural roads (4 passes through), close highways, Kansai train line	
can enter Cella Monte from different directions	can enter to Yubune from different directions, From Uji two route only	
lack of public transportation (no train, 1 regional bus)	lack of public transportation (no train, 1 bus line)	
hiking & biking paths	biking & hiking possibilities	
agrotourism, many services & accommodations connected to vineyards and agriculture in general	tea house in Uji (history introduced, tea ceremony), many services connected to tea production	
Eco museum	-	
Cella Monte: 5.6 km^2 with 495 inhabitants (2019)	Yubune 6.9 km^2 with 330 inhabitants (2015) (Wazuka 64.96 km^2 with 3,483 (2020))	local
trend: between 1991-2011 population increased, but in the past years small decline*	trend: steady decrease in population	
gentle hilly landforms, more open	steep hills with narrow valley, more enclosed	
Height above mean sea level: 150-305 m	Height above mean sea level: 200-660 m	

no characteristic hydrological feature (Po river flows 6km to the north)	rich in watercourses (Wazuka and Shiihara River)	
main land use: cultivated fields	main land use: forest	
characteristic crops: vineyards, corn, wheat	characteristic crops: tea plantation, rice, wheat	
services: accommodation, restaurants, winery	services in Wazuka: accommodation, tea cafes and restaurant, tea shops services in Yubune: one 'guest house', forest park, MTB park,	
Eco museum	-	
lack of service: healthcare institutions, supermarkets, public institutions	lack of services: healthcare institution, supermarket, public institution, (restaurant, tea cafe, museum)	
weak public transportation (no train, one regional bus)	weak public transportation (no train, one regional bus)	
multiple sacred built structure (churches)	multiple sacred built structure (shrines, temples)	
business related to wine production led by younger generation (e.g.: Cinque Quinti)	business related to tea production led by younger generation (e.g.: d:matcha)	
characteristic pattern of the landscape: settlements on top of the hill crest, surrounded by vast agricultural lands, vineyards and patches of woodlands	characteristic pattern of the landscape: settlements in the valleys, tea plantations and crop fields along the riverbed close to the inhabited areas, surrounded by dense forest	
many viewpoints (open views - can see far without blocking elements)	few viewpoints (e.g. Mt. Jubu) (more enclosed, limited views)	
characteristic feature of the built area: thicker, denser structure – mostly stone or bricks (influenced by the available resources – stone quarries) built structure: ciabots, casot, cascina and the most uniqueness: infernot	characteristic feature of the built area: lighter, mostly wooden structure (influenced by the available resources – wood); residential buildings usually complemented with warehouses, tea factories	
aesthetic feature: texture - rows of vineyards, alternating field patches with different crops	aesthetic feature: texture - rows of tea plantation, dense forest, smaller crop field and tea plantation patches	
aesthetic feature: color - warmer tones, brownish/reddish color of the material used in buildings	aesthetic feature: color - cooler tones, grayish color of the material used in buildings	

* As the newest census of 2021 in Italy hasn't been published yet only estimations can show in which they took into consideration the decreasing population tendency on bigger scale.

The table above shows that there are many similarities between the two case studies. In the following the findings are described. The similarities and differences are highlighted on the four levels (global, national, regional and local).

Seeing some basic features on a global level: Italy is a European county and has more direct connections with the other surrounding EU countries whereas Japan is an island country in Asia, therefore it doesn't have direct physical connection with other countries as they are located further. Japan is bigger with ~70,000 km^2 area but with the double amount of inhabitants hence its population density is way higher than Italy's. Both countries – as first world countries – face the trend of decreasing and aging population. Japan has the highest percentage of elder inhabitant and Italy follows with the second highest rate. As in this thesis the wine and tea production is in the focus, it is important to mention the countries status on the international production scale: according to last year's data Italy is world leader in wine production and Japan is the 10^{th} largest tea producing country in the world. Italy has 58 UNESCO World Heritage Sites while Japan has 25. The Italian case study's area is part of 'The Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato' WHS since 2014.

Some information appear more times in the table due to the fact that some attributes, like heritage has effect on more levels. That is the reason why the UNESCO WHS is mentioned on all the levels in the case of Italy. On national level the Japanese case study also enters the picture as the analyzed territory is part of the Japanese Heritage 'A walk through the 800-year History of Japanese Tea' since 2015 and also it was promoted to be part of the collection of Japanese villages called 'the most beautiful villages in Japan' in 2013 which also contributes to the heritage conservation and promotion in the area.

On national level the land use and tendencies revealed some interesting facts. In Italy the urban areas are occupying ¼ of the total land area where 70% of the population lives, whereas the rural areas occupies ¾ of the total land area where only 30% of the inhabitants live. In Japan this tendency is even stronger as the rural areas are occupying similar ratio of territory compared to Italy (70%) but even less people, only 10% of the total Japanese population lives there while the urban areas are very agglomerated, densely inhabited. Seeing the land use it can be said that in Italy around 40% of the total land is agricultural land while the forested areas are around 30% but the tendency shows that it is increasing in the past years. Vineyards are part of the cultural lands and can be found in all the Italian regions, in 2018 they harvested 7.67 million tons of grapes altogether. In Japan the land use ratio is very different as only approximately 10% of the total land area is used for agricultural fields which includes tea plantations. Around 70% of Japan is covered with forest but the trend shows slow decline. Tea is produced in 17 prefectures (less than half of the country) and in 2019 they produced 81.8 thousand tons of tea.

On regional level the infrastructure and connections are important aspects as well. In Cella Monte's case within 1.5 hour driving three big cities can be reached, these also provide airport links and Genoa has a harbor therefore sea connection. The provincial roads cover the territory quite well, though the railway connection isn't strong as in Cella Monte there is no railways and the public

transportation in general insufficient. In Wazuka's (which includes Yubune's) case, within 1.5 hours of driving five big cities can be reached which has airports and some of them harbors. In Wazuka there are some prefectural roads crossing and highways in the adjacent municipalities. Wazuka also doesn't have direct railway connection and the bus service is similarly to Cella Monte, it is insufficient. Regarding the services Cella Monte and its immediate environment has more variety than Wazuka, especially Yubune.

On a local level the two case studies – if in the case of Japan we consider Yubune as a unit for the scope – their territory size and number of populations is similar though in Yubune the population is scarcer than in Cella Monte. Landscape and natural physical-wise they are more different as Cella Monte has gentler hill-system and bigger open areas whereas Yubune is limited with the steep hills and narrow, more enclosed valley. The rows of vineyards and tea plantations give similar aesthetical feature.

4.2. SWOT - Cella Monte

The SWOT analysis for Cella Monte is conducted based on the analyzed features and elements and focuses more on the attributes that are relevant in rural development and heritage protection point of view. It is possible to prioritize easier the problems and challenges which needs more urgent or bigger scale attendance.

strengths	weaknesses
• location: in Europe, close to Milan, Turin, Genoa • Wine region (unique in a way) – wine production • UNESCO WHS of 'The Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato' (touristic attraction, heritage protection covered with regulations) • closeness of Castello di Uviglie • closeness of other municipalities with available services connected to wine • natural physical features • quarries – unique recourse • traditional rural area • good infrastructure system, with car easily reachable; airport & harbor connection within 1.5 hour driving distance • biking & hiking opportunities • viewpoints, scenic routes, open space without blocking elements • agrotourism – wine tourism • accommodations, wineries	• insufficient public transportation (lack of bus lines and no railroad) • high ratio of elder inhabitant • within 1 hour of driving no big cities • lack of services: supermarket, public institutions, healthcare services, other touristic services (e.g. car and bike renting) • abandoned village house without function • most information is in Italian • many infernots are private • Cella Monte is not that famous among tourists (especially foreign tourists) • no events related to wine • lack of designed cycle paths • no strong territorial identity (branding) • in wine-tasting only people aged above 18 can participate

• restaurants – using local food • ecomuseum of Pietra da Cantoni • built structures: casot, ciabot, cascina, infernot (very unique), churches • many wine farms, small private wine producing businesses (younger generation invested in it) • village well maintained while historic features strongly present • sign postings • bigger parking space at the entrance of the village in the northwest	
opportunities	**threats**
• improving public transportation system • attracting more tourists • involving more young people in wine production • improve signal system for both hiking and biking routes (also in English) • connecting the viewpoints, creating identity for Cella Monte • install bike and car rental place • expanding wine-related services: more events, wine-tasting programs • giving function to buildings not in use	• abandoned quarries without any present use – decreases the value • decreasing number of inhabitants (if the estimation is correct without having the 2021 census data) • aging population • insufficient services and public transportation connections resulting in less people visiting and wanting to live there • global trend of people moving to urban areas • increasing visitors would result in more need for parking space

4.2.1. Identifying assets

Fortunately Cella Monte has many assets like wine production and being an important wine producing region. Another asset is the location which includes that in European scale it is quite central and within Italy the municipality is situated in a reasonable distance between bigger and important cities. The heritage itself and being part of the UNESCO WHS is a weighted advantage as it provides the frame for regulating preservation of heritage in the area and puts it on the map on a global level that results in more visitors. All these contribute to the fact that how livable and promising is Cella Monte.

There are many opportunities in the area for further development like improving the public transportation system and the biking and trekking paths. Creating an identity of the place more inclusive or expanding the service palette is also an option. As the village house is abandoned, it opens new opportunity to give new function to it that would contribute to the locals and/or to the visitors.

4.2.2. Identifying problems

Going further, here the aim is to highlight and define the main problems that act as weaknesses or threats according to the

SWOT analysis. Setting up a priority, the first problem is the insufficient public transportation. This creates sub-problems like it is more difficult to reach certain services (e.g. supermarkets) without a car. The second main set of problems is the amount and diversity of the services. As it is a wine region it is given to have the services connected to this but the diversity can be expanded to attract a bigger range of people regarding age and interest.

The third main issue is the information provided on Cella Monte especially in English.

4.3. SWOT - Yubune

Conducting a SWOT analysis also for Yubune (involving Wazuka where it's relevant) helps to identify the same way the location specific advantages and disadvantages. After that the main set of problems are introduced in a prioritized way.

strengths	weaknesses
• Located in a famous and important tea region • part of Japanese Heritage 'A walk through the 800-year History of Japanese Tea'; 'the most beautiful villages in Japan'; 'Cultural Scenery of Kyoto Prefecture' (helps to promote and conserve the cultural heritage) • tea tourism (Wazuka) • services connected to tea production and consumption (Wazuka) • tea farms, tea cafés, tea ceremonies and accommodation (Wazuka) • "new wave" of business with the tea cafés, younger generation managing (Wazuka) • guest house in Yubune • Closeness of important cities like Kyoto, Osaka, Kobe, Koka and Nagoya • good infrastructure system using car, airport & harbor connection within 1.5 hour driving distance • natural physical features favorable for tea plantation • forest (visual benefit and resource) • traditional rural area • biking & hiking opportunities • viewpoints • MTB Park • Yubune Forest Park	• isolated due to location and natural physical features • narrow valley • insufficient public transportation (lack of bus lines and no railroad) • high ratio of elder inhabitants • lack of services: supermarket, public institutions, healthcare services, other touristic services (e.g. car and bike renting) • abandoned buildings in degraded condition • abandoned crop fields, vegetable gardens • few open spaces • no market • lack of available information in English • Wazuka is not that famous among tourists (especially foreign tourists), Yubune is worse in this sense • no events related to tea in Yubune • lack of designed cycle and trekking paths • Yubune doesn't feel as it belongs to Wazuka (territorial identity) • limited space to expand (e.g. for parking)

• traditional way of living • shrines and temples • tranquility and unique essence of place	
opportunities	**threats**
• initiative to register for the UNESCO WHS Tentative List as 'The Landscapes of Uji-cha tea production' • improving public transportation system • attracting more tourists • people of every age can consume tea can expand the services related to rea • promoting the area more • involving more young people in tea production • improve signal system for both hiking and biking routes (also in English) • install bike and car rental place • giving functions to buildings not in use	• abandoned buildings leads to further deterioration • more abandoned buildings and fields appear • decreasing number of inhabitants • aging population • insufficient services and public transportation connections resulting in less people visiting and wanting to live there • global trend of people moving to urban areas

4.3.1. Identifying assets

Wazuka as a whole but also Yubune as a unit, has many assets. The location is one of it as Kyoto and some other big cities are within reachable distance which provides further advantages. Important to highlight that Yubune is located in one of the most important tea-producing areas, bears many old traditions along the line. Japan acknowledge the importance of this area as it is part of the Japanese national heritage sites and was given the 'the most beautiful villages in Japan' and 'Cultural Scenery of Kyoto Prefecture' titles which help to promote and conserve the cultural heritage better. Furthermore, it is not negligible the fact that they are trying to register the area to become an international heritage site through becoming part of UNESCO WHS. Another important strength is the natural elements, as Yubune – and Japan in general – is mostly covered with forest, there are some available recreational activates such as hiking and barbequing in Yubune Forest Park or ride bike in the MTB Park. The shrines also add to the landscape's value as these places usually have nice scenery. Improving the public transportation system and broadening the available services in Yubune could help in the development process.

