

Rural Settlements: enriching villages through the network of shared qualities The case of Tsirguliina village in Estonia

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Rural Settlements: enriching villages through the network of shared qualities The case of Tsirguliina village in Estonia

With urbanization people are As Baltic states are one of the traveling and settling closer and countries ranking with the biggest closer to bigger cities, where all decrease in population overall, small the economical, social and work 15 settlements were analysed and opportunities are the most. But compared in 1 municipality of each where are these people coming from?

Rural areas in Europe cover around 80% of the land area together, but only 30% of EU's population lives in rural areas. Mainly people settling in cities are from smaller settlements leaving their original homes empty and in a slowly degrading phase as fewer people live there, shops and schools close, there are less investments and less interest in people to call it a home. Rural settlement idea around Tsirgullina village. For is to work together and provide achieving the goals 3 main target the balance of people coverage. Creating sufficient network systems between small settlements can keep the existing functions running. strengthen communities and work towards future goals together.

country. Comparison of spatial qualities and arrangements of the villages themselves concluded into a rating, that showed the most popular elements and functions as well as weaknesses between the villages, municipalities and Baltic State villages together.

Outdoor design, smart village tools and different scale connections were used to create a pilot project in Estonia's municipality of Valga groups were defined, prioritizing existing residents the most, then concentrating on visitors and then on new residents in the future. After rebranding, providing daily features and sustainable solutions it shows how settlements can work sustainably together with 2 other similar scale villages.

Actuality

Decreasing population in rural areas and settlements and people moving to bigger cities, increasing different needs there.

Problems

More empty buildings when people leave, they are not efficient to maintain and must be demolished (construction - the biggest CO. footprint creator).

Less services in small villages so people have to commute more to other cities, leave the village and the village itself is totally dependent on the bigger city.

Decreasing historical places and rural places to visit, countryside work hands.

Goals

- Create a home feeling for the existing community.
- Attractive space for past, existing and future residents, visitors.
- To propose a future look/ perspective to the place.
- Create a system between small settlements that can work together to be more sustainable and sufficient.

Solutions

Use smart village, start-up village, future village etc. tools to be modern, sustainable and sufficient settlement. reorganize services.

Urban-rural design in rural areas for comfort, community, meeting.

Rebrand the settlement area to create a new look at them and get closer to the communities.

Create more walkable, bikeable and public transport accessible between connections the settlements.

Organize a specialty feature in each settlement that can help and work in connection to the other settlements.

Provide the main daily features in every settlement - a shop, a place to live, a place to meet, close and accessible public transport.

Project result

Research of Baltic countries - regions and municipalities with decrease of residents, collection of existing smallscale initiatives and workshops, programs in small villages.

Specific municipality and small settlements in each Baltic country researched, compared factors of the decrease.

Networks between small villages, towns and bigger cities around them analysed.

Specific solutions for different settlement situations and existing, future factors defined.

One of the small settlement networks chosen to boost and detail as a pilot project.



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FUTURE CHALLANGES











Mega-trends, processes, trends and factors (ESPON, 2019, p. 20)



1.1. Urban increase and rural decrease

Some trends come and go, and they exist in different scales and fields. Some mega-trends (ESPON, 2019, p. 19) have been stated also for the world in the future overall:

- Urbanisation
- Climate change
- Technological breakthroughs
- Shifting power from West to East

Of course, there would be some changes and factors that we cannot not now, but these have been determined as some very likely points in the longterm future (United Nations, 2018, Intergovernmental Panel on Climate Change, 2018, PwC, 2019).

In 2019 a Baltic Sea Region (BSR) future development for 2050 (ESPON, 2019, p. 19) was created pointing out also some relevant processes as well as 3 future scenarios. These were the future development processes defined specifically for BSR:

- Technology transforming economy and society,
- Demography and politics shaping society,
- Environment shifting economy.