4.3.2. Identifying problems

As in the case of Cella Monte, here the aim is to define the main set of problems and prioritize them keeping in mind which has more effects on bigger scale.

The biggest problem is around the decreasing and aging population which could lead to Yubune's depopulation. The presence of abandoned buildings confirms more the trend of people moving to urban areas and the decreasing number of inhabitants in general. The second set of problems is the insufficient public

transportation connection, as Yubune is more marginalized and feels more isolated due to the given morphological attributes, it is crucial to have better connections. The third problem is the lack of services to which the abandoned buildings contribute as well.

4.4. Comment and consideration

After analyzing and getting through of the SWOT, some considerations appeared which are important to deal with and bear in mind in the following, too.

The "pre-conclusion" for the development opportunities is that one of the most crucial aspect is the available services in both of the case studies. In the figure 35 below the correlations are visible on how this pre-conclusion was identified and how the services have such a big influence in this equation.

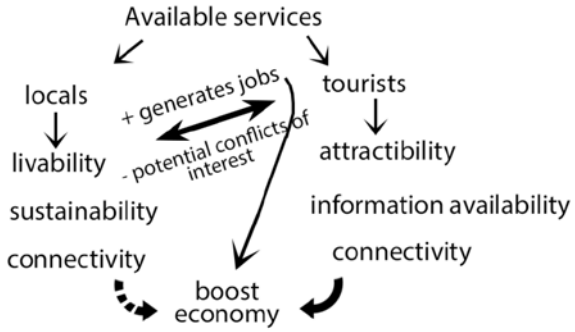

Figure 35: Effect and correlation of available services on people
Source: elaborated by the author

The available services defies the way locals live in a certain location and what kind of tourists come to visit that area. The tourists visit a place based on their interest, how attractive the given area is, what available information is there about it and how easy it is to reach either by car or public transportation. The locals' everyday life is defied by the available services and facilities whether all the basic commodities are present or do they have to travel for it, and if so, is the infrastructure system sufficient to support commuting. The relation between the locals and tourists is very important, there can be a conflict of interest if the available services make it impossible to not bother each other. If there is no conflict, it is a positive economy boosting opportunity as tourism generates jobs for the locals. The dashed arrow pointing implies that the good infrastructural connection can help the locals' life if it possible for them to commute comfortably to work.

For further consideration about the asset of heritage that can be used for developing opportunities in tourism. "Across Europe's regions and cities, culture is highly valued by residents and visitors alike. Cultural and creative industries are also a vital asset for regional economic competitiveness and attractiveness, while cultural heritage is a key element of the image and identity of cities and regions, and oftentimes the focus of city tourism. Integrating culture and heritage in regional and local development strategies stimulates the development of creative businesses; promotes traditional cultural assets, brings spill-over effects to the wider local community" (URBACT, 2020). Even though, the URBACT puts the focus on urban areas, the idea applies in a similar way to the rural areas as well.

5. Good examples

In this section some good practices, case studies from other countries are being introduced to consider and help the proposal phase of this thesis.

Firstly, with a bit more general approach I would like to highlight the Cultural Heritage, Landscape & Rural Development: Good practice, Methodology, Policy Recommendations & Guidelines for Rural Communities by INTERREG. This publication was made under the HITSCAPE (Historic Assets and Related Landscapes) project within INTERREG, which is a programme, a community initiative to help European regions to work together by sharing experience and knowledge, with the help of funding. Searching for innovations and possible solutions especially for policy-makers (Eppich, 2014).

The reason I find this important is due to the fact that it is showcases many good examples in itself, and the method of showing it gives guidelines. In each example of good practice it lists ideas for implementation and transferability.

Furthermore, it emphasis that all regions are unique and diverse, but they share similar issues of conserving rural areas, cultural heritage and their related landscapes. However, similar problems can have different impacts, but the challenges they face are similar. One main problem is depopulation, which draws the consequences for vacant properties, less available services, thus less attractive for new people to move there or enhance the infrastructure.

This publication summarizes, that the good practices in the projects aim to address simultaneously the general issue and the specific problem or situation in which it is set. The conclusion is that simply transferring the good practice is impossible without altering. The adjusting has to be with a combination of different approaches so as to be effective, increase knowledge and capacity. The project in conclusion proposes a methodology that helps to address the specific problems better. This methodology is the following:

• Identifying problems and assets,

• Searching for new approaches, innovative solutions using existing good practices,

• Reveal the components and identify the best ones for further use,

• Gather, mix and modify the good practice in a new context,

• Prepare a new good practice for the location specific case (Eppich, 2014).

The next good example is the Conservation Design for Traditional Agricultural Villages: A Case Study of Shirakawa-go and Gokayama in Japan written by Kuroda Nobu which was chosen due to the fact that it describes a case study in Japan that is already part of the UNESCO WHS (Kuroda, 2019).

According to the author the “destiny” of the Japanese agricultural villages are most likely to have two outcomes. The ideal way would be that the people live in the villages keep on living how they have always did and they sustain their settlement but unfortunately based on the reality, this is not likely to happen. Therefore one of the outcome is that the ‘marginal villages’ disappear eventually without intervention. The other outcome is that they intervene and conserve the agricultural hamlets as cultural heritage sites. These villages in Japan can’t rely on food production solely anymore, they need additional source to maintain it. Agritourism

can help to contribute in maintaining them (Kuroda, 2019).

In the paper the author debates and considers what can be changed in a living heritage site as it is impossible to conserve as it is. It “aims to discuss the design of conservation for agricultural villages trhough a case study of the historic villages of Shirakawa-go and Gokayama, which are World Heritage Sites” (Kuroda, 2019, p.9). The findings were that the involvement of the local inhabitants is crucial. “The self-motivation of residents is an integral part of sustainable development for agricultural villages” (Kuroda, 2019, p.21).

The third one is the Inventing Agricultural Humanities via Revitalizing New Ruralism Tea-Town in Taiwan which focuses on how the community can be involved in revitalizing rural areas. Using agricultural humanities as values, they can help to restore eco-friendly rural developments including biodiversity. As agriculture is more of a lifestyle rather than just a way of production, they try to engage people who lost their connections with rural landscapes. To do so, the proposed method involves in first finding a depressed rural area where the participatory farming engagement happens. There has to be local eco-farmers with whom they can collaborate and build a network for programs and tours related to it. The actual engagement of the people who are mostly from cities is also to educate them about ecological values and teach them how farming works. Therefore they can share their experiences, promote the area and the method so others could visit and to cultivate agricultural humanities in general. (Chang, Yang, Kuo and Hsiao, 2018)

5.1. Further consideration and take away

The aim of this section is to synthetize and summarize the ideas from these good examples which can be used in proposing suggestions in this thesis.

The first example supports the idea mentioned in the beginning of this research paper that it is useful to create transferrable actions as a tool to provide help in developing certain areas, in this case rural landscapes. The more presented the wider the ‘palette’ of actions grows which are good for initiating bottom-up developments.

Furthermore, “participation fuels the self-reliance of (local) actors and helps to eliminate the practice of merely delegating power or just making claims. It produces broader involvement in the actual solution of problems and develops a sense of ownership of ideas which in turn creates favorable conditions for implementing change. The communication channels set up between the various actors involved will probably remain in place like permanent (social) capital for future initiatives”(Eppich, 2014, p. 95).

Typical tools for exchanging experiences according to INTERREG are networking activities like seminar, conferences, thematic workshops, surveys and study visits. Usually possible project outcomes include case study collections, policy recommendation, strategic guidelines or action plans.

Through similar case studies showcasing ideas and experiences help to assist other rural communities. “Preserving a way of life and the identity of a community is usually more important than preserving only its physical form” (Eppich, 2014, p. 15).

The community involvement gave me the idea of considering a bit different community engagement which is the method of Völgyzugoly Műhely Kft's. This method for participatory planning promotes mediation in cases of conflict of interest. It usually consists of a set of workshops which are organized in cases of intentions for new development, especially in small municipalities. These workshops are open for all the local stakeholders as they are invited to participate in and everybody is equal which provides the space for everyone to express their problems and ideas for development in their village (Ferik et al., 2014; Völgyzugoly Műhely Kft, 2021). As I have working experience with this, it can be said that usually - if they are active and self-motivated – with their help a better tailored development goal set can be created. As they live there, they see the issues better – they can give suggestions to resolve it. Furthermore it makes it possible to find out about their attitude towards certain development proposals, what they think of heritage for example – maybe they don't even consider it.

Therefore considering participatory planning as a potential proposed suggestion, it could respond the best to the question on how and what to enhance in both of the case studies.

CHAPTER V.

6. Proposal

The detailed landscape character assessment and the SWOT analysis gave a strong base for the two case studies to be able to propose suggestions in order to enhance the rural areas and of course support with the good existing examples shown in the previous chapter.

In the following there are two scenarios presented for each case study. The aim with these to explore the possible outcome of the development or the lack of development.

It is a thought experiment in a way because in the scenarios I am exploring a hypothetical situation with the chance that they can become reality in the future. I use this tool to showcase possible outcomes and a vision for the analyzed areas. Thought experience helps to see certain things in a different light (FarnamStreet, 2021).

The paper of Insight into Cultural Heritage Landscape written by Dezső Kovács gave the idea of introducing scenarios showing different visions in the chapter about the Heritage Site Management Plan of Hollókő Village which is a UNESCO WHS (Kovács, 2014). Using this but reducing to two scenarios from which the first shows the future images in case the present tendencies continue in the way they are now and there is no intervention to change it. The second scenario presents the more ideal future where the positive changes went on for the benefit of heritage conservation. These will help to see and define better the interventions for the future, what would work for developing the rural areas in a more sustainable way.

6.1. Scenarios - Cella Monte

6.1.1. Scenario I.

In this first scenario the vision for Cella Monte is presented with the current processes and tendencies continuing without major changes.

The population of the municipality is continuing to decrease slowly, within four decades the population would drop to ~250 but becoming completely abandoned would need many more decades. The aging population remains in the village living their life in the traditional way keeping the local customs alive in the meantime. Without population supplement and younger generation, there will be less services that is needed for every day's life demands such as the need for school or kindergarten or public transportation use will drop and the municipality will reduce the frequency of the already barely sufficient bus line. This furthermore demotivates tourists without car to visit Cella Monte. The businesses related to wine production will purchase more lands and eventually become a monopoly firm for producing and selling wine within the municipality and might overshadow the neighboring areas' wine producers' business and opportunities on the market. More services will appear to satisfy solely the tourists. The risk of losing the UNESCO WHS title due to heritage loss is on the table (figure 36).

In conclusion, this version of the future is not so promising but the village will probably sustain itself for some time before getting worse. The idea of becoming abandoned would most likely to happen only in the far future. The main problem would be the

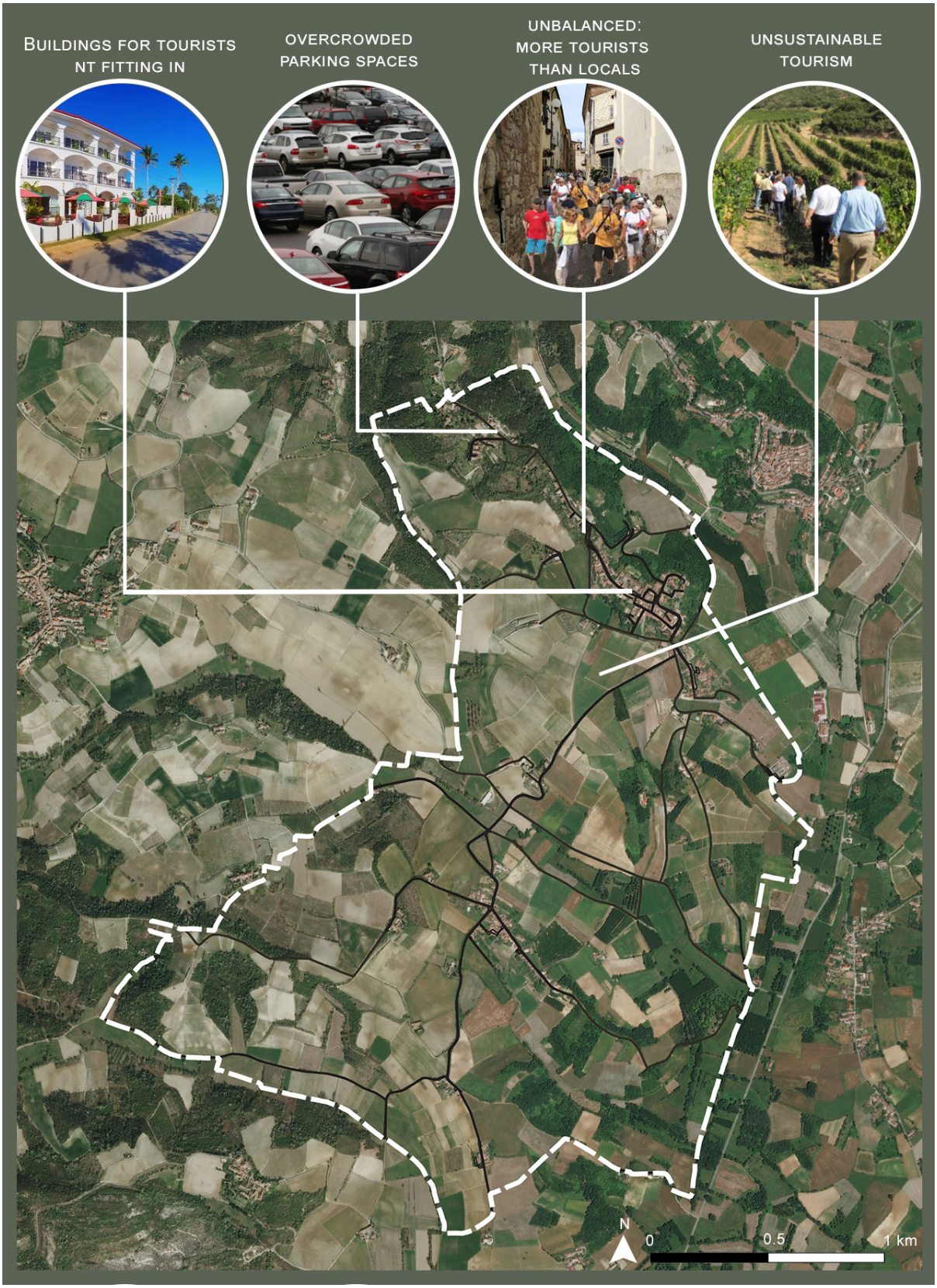

Figure 36: Scenario I.
Source: Elaborated by the author

status of the local businesses as they are prone to outgrow the favorable size and scale of sustainable business in a rural area and from this the assets of the landscape would be more at risk with nourishing unbalanced tourism.

6.1.2. Scenario II.

In a more idealized scenario there are some initiatives for development which will result in a sustainable rural settlement with rich heritage.

The connectivity of Cella Monte with the region improves, the region and the municipality together upgrade the public transportation system which allows the tourists to leave the car behind therefore becoming more sustainable in this way. To attract the visitors the palette of services and facilities are becoming more diverse but in a controlled way so the tourism wouldn't overwhelm the area and its inhabitants (figure 37).

The improved connectivity allows to build stronger network between the neighboring municipalities both for sharing knowledge and "share tourists". The balance of using the landscape is kept firmly, they follow the strategy that helps to develop into a municipality that allows locals and tourists exist next to each other without conflict of interest. This makes the village more attractive also for people to settle down or become part of the wine production which strengthen the tradition through practicing it. Keeping the population number steady or even a bit increasing generates more need for public institutes like schools. They can integrate the heritage education into the study plan and strengthen the younger generation's connection with their identity and understand the historical heritage better.

This vision helps to show how the village becomes self-sufficient with wider diversity of available services and facilities that attractive for both people to stay short time and temporarily or settle down permanently. The locals develop a strong sense of identity with connecting the heritage present there. Moreover, the role of the landscape here is more important and more diverse, it contributes to the social and cultural aspect of life with the resources, the cultural values and the identity it holds. It carries the potential of a well-balanced tourism that allows for locals and tourists to interact without conflicts.

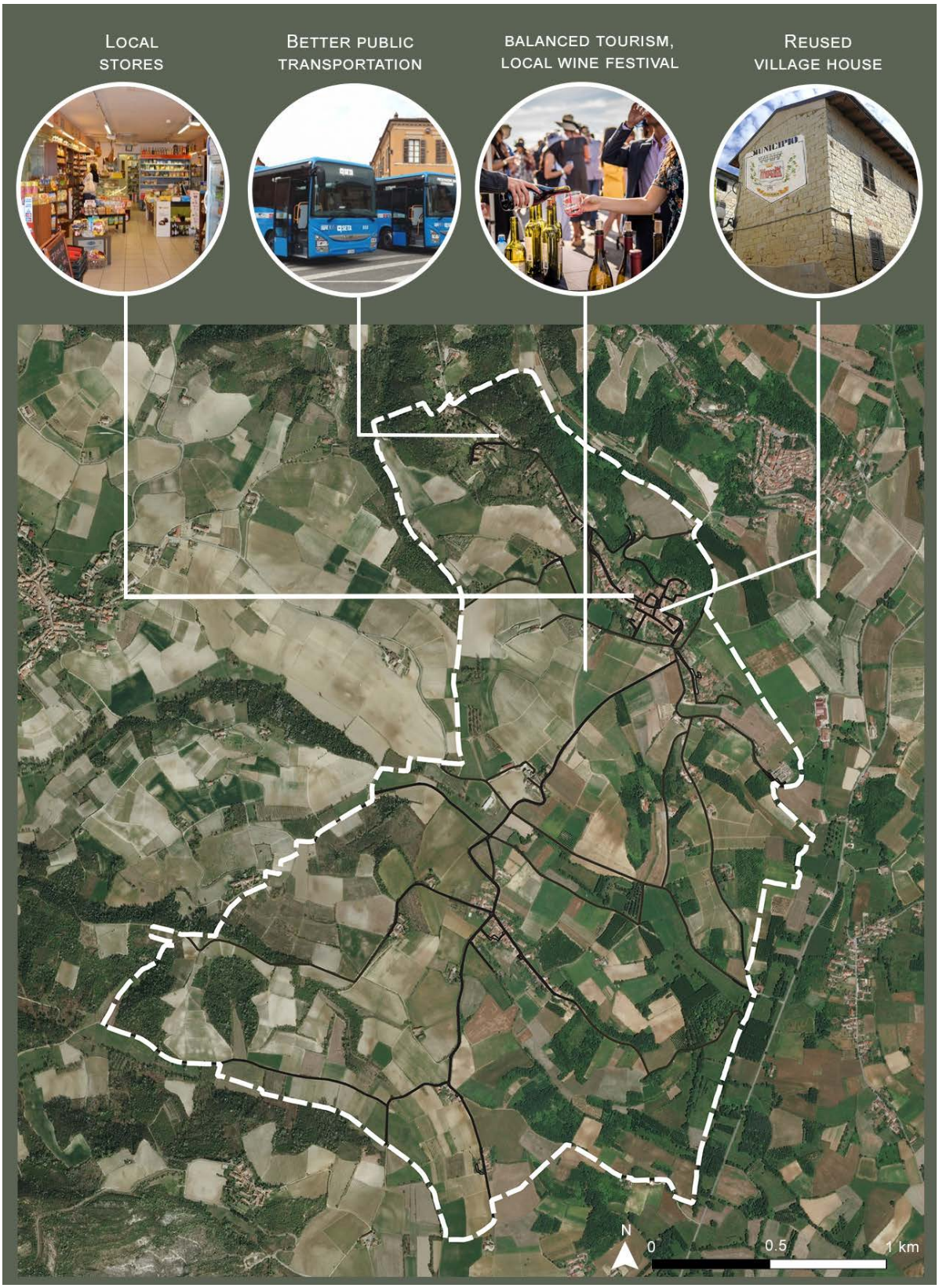

Figure 37: Scenario II.
Source: Elaborated by the author

6.2. Scenarios - Yubune

6.2.1. Scenario I.

In this scenario where the current trend continues without bigger changes has some more drastic consequences than the first scenario of the Italian case study as Yubune is more at risk in some aspects.

Yubune becomes more isolated and marginalized as the population of the village remains without services and facilities in their immediate environment. As it is not attractive for people to move there the aging and decreasing local population within 10 years will most likely to drop below 200 or even lower. Without the need for using the local buses due to lack of people, Wazuka and the district loses the interest in investing into enhancing it. The abandoned buildings' condition worsen and some may even collapse. As less people will live there the amount of abandoned gardens and fields increases, the tea plantation fields might become at risk from this point of view.

The biggest risk in this vision is Yubune becoming uninhabited and degraded up to an extent that the traditional residential buildings and the complimenting tea factories will be irrecoverable and the tea plantations there become uncontrolled as well (figure 38). Even if Wazuka town's center continues to improve in some ways in the meantime, without good connectivity with Yubune, this eastern side of the town will degrade and the specific rural traditional customs and values there will eventually disappear if there is no interfering and incentives for further preservation and development.

In conclusion, in this scenario the effect on landscape is negative as it's losing the traditional cultural values with the identity, it is becoming abandoned.