In these trends a big topic that can be seen already today is the change in demography through the world but in BSR it is also a different case as

a rapid urbanisation and rural shrinking can be seen (ESPON, 2020, p. 1). That leads to population aging and migration, but the scale and the speed differs between countries and regions within a country. For example, the differences in population density between the northern and southern countries of the BSR (Finland -17 inhabitants/km2 and Germany - 172 inhabitants/km2) influence the spatial pattern of the region, in which cities in the South of the region are more connected. The study shows that the depopulation of rural areas slowed down in the countries which received international migrants in 2015-2016 (Germany, Sweden, Denmark and Norway) (ESPON, 2020, p. 1).

In Sweden and Norway, several regions where the population decreased slightly between 2002-2008 had population increases in the 2009-2015 period. In the three Baltic States, most regions experienced the opposite trend in the 2009-2015 period, with the capital region of Estonia the only region seeing a positive change (Nordregio, 2016).



Change in population between 2005 and 2050 under a status guo scenario (European Environment Agency, 2012)



> 1.5

Average total population change (in percent) in 2002-2008 and 2009-2015 (Nordregio, 2016)

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2002-2008



2009-2015



A very challenging situation faces all three Baltic states -Estonia. Latvia and Lithuania. The three Baltic States have all experienced a tremendous volume of out-migration, particularly in the second half of the last decade. This is likely a consequence of the financial crisis. These areas lost up to 45 percent of their population potential (Nordregio, 2016).

Baltic states have been losing residents at some of the fastest rates during the last decade. Not only have peripheral rural areas been **shrinking** but 95% of cities and even capitals (for instance, Riga has lost 29.6% of its population) have been losing their populations since 1989. The suburban areas surrounding the capitals (in Lithuania and Estonia, this includes two other major cities) have, however, seen population increases (Pociūtė-Sereikienė, 2020, pp. 4-5).

A crucial point is also that how even more unbalanced the populated areas would become. Already now there is a huge difference between city and rural population, but it is thought that in 2030 the depopulation of BSR rural areas will change of more than 30%. This pattern is particularly seen in the Baltic States. In those countries, the main urban agglomerations continuously would increase in population while the other parts of the territory would face depopulation.







Regions of the Nordic Countries would grow during the next twenty years with some exceptions in eastern Finland. Again, the capital city regions would be gaining more inhabitants than other regions in these countries (ESPON, 2019, p. 24).

What can we see already and goes hand in hand with population disperse within land in the BSR development is that in the three coming decades **BSR** countries will experience fewer people in working age and a growing number of retirees. The proportion of people aged 30-60

SPON BT2050

BS = Baltic Sea Region

2051

2041

2031

years will decrease from 43% to 34% till 2050. That is likely in every country, but most severe in Sweden and Germany.

The proportion for people aged 60+ years will rise from 25% to almost 40% till 2050. So overall in

BSR there will be a dramatic shift in the old-age rate that has never seen before increasing from nowadays 30% to 55% in 2050 (ESPON, 2019, pp. 22-23). In Swedish and German regions, older people would account for almost 50% of the total population. In other regions in the BSR, at least one-third of the total population would belong to 60+ age group (ESPON, 2019, p. 25).

In the BSR future development document (ESPON, 2019, p. 51) some key actions for the future have been defined

- Strengthening the network of Baltic medium-size cities,
- Supporting cross border service networks based on new technologies,
- Connecting the Baltic infrastructure on the regional level,
- Supporting border cross metropolises,
- Using the Baltic Sea assets wisely,
- · Adapting to climate change, water and green cross-border clusters,
- Attracting migrants to the BSR,
- Improving BSR integration through data integration, monitoring, research and spatial planning.

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1.2. Baltic Sea Region scenarios

As written before there has been a future forecast proposed for the future development for the Baltic Sea Region (BSR) (ESPON, 2020). They include 3 scenarios:

1. Scenario **Baseline Scenario**

(if trends of the recent past (e.g. steady economic growth, the inflow of immigrants) and current policy practices (e.g. EU political integration) continue to be in effect in the following three decades.):

- bigger cities will keep generating economic power,
- Cities will be able to attract more people,
- rural areas will continue to decline.