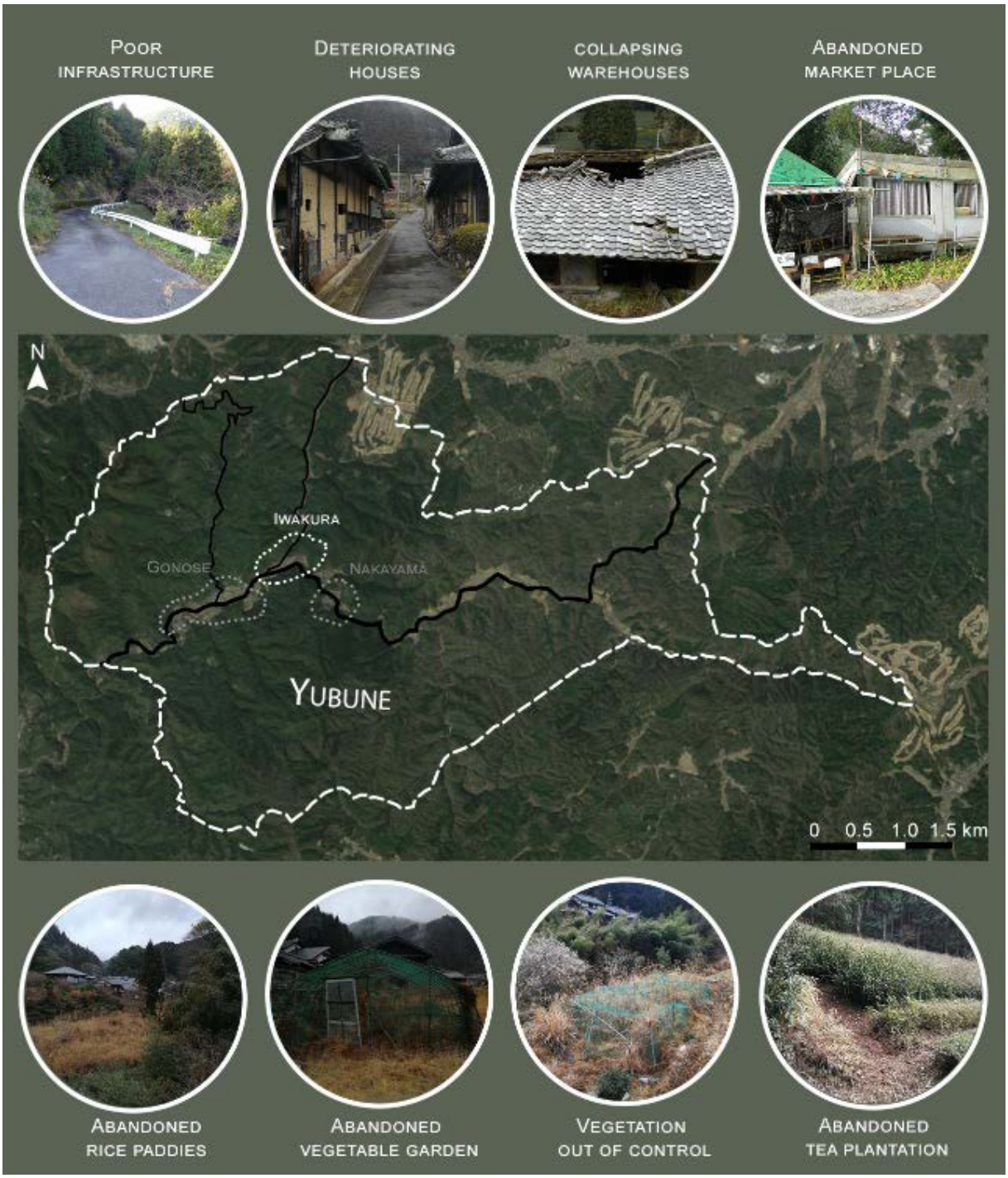

Figure 38: Scenario I.
Source: Elaborated by the author

6.2.2. Scenario II.

This second scenario for Yubune is proposing a more ideal vision or a more promising future if there are some changes for the better that initiate the appropriate rural development to make the village more self-sustaining.

Similarly to Cella Monte, the improving transportation connections help to start the process of becoming less marginal. Making it more easy to reach the village, it creates the opportunity to install some basic services and facilities to attend the locals' need and after determining that this area will continue to provide for soft tourism which includes mostly outdoor activities maybe with occasional short term and small scaled events organized, therefore they keep it wihtin boundary how many tourists will visit, as the area is characterized by the narrow valley the space and opportunities are limited in this sense. As the village becomes more equipped with opportunities and even receive support (funds) from the higher administrative level to restore the buildings and give functions to the abandoned ones, it motivates the people who already live there not to leave and to attract more inhabitants. In this way having more locals they can, for example, maintain the rice nurseries and the tea plantations (figure 39).

The most major and ideal change is to create the conditions to make it possible to enlist this tea-producing area – of which Yubune is part – as a UNESCO WHS. This 'status' provides the tools and support for creating the strategic framework for the region with the heritage protection focus. With time this results in a comfortably livable village with the tradition-keeping population that highly aware of the value of the heritage present there.

In this ideal vision, the role of the landscape is much more diverse, it contributes to the social and cultural aspect of life with the resources, the cultural values and the identity it holds. It carries the potential of soft tourism and possible becoming an UNESCO WHS.

Figure 39: Scenario II.
Source: Elaborated by the author

6.3. Integrated suggestions

After assessing the scenarios, seeing what possible outcomes could happen with no changes and following the present trends, and with development actions and positive changes. As these were just two scenarios out of many possible others, still bear in mind that these were though experiments based on the findings and ideas appearing in this research paper, reflecting on existing good practices and case studies, therefore they aren't random scenarios but also not necessary complete.

As a final proposed suggestion in this section, the important and concluded considerations and actions are incorporated into a set of comprehensive strategic guidelines that could be applied in the analyzed case studies – but in different

scales for the reason of the two location is not being in at the same level of development. By collecting and generalizing these interventions in a way that they could be transferable to other similar case studies like how in the good example of Cultural Heritage, Landscape & Rural Development: Good practice, Methodology, Policy Recommendations & Guidelines for Rural Communities by INTERREG showed.

Recommended measures:

The integrated suggestions serve the objective of protection and preservation of the built and the intangible heritage, and its environment. Creating the conditions for sustainable development in the rural landscape, it needs the following:

- providing well-connectivity with the region (infrastructure system as well as networking) and within the village,
- defining further use of the area, for the purpose of tourism,
- promoting heritage education,
- meeting the needs of the local community (for which the most effective way is to engage them in the planning process therefore provide a platform for this),
- giving function to abandoned structures (as they can attract further degradation however they also hold opportunities. It needs to have function which can be either restored one (for example an abandoned residential building after renovation is becoming inhabited again) or can host a different, new function after assessing the opportunities and demands),
- establishing the missing civil services of the village,
- providing enough capacity and services needed by tourists,
- providing new prospect for local people that makes it attractive (livability, jobs) for the younger generation not only to stay but to increase the population,
- involving higher administrative level for support (considering resources and budget for funds).

These interventions help to develop the analyzed rural areas and possibly can be used in other but similar case studies. With the measures the livability is improved, the attractiveness for tourists is enhanced and the local and regional governance is improved.

7. Conclusion

The aim of this thesis was to find rural development opportunities with heritage focus for the two analyzed case studies. The objective was obtained with first discussing the framework for rural development and heritage protection through policies, projects and other literature on the topic.

The two specific case studies were chosen based on the Drinkscape programme in which I participated. This program was a collaboration between the POLITO and KIT with two workshops. One workshop was built around a Japanese village, Yubune which is part of the famous tea-producing region and the second workshop was located in also a village, but in the famous wine-producing region in Italy, in Cella Monte. Thus, these gave the base for this research paper, some parts of the workshops were built into this thesis but as an individual work it was expanded to be more comprehensive and arrived to my own conclusions.

Furthermore, as there was no clear outcome of the workshops, my work in this research tried to frame them in a more complete and holistic approach, through assessing them in a comparable and more detailed way and evaluating their attributes with the SWOT method. The main assets and problems were identified in both case studies. After synthetizing the findings; there were showcased some good examples related to the topic. They helped to take ideas away for further considerations. Conducting a thought experiment with creating two scenarios for each case study, it helped to find the development goals which were made into a comprehensive set of interventions, suggested measures that are possible to apply in other similar case studies.

As the two case studies were alike in many ways, for example both of them being a traditional productive landscapes in the rural part of a first world countries. One related to tea-production while the other to wine-production, besides the fact that they are connected to food production and consumption, even the visual attributes have some similarities as both type of plantations has regulated straight rows of the plants which are located on slopes. Moreover, the crucial common value is the heritage as both location has long history and traditions connected to production.

Important factor is that the Italian location is part of the UNESCO WHS while the Japanese has the intention to become one and in the present it is part of the Japanese heritage which is already a good starting (or more like continuing) point. The case study of Cella Monte was analyzed first to help to determine some steps as a sort of “front runner“. Making them more comparable the scope was defined similarly, for this reason at the Japanese location the focus was pointed on a part of the whole unit, Yubune and even within that there was a zooming in but never forgetting to see the big picture as a whole, too.

The findings showed that both location has many assets and opportunities for development, but the weakness and threat in Yubune’s case was a bit more weighted. The main problems were highlighted and prioritized, which in case of Cella Monte were the following: the insufficient public

transportation which creates sub-problems as difficulties to reach certain services; the diversity of the services itself; and finally the available information in Cella Monte, especially in English.

For the second case study the main problems are the following considering their priority as well: the decreasing and aging population which can lead to Yubune's depopulation; the insufficient public transportation connection as Yubune is quite marginalized (also due to locating in a narrow valley); and thirdly the lack of services and degraded buildings without functions.

As it can be seen, there is an overlap between the two cases, for example listing the insufficient transportation connections and lack of services as problems due to their similarities. Furthermore, these and the other issues such as the decreasing population are align with the global trends and problems that were discussed in the beginning of the thesis.

Seeing some good practices confirmed that participatory planning with involving the local stakeholders is indeed one of the best option also for assuring that the locals' demand is met with the development actions.

Regarding the thought experiments with the scenarios, in the first scenario for Cella Monte envisioned the future in a way if everything would continue to go as the current tendencies show without major changes. In this version the future is not so promising but the municipality would sustain itself for some time before starting to decline. The idea of becoming abandoned would most likely to happen only in the very far future. The main problem would be the status of the local businesses as they are prone to outgrow the preferable size and scale of sustainable business in a rural area, this would also result in an unbalanced, unsustainable tourism and from this the assets of the landscape would be more at risk.

In the second version, the ideal future was envisioned with positive changes. Cella Monte becomes self-sufficient with wider diversity of available services and facilities which is attractive for both people to stay short time and temporarily or settle down permanently. The locals develop a strong sense of identity with connecting the heritage present there.

In the Japanese village's case, in the first scenario following the current trend would result in a worse outcome in the future: becoming uninhabited and degraded in an extent that the traditional residential buildings and the complimenting tea factories will be irrecoverable, the tea plantations there become uncontrolled and the local heritage will be at risk. Even if Wazuka town center continues to improve in some ways in the meantime, without good connectivity with Yubune, this eastern side of the town will degrade and the specific rural traditional customs and values there will eventually disappear if there is no interfering and incentives for further preservation and development.

The second, idealized scenario for Yubune shows that the most major and positive change is to create the conditions to make it possible to enlist this tea-producing area as a UNESCO WHS. This 'status' provides the tools and support for creating the strategic framework for the region with the heritage protection focus. With time this results in a comfortably livable village with the tradition-keeping population that highly

aware of the value of the heritage present there.

As the last step the integrated suggestions are incorporated into a set of measures which serve the protection and preservation of the present heritage in the rural areas which are in a similar position and phase of development as the analyzed case studies.

These goals include protecting the heritage while promoting cultural and social values. The incentives for development need to take into consideration the locals' demands and the resources. Involving and asking the local communities what they need, what they have difficulties with and what would want to change and improve. This makes it easier to define development actions and create a more comprehensive and integrated strategy. This could tackle more problems simultaneously.

The further goals are providing good connections between the villages and within the village, while also creating a network with the other settlements in the region. Defining the further use of the area, the purpose of tourism considering sustainability. Promoting heritage education, establishing the missing public services. Providing services and facilities for both the locals and the tourists to make the place more attractive for both interest parties. Last but not least, to involve upper administrative levels' support as alone with bottom-up initiatives it takes more time and effort, therefore the budget and resources should be defined as well.

Circling back to the questions asked in the beginning of the thesis: How to enhance the productive landscapes without compromising and damaging their value? How to make a transformation without losing their identity? The analysis of productive landscapes reveals the challenge of their development and with the proposed comprehensive set of measures, it is possible to answer them.

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ANNEXES

Annex 1

List of participants in Workshop I.

Prof. Mauro Berta, Polito
Prof. Massimo Crotti, Polito
Prof. Marco Bozzola, Polito
Prof. Beatrice Lerma, Polito
Prof. Bianca Marla Rinaldi, Polito
Prof. Davide Rolfo, Polito
Prof. Marco Gazzoli, Polito
Prof. Yoshiro Ono, KIT
Prof. Elzo Okada, KIT
Prof. Shigeatsu Shimizu, KIT
Prof. Kauze Akamatsu, KIT

Architect team

Kana Watanabe, KIT
Laura Munoz Tascon, Polito
Mattia Salvador, Polito
Miori Abe, KIT

Systemic design team

Asja Aulisio, Polito
Eva Vanessa Bruno, Polito
Haruko Arai, KIT
Shin Okamoto, KIT
Rinko Mitsui, KIT
Ayaka Ota, KIT

Landscape design team

Chika Yamade, KIT
Vittoria Urso, Polito
Noemi Juhasz, Polito
Namiko Araki, KIT
Yumi Goto, KIT

List of participants in Workshop II.

Prof. Claudio Germak, Polito – scientific responsible of the Drinkscape Programme
Prof. Marco Santangelo, Polito – scientific responsible of the Drinkscape Programme
Prof. Kazue Akamatsu, KIT
Prof. Elzo Okada, KIT
Prof. Yoshiro Ono, KIT
Prof. Shigeatsu Shimizu, KIT
Prof. Hiroyuki Kimura, KIT
Prof. Massimo Crotti, Polito
Prof. Davide Rolfo, Polito
Prof. Marco Bozzola, Polito
Prof. Beatrice Lerma, Polito
Prof. Bianca Maria Rinaldi, Polito
Prof. Silvia Barbero, Polito
Prof. Mauro Berta, Polito
Prof. Marta Bottero, Polito
Prof. Andrea Bocco, Polito
Prof. Claudia Cassatella, Polito
Prof. Michela Rosso, Polito
Prof. Mauro Volpiano, Polito
Prof. Marco Gazzoli, Polito

Team ‘Paths’

Haruko Arai, KIT
Namiko Araki, KIT
Eva Vanessa Bruno, Polito
Yumi Goto, KIT
Noemi Juhasz, Polito
Shin Okamoto, KIT
Kana Watanabe, KIT

Team ‘Quarry’

Laura Muniz, Polito
Vittoria Urso, Polito
Naoki Nobe, KIT
Tokihiro Aoyama, Polito
Rinko Mitsui, KIT

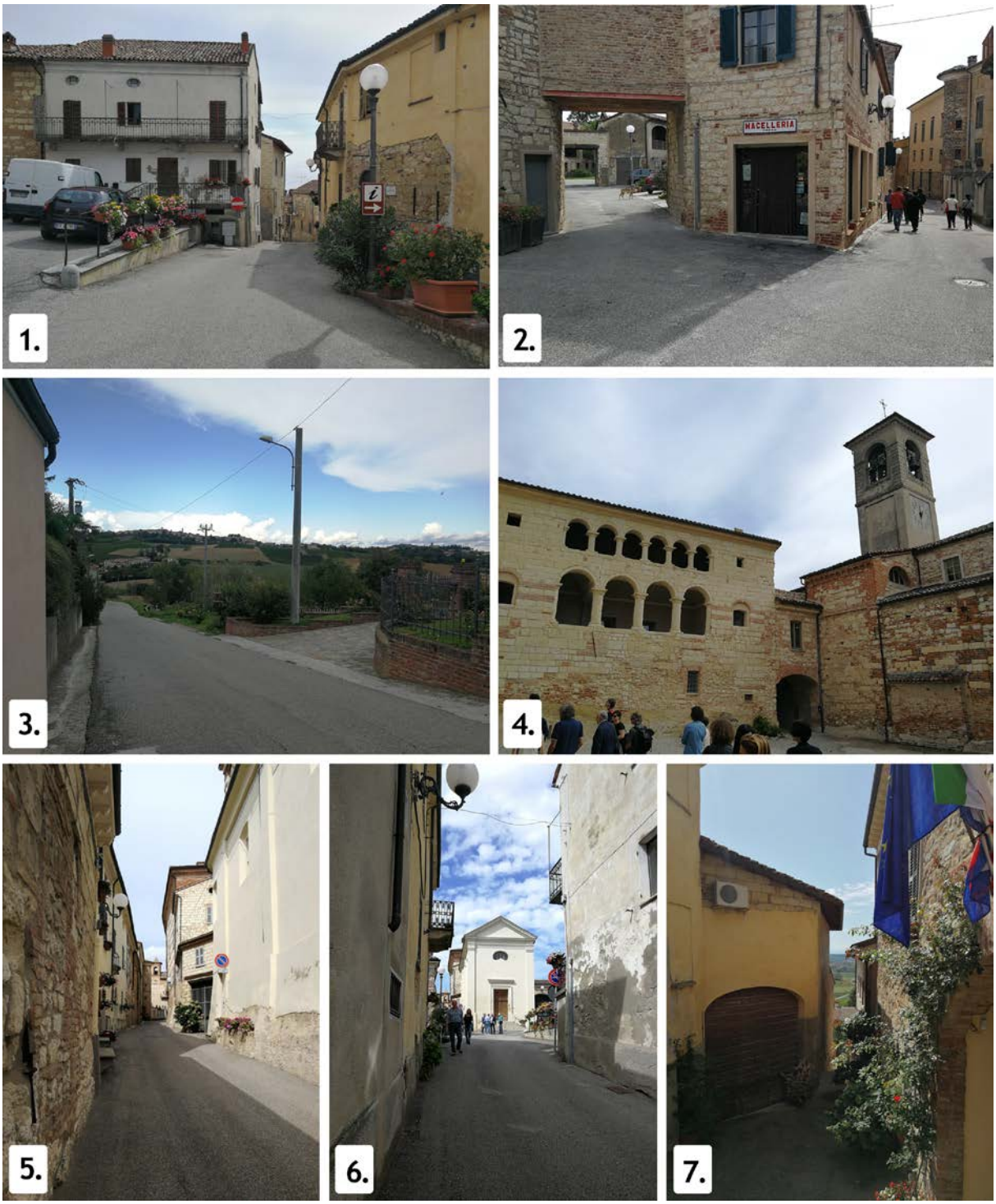
Team ‘Village House’

Miori Abe, KIT
Ayaka Ota, KIT
Chika Yamade, KIT
Asja Aulisio, Polito
Mattia Salvador, Polito

Annex 2 – View of landscape in Cella Monte

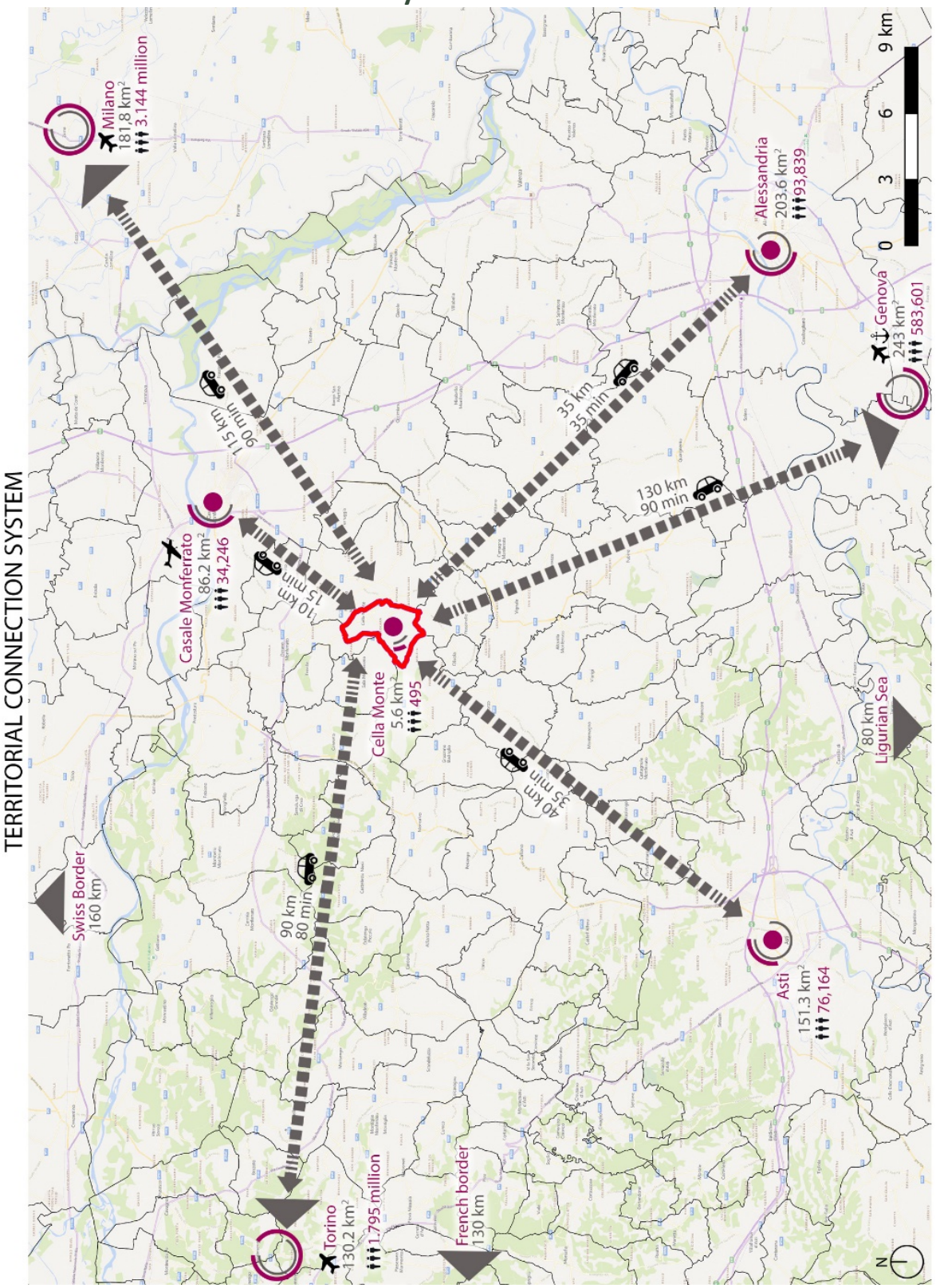
Source: Photos taken by the author

Annex 3 – Built environment in Cella Monte



Source: Photos taken by the author

Annex 4 – Territorial connection system



Source: Elaborated by the author, Google Maps, 2021

Areas under the protection of regional landscape plan

Legend

- UNESCO core zone
- UNESCO buffer zone
- Cella Monte
- municipality border
- hydrology
- road
- building

PPR 2017
Areas protected by law related to the art. 142 del D.lgs. n. 42/2004

- Rivers, streams, watercourses inscribed in the lists provided by the consolidated text of the legal provisions on water and electric power plants, approved with Legislative Decree n. 1775/1933 and the related banks or foot banks for a band of 150 m each (art. 14 NdA)
- Territories covered by forests and woods, even if covered or damaged by fire, and those subjected to a reforestation constraint, as defined by article 2, paragraphs 2 and 6, of Legislative Decree n. 227/2001 (art. 16 NdA)