2. Scenario "Well-being in a circular economy"

- active citizen involvement in the transition from the existing linear economic model in favour of a circular economy,
- focus on a better quality of life,
- The role of the smaller cities and towns will be more prominent (decentralised patterns are observed, where second and third-tier cities and towns become the main centres, reducing the importance and concentration in metropolitan and large urban areas),
- a boost in local production as well as reduced consumerism.

The 'Well-being in a C-E' describes a development that benefits the population development in rural and peripheral regions. Nevertheless, in relation to the rural population in the Baseline Scenario, the difference is only up to two per cent. On the other hand, cities, particular in capital cities, would have fewer inhabitants; however, the comparative loss would be less than one per cent (ESPON, 2019, p. 44).



Decentralised circular economies and Regional centres and transport, Baltic Sea Region 2050: Scenario 'Well-being in a circular economy (ESPON, 2019, p. 35)



3. Scenario "Growing into green-tech giants"

- in green technology and innovation,
- reduced ecological footprint,
- increased eco-production,
- an increased 'guilt-free' consumerism,
- increasing concentration of economic activity around the present metropolitan areas and growth centres.

The 'Growing into a green-tech giant' yields a different pattern. Here, the metropolitan areas are drivers of the economy and, as such, are expected to have a higher urban population, whereas the remaining, mostly rural areas might have somewhat fewer inhabitants than in the Baseline Scenario. Again, the changes to be expected from such a scenario by 2050 are relatively small (ESPON, 2019, p. 44).



Green-tech giants and global attractiveness and Urban centres, transport and connectivity, Baltic Sea Region 2050. Scenario 'Growing into green-tech giants (ESPON, 2019, p. 42)



5Population difference to Baseline Scenarion in 2050 (ESPON, 2019, p. 45)



In the BSR as a whole, but also in each country, rural areas would have clear population gains at the expense of urban areas in the 'Well-being in a C-E' scenario. The 'Growing into a green-tech giant', with its focus on metropolitan areas, would lead to population gains in cities, and losses in rural areas (ESPON, 2019, p. 45).

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1.3. Challenges in rural areas

Why would someone prefer to live in a town or village rather than a city? Clearly, some people love being in cities while others thrive in smaller communities. There are many pros and cons for urban and rural areas. It all depends what people want to do and in what kind of environment they want around them (RTT, 2019, p. 109).

As rural area settlements towns and villages would remain as key features of the land for generations. It is likely that people in rural areas are more into traditions, more patriotic and in more balance with the nature. Rural areas are home to around 140 million people, representing some 30% of the EU population and over 80% of EU territory. Rural areas are a core component of the European way of life and identity. They hold diverse potential - and face shared challenges (Goodwin-Hawkins, Guzzo, Merida Martin, & Sasso, 2023, pp. 2-3).

The European Commission's long-term vision for the EU's rural areas identifies several of action towards areas stronger, connected, resilient and prosperous rural areas and communities by 2040 (Goodwin-Hawkins, Guzzo, Merida Martin, & Sasso, 2023, pp. 2-3). Generally of low economic value or too remote, rural areas receive

little attention and protection. Yet, they are of global importance as reservoirs of clean water, stabilizers of weather patterns and clean cool air, absorbers and storage of greenhouse gases, protection against massive soil erosion and sedimentation, and reservoirs of native wildlife and biodiversity. Furthermore, these large remote natural areas are sources of inspiration for people who treasure them or venture into them for recreation (RTT, 2019, p. 8).

And it is not only about people living in rural areas or the green areas. Yes, it is home for half the world's people, and provides jobs for almost all of them. But it is also the source of the food and products we use daily anywhere, most of the materials as wood also comes from rural areas, and everyone on their weekend try to get out of the urban centers to go to recreational areas that are mostly located in rural land (RTT, 2019, p. 8).