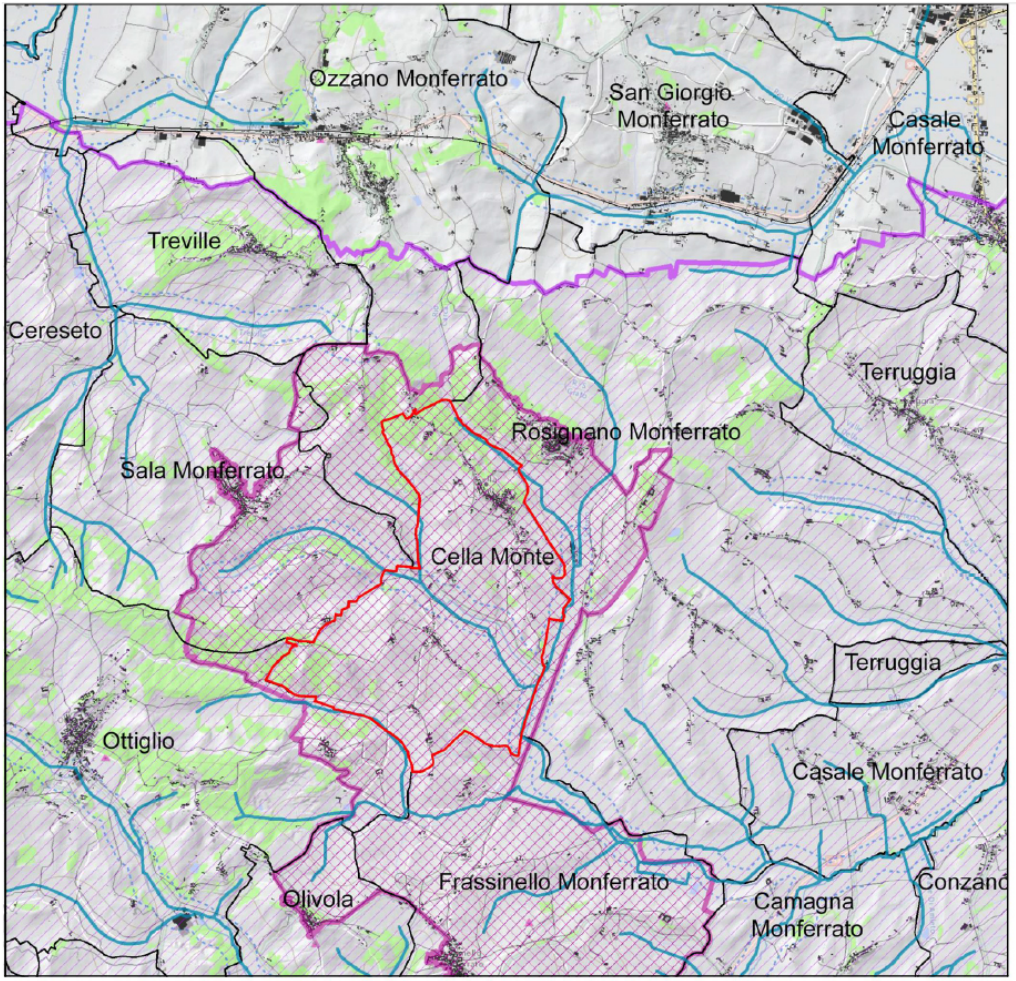
source: BDTRE - Piedmont regional portal 2018 http://www.geoportale.piemonte.it/geocatalogorp/)
PPR 2017 (http://webgis.arpa.piemonte.it/ppr_storymap_webapp/

UNESCO WHS - Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato

- Contains 5 different wine-growing areas and the Castle of Cavour (in Grinzane Cavour)
- History of wine-growing and wine-making dates back around 5th century BC
- Area of the core zone: 10,789 ha
- Area of the buffer zone: 76,249 ha
- Date of inscription: 2014
- Criteria:
  - (iii) to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared
  - (v) to be an outstanding example of a traditional human settlement, land-use, or sea-use which isrepresentative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change

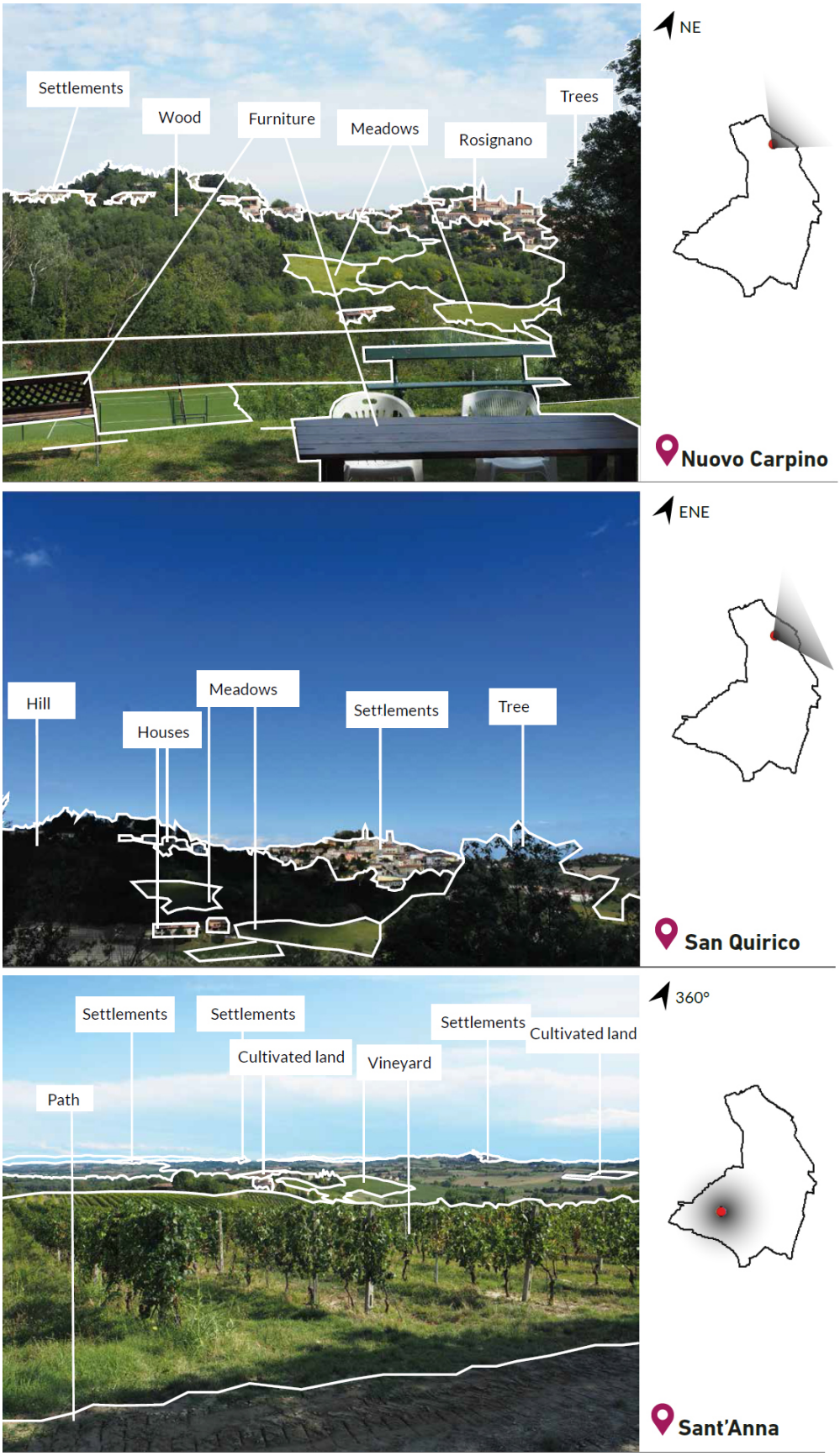
0 1 2 3 4 km

N



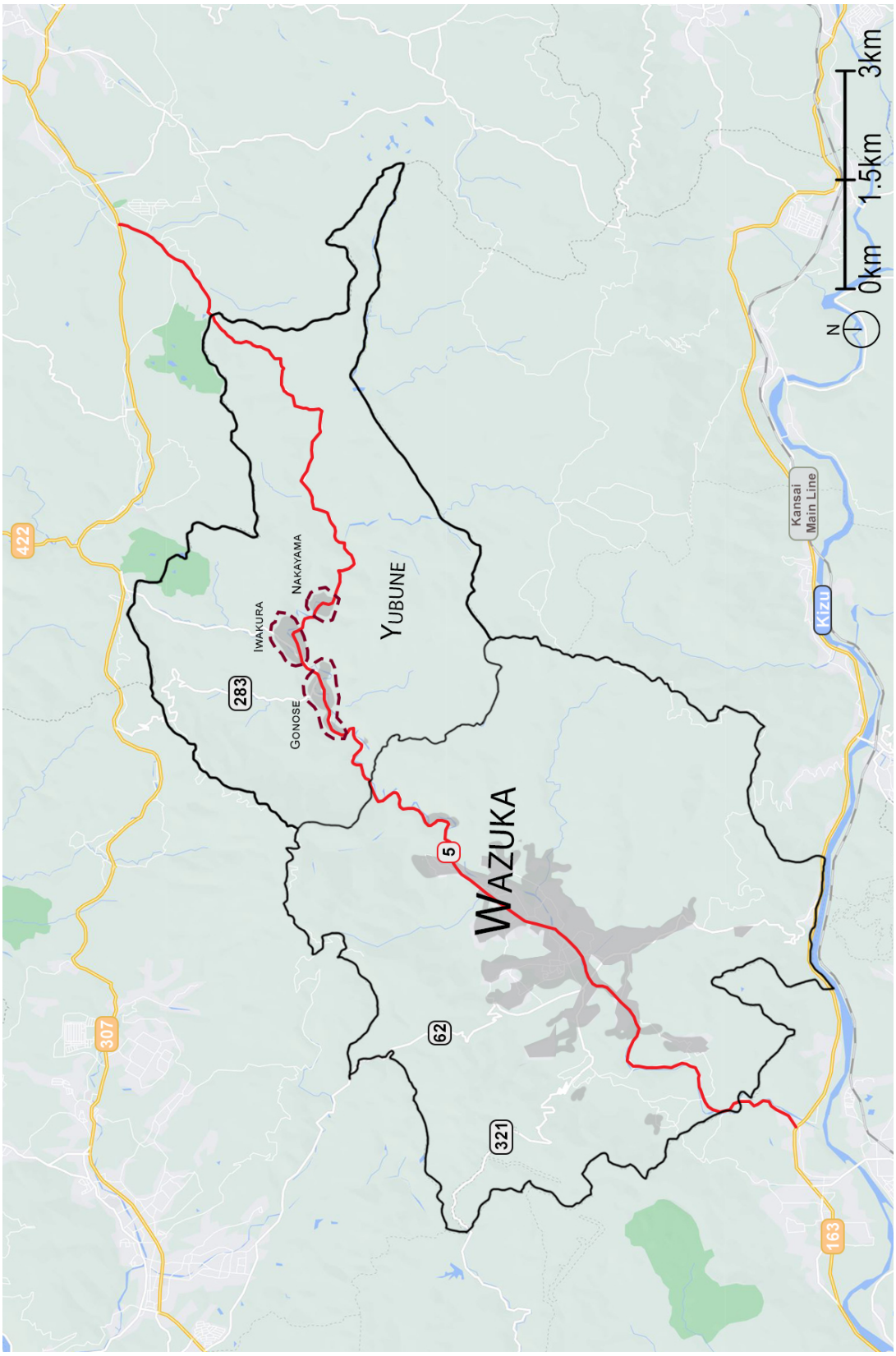
Source: Elaborated by the author, Piedmont Reginal Portal, PRG 2017

Annex 6 – Viewpoints in Cella Monte



Source: Elaborated during the workshop by the 'Path & belvedere team'

Annex 7 – Connection of Yubune

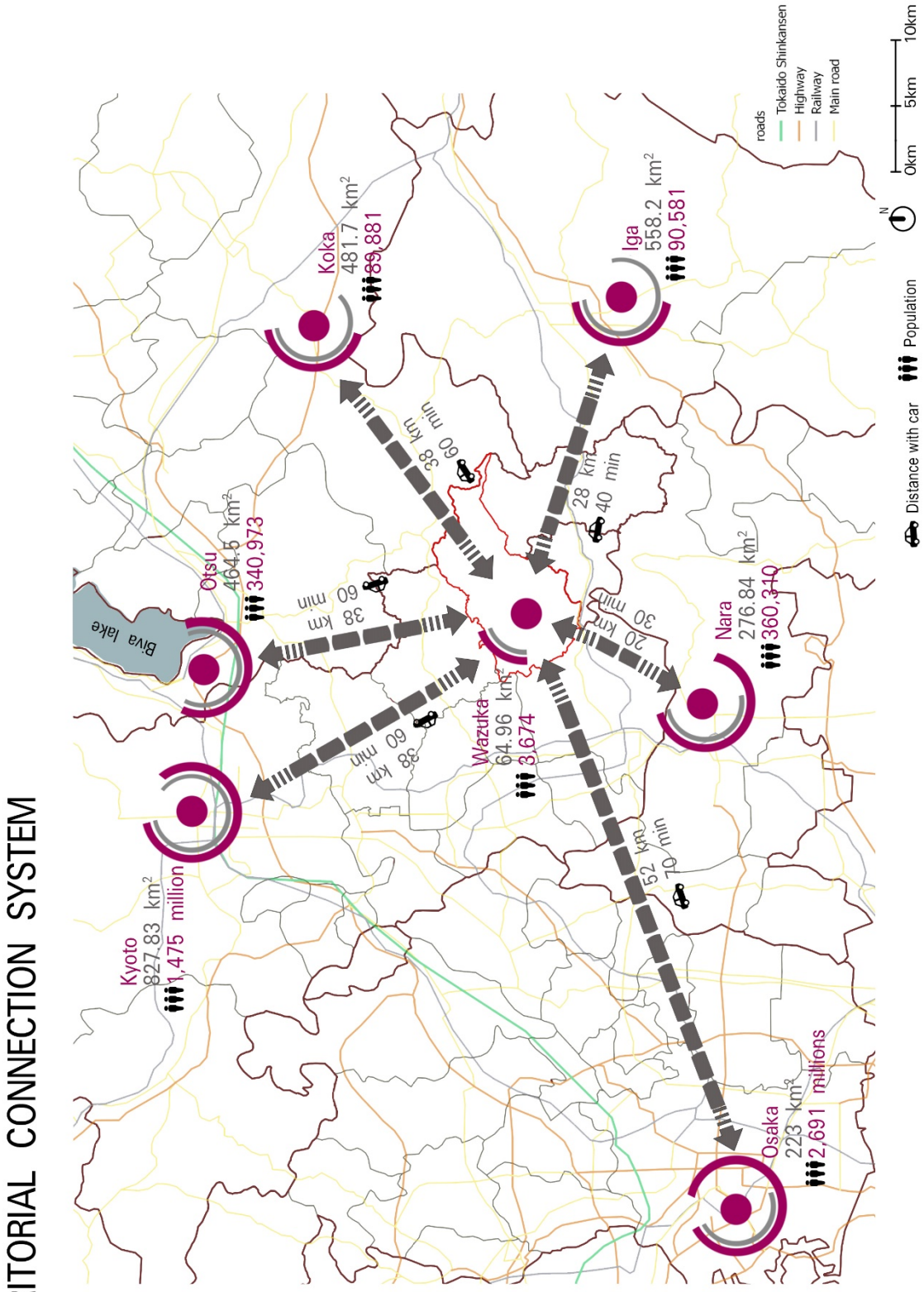


Source: Elaborated by the author, GoogleMaps, 2021

Annex 8 – Land use of Iwakura

Source: Elaborated by participants of workshop, landscape team

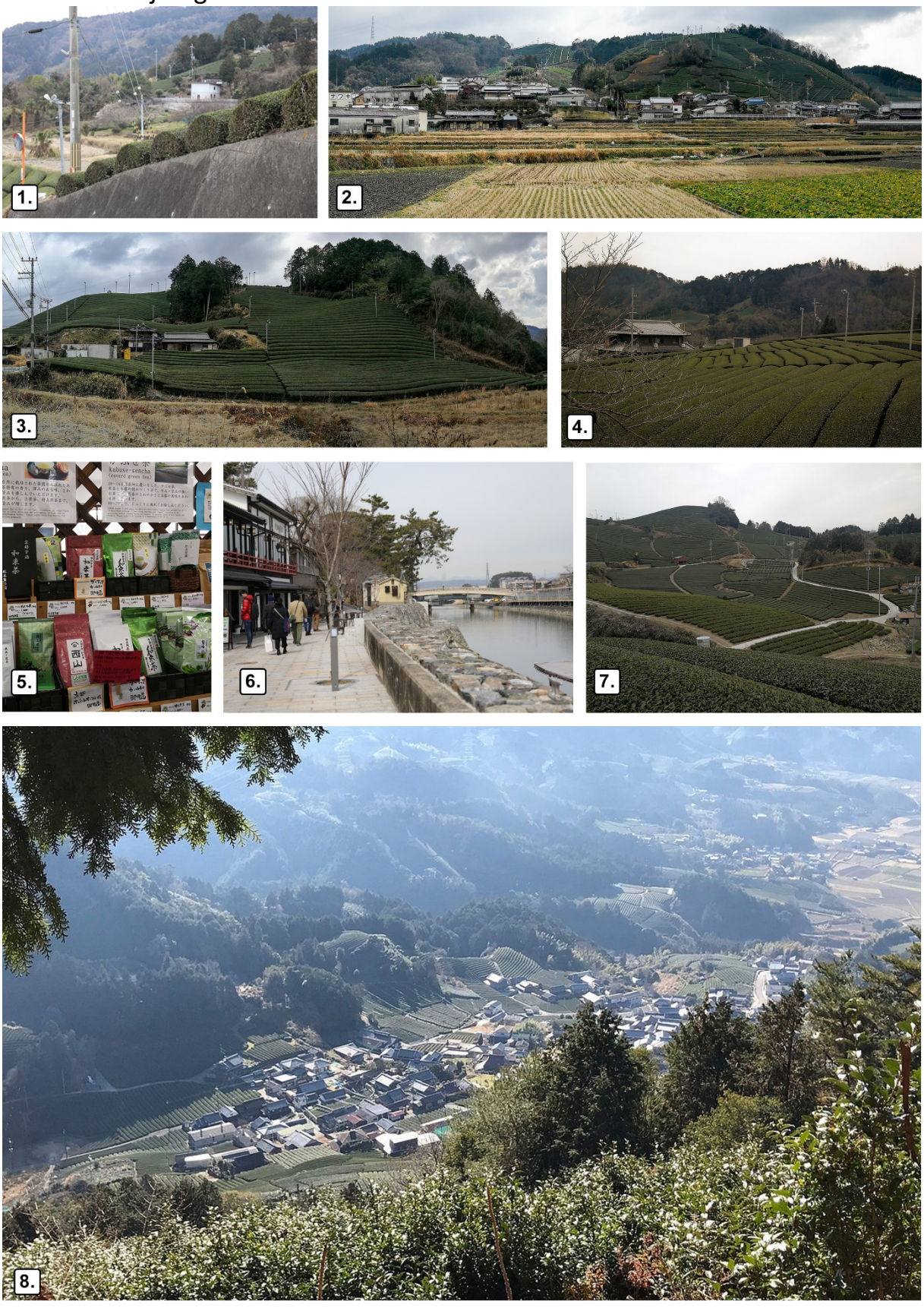
Annex 9 - Territorial connection system of Wazuka