Advantages and disadvantages in rural areas



- Demographic aging
- Weak labour market
- Depopulation
- Lack of infrastructure and service
- Poorly diversified economy
- Low income, higher poverty, social exclusion risk
- Farmland abandonment
- Lack of education facilities
- High number of early school leavers
- Digital gap



- Diversity
- Contribute against change
- Ensure balanced distribution
- Valued quality of life
- Cultural heritage
- Benefits after COVID-19:
 - Teleworking
 - Valuing green areas

Juan & McEldowney, 2021, p. 2



 Food and environment resources climate

territorial

1.4. Development of rural areas

Life cycle theory is universal; it refers to the cyclical process and laws in nature and human society in which entities undergo birth, development, maturity, and decline, including cities and villages as human settlements. **Rural evolution is a complex non-linear process that includes positive forces and negative degradation, and not all villages experience a complete life cycle.** Policy intervention and

life cycle. Policy intervention and residents' subjective will also affect the rural development process. Rural areas have always been spaces of change, shaped by the comprehensive action of factors, such as population flows, economic levels, policies, and geographic conditions (Yajing, Jianhua, Qiaobing, Xuesong, & Miaomiao, 2022).

A large quantity of IRRL (Idle rural residential land) has a negative impact on social and economic development, quality of life and the ecological environment in rural areas. It can result in the waste of rural land and a reduction in the utilization efficiency and economic benefits of land, and it can further hinder the progress of the rural social economy. Meanwhile, areas of IRRL can become distribution centers of waste and garbage, which worsens the appearance of villages and the aesthetic of the rural landscape (Zhou, et al., 2021).



Schematic diagram of the life cycle evolution of human settlement. (a) represents the complete life cycle curve, and (b) and (c) represent the life cycle trajectory under different policy regulation situations (Yajing, Jianhua, Qiaobing, Xuesong, & Miaomiao, 2022, p. 2).

Polluted idle land also produces substantial environmental pressure and worsens the living environment. In addition, the idleness of rural residential land (RRL) in traditional villages with long histories may cause damage to historical sites, architectural art, and cultural landscapes and damage the historical and cultural. In turn, these adverse impacts further aggravate the continuous decline and even extinction of rural villages (Zhou, et al., 2021).

Any place and object in a process have their timeline. That also relates to any scale settlements. There is always some starting point, some development and some high points. But how high can you go? Where is the limit and capacity? Development is influenced by different local and global factors so there always is need for a strategy, goals, backup plans, compromises, but what is the most important part. if the place wants to continue to exist – to be flexible and transform according to the needs and trends. If nothing will happen, then there will be a decline of development, but with transformations and activity the level of development can rise or at least stay in certain range not to go into decline phase.



01 ()2 03 04 05 06 07

TRENDS IN SETTLEMENTS



70,000 Built area 60,000 Population size (number of inhabitants) (*) Small city 0 50,000 of land uses (40,000 Tree canopy cover 8 30, Dercent cover Open non-paved area 20,000 Town 0,000 70 20 60 10 30 40 50 Village Small city Town Area of population center (km²)

Population size and land uses in villages, towns, and small cities (RTT, 2019, p. 11).

2.1. Defining settlement types

After summarizing different research papers (RTT, 2019), (Hudson), (Sharp, 2019) a conclusion was made that there are no official or specific classifications of settlement types. Their characteristics differ in every continent, country and region because of history, geography and lifestyle. Sweden, Switzerland, Belgium, Portugal, and Amazonas commonly consider a community of 10,000 to be a small city, whereas in China a small city may reach 100,000 to 500,000 inhabitants (RTT, 2019, p. 12).

Through the analyses for this thesis European settlements were more overviewed, although in every country there are different systems in settlement types and how to define them. As there can be big cities, cities, small cities, towns, townships, small towns, villages, hamlets and even smaller units. But what is common for all of the settlements – they are all population centres or communities. **Population centre is more a spatial definition, but community relates more to the social interactions and connections** (RTT, 2019, p. 10).

But what is known for sure – nearly half the world's population lives in rural or remote settlements. Everyone depend on these settlements as they are the sources for food, materials, freshwater, air quality, flood control, biodiversity and recreational opportunities (RTT, 2019, p. 4).

These are some of the definitions that were found about "village" to show how different they can be:

- Village a group of houses and other buildings that is smaller than a town, usually in the countryside. (Cambridge Dictionary, n.d.)
- A village is a compact grouping of anywhere between 100-1500 people (Sharp, 2019).
- A village is a group of households with a public building(s) and about 200 to 2,000 residents, and well separated from town or city (RTT, 2019, p. 4).
- Villages, as smaller population centers with at least one common building and usually a common green, are often simply described as linear or enclosed/compact/ squared. Villages are generally too small to sustain a factory (RTT, 2019, p. 29).

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2.2. Factors and their influence on development

In any situation there are some factors that we can or cannot affect ourselves. Looking at development of settlements we can see 3 big factors that create a big influence on either the place is growing, staying the same level or declining.

Economic and political changes overall in the world are unlikely to be foreseen before coming true. For these changes there always should be some backup plan, some priorities and savings, because we cannot predict when, how and for how long something would happen. Especially nowadays when everything is changing so fast and anything is possible. All these kinds of changes can influence settlements by having less budget, income, projects or stopping projects and development for some time.

Factors which are hard to affect or change

Factors which are easier to affect or change



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Factors that can be affected by activities, ideas and people are – if nothing is happening in the settlement or if educational places are closing. And they both

are related to each other, and they both are the biggest factors why settlements are declining slower or faster.

If nothing is happening, of course, then the residents also don't see anything to look forward and they lose the future view to the place, and they move away to another place with more opportunities and something happening around. This also leads to decreasing the community feeling which is very important especially in small settlements. If nothing is happening in a place an investor also doesn't see any reason to invest in such places with no future view or growth.

Nowadays we could say that education overall is mandatory and self-explanatory if people want to work anywhere or just live in any kind of social environment. If in the past church was the first thing to be built in a settlement and the main thing where people went and had the highest affect on things, nowadays schools are the new churches. In smaller settlements if people are moving away, children amount in schools are also decreasing and a lot of educational places already have been closing in the recent years in rural areas, especially in BSR and Baltic



states. So, if nothing happens, schools are closing, people move away and there are more and more abandoned buildings around, the settlement becomes more and more unattractive as for existing residents as for new people. That leads to total decline of the place.

Modern lifestyle needs more of functional factors to live in a settlement and cover their basic needs. A place where to live, to get food, to socialize and be connected to transport systems – are just basic necessities. Access to education, workplace, shops and services, health centre and some place to relax are basic needs for a settlement to work.

"School - the new church."

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2.3. Village types and characteristics

After analysing different type of settlements, their characteristics it was concluded that there is no classification of settlement types as there are too many factors that impact how they form. So, it can be said that **every settlement is unique and they cannot be compared so easily.**

Although through scientific papers (RTT, 2019, p. 29), (Sharp, 2019, p. 7), and regularities (Ministry of housing and local government, 1953, p. 4) it can be defined that there are mainly **2 spatial types of a village or a smaller settlement:**

- Roadside or linear type,
- Square or compact type.

From these two types there can be other subtypes transformed.

Looking from settlement characteristic side of view there are also not so specific requirements which would define if a place is some kind of settlement. Usually they are defined by the number of residents, rarely by settlement size (RTT, 2019, p. 31), (Sharp, 2019). The most common rural settlement that isn't a city is a village. These were that kind of settlements that were the most researched through the thesis.



On crossroads

22

2.4. Smart villages and their examples

2.5. Start-up villages

MENSION

CONCEPTUAL BUILDING BLOCKS



Startup Village conceptual building blocks (Goodwin-Hawkins, Guzzo, Merida Martin, & Sasso, 2023, p. 5)

Material and imagined coherence - which village is suitable for a startup village (Goodwin-Hawkins, Guzzo, Merida Martin, & Sasso, 2023, p. 15)

Ecosystems.

Smart Villages are communities in rural areas that use innovative solutions to improve their resilience, building on local strengths and opportunities. Smart Villages benefit from cooperation and alliances with other communities and actors in rural and urban areas. The initiation and the implementation of Smart Village strategies may build on existing initiatives and can be funded by a variety of public and private sources (European Comission, 2020, p. 6).

Smart village main elements (Komorowski & Stanny, 2020, p. 12)

In Europe the "Smart Rural 21" was a project that was collecting and helping different rural areas with their ideas. The