Source: Elaborated by the author, GoogleMaps, 2020

Annex 10

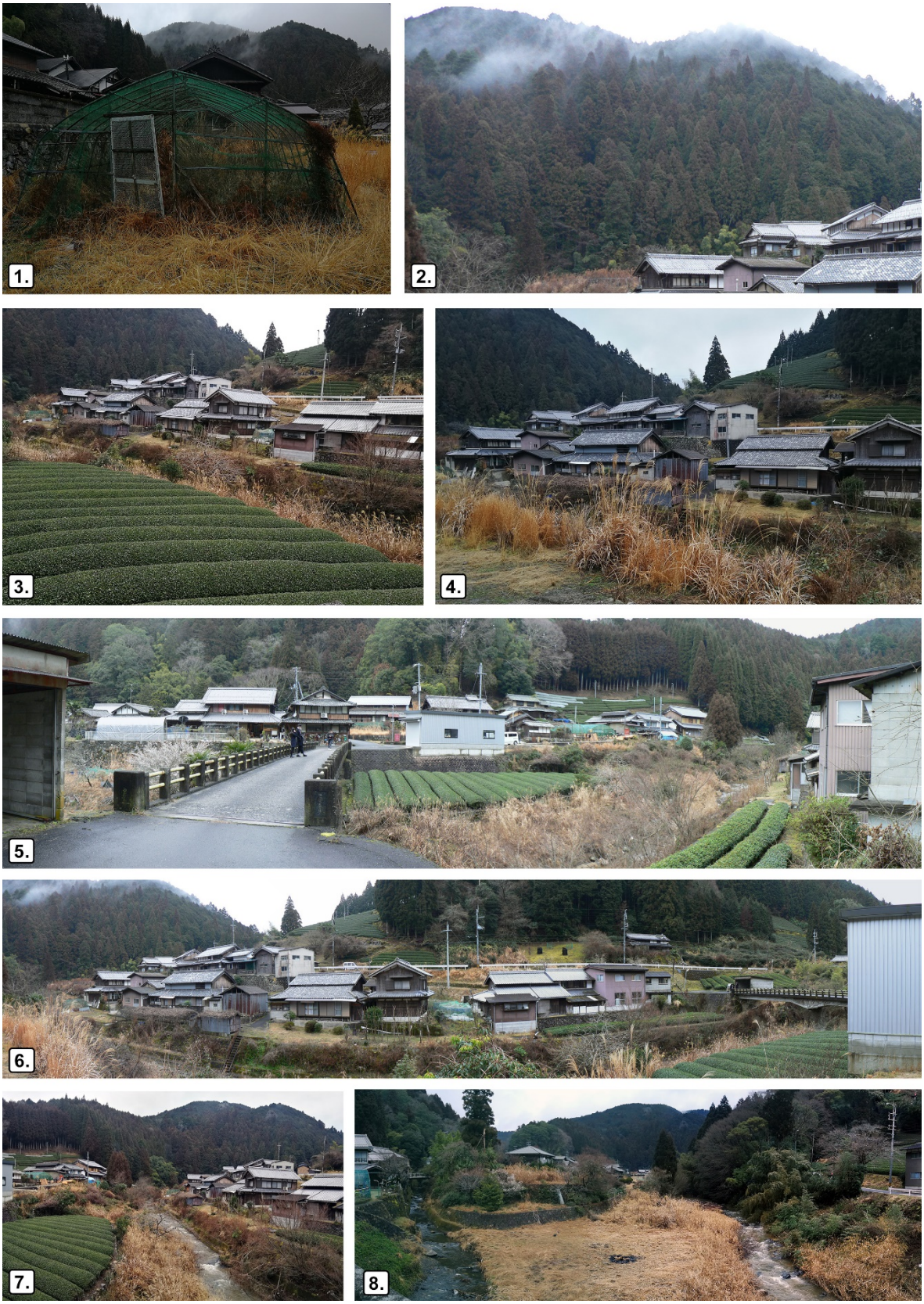
Pictures of Uji region



Source: Photos taken by the author, except picture no. 8: TripAdvisor, 2019

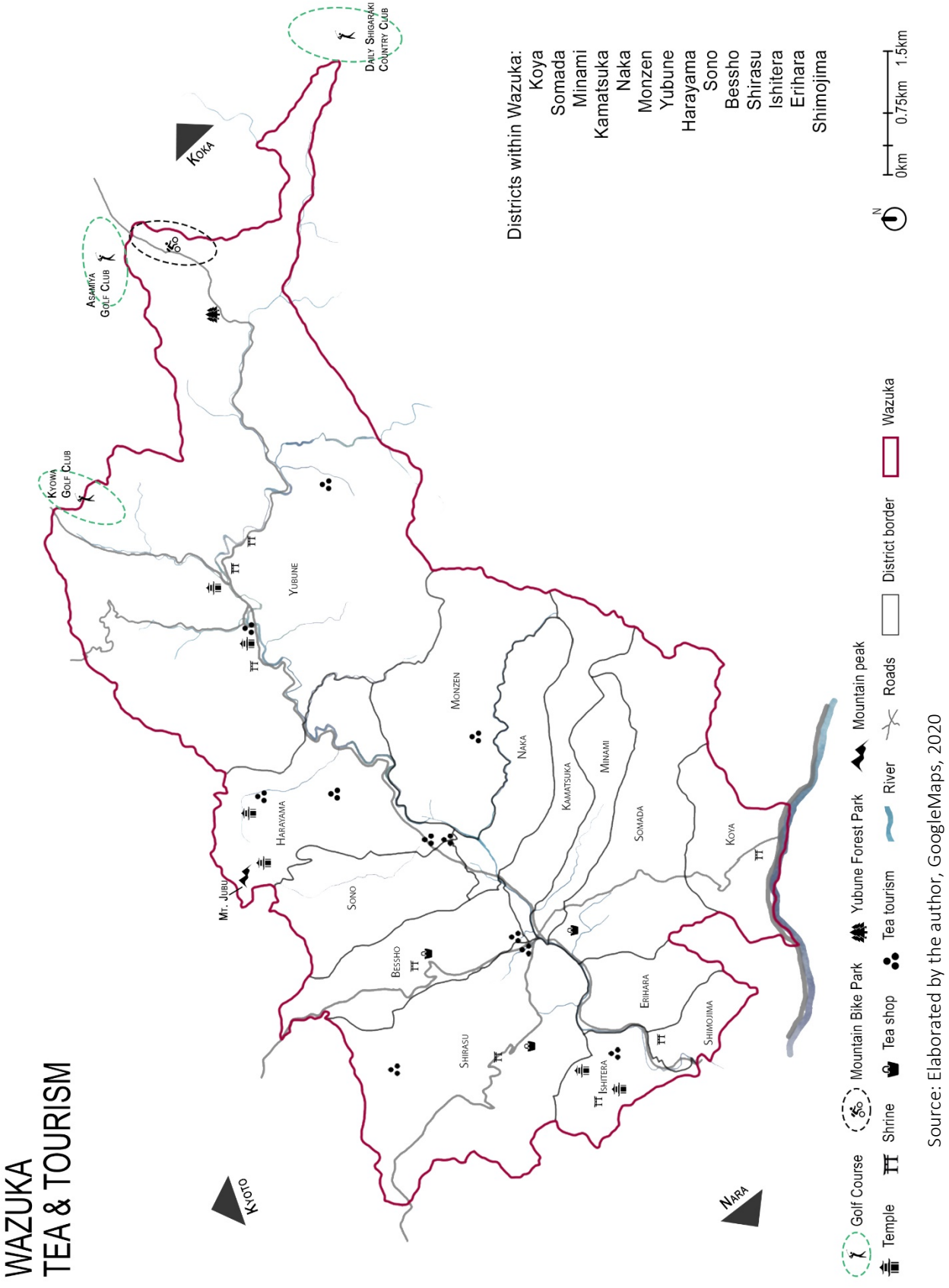
Annex 11

Pictures of Yubune

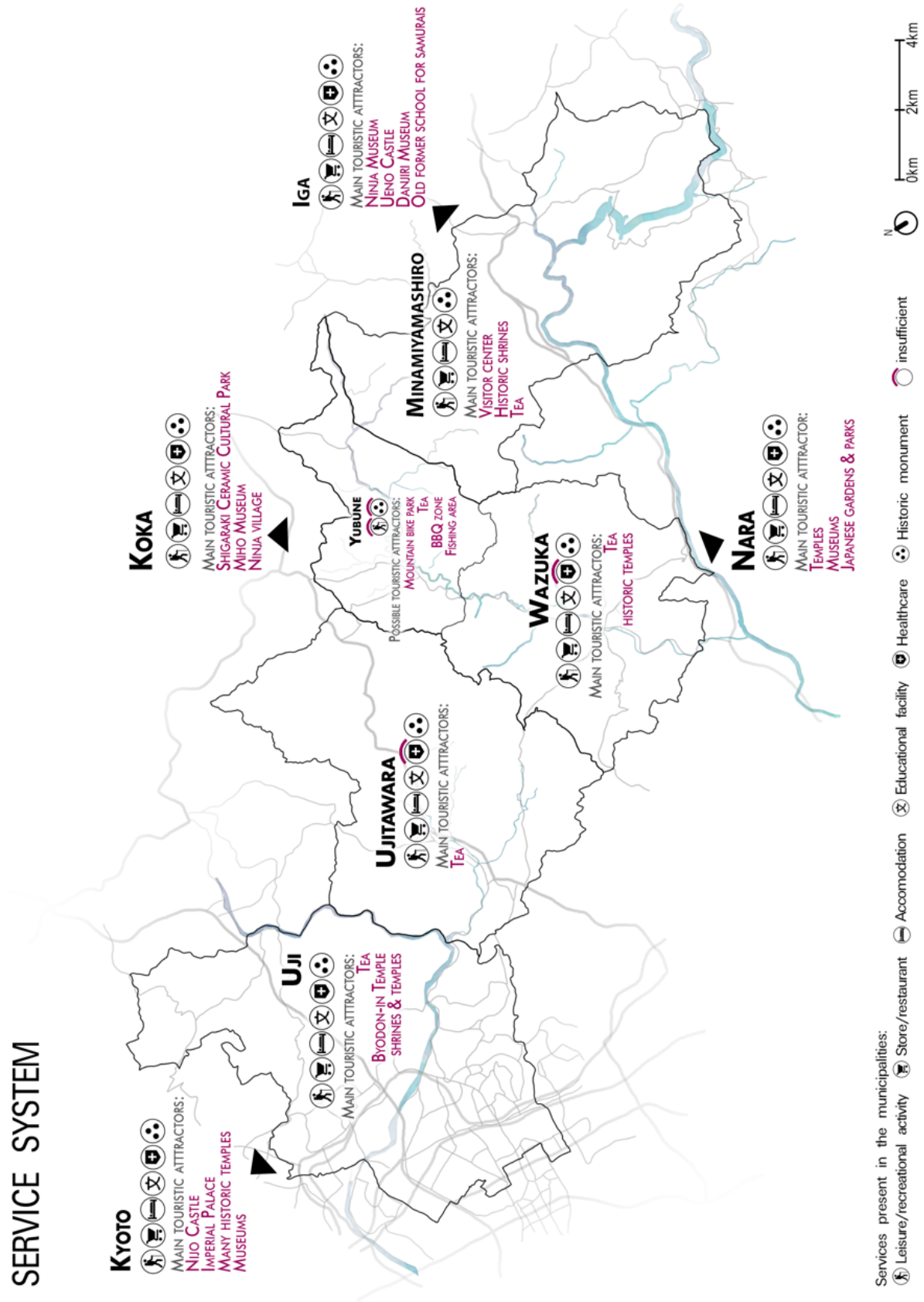


Source: Photos taken by the author

Annex 12 – Tea & tourism in Wazuka



Annex 13 – Service system in the Uji region



Source: Elaborated by the author, GoogleMaps, 2020

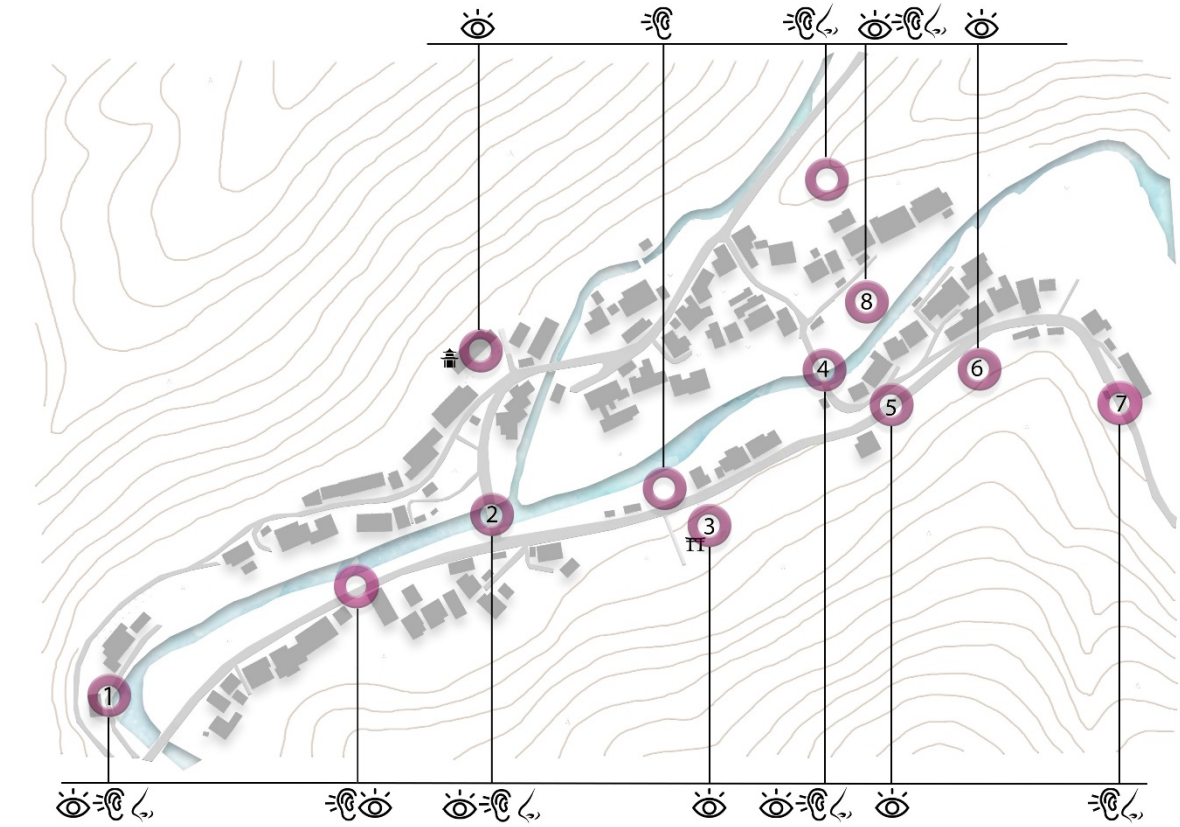
LAND USE MORPHOLOGY AND DYNAMICS

	Uji	Wazuka	Yubune
Population	184,678	3,956	330
Area	67.5 km²	64.9 km²	6.930 km²
Connectivity & services	Center Proximity with Kyoto & Nara	Node Transition between center & periphery	Marginality bad connectivity
Characteristics	Wide, flat valley heavily urbanized	More enclosed valley Significant agricultural & natural features	Narrow, enclosed valley Very lightly urbanized

Source: Elaborated by the author

Annex 15 – Tranquility of Yubune

TRANQUILITY OF YUBUNE



Source: Elaborated by the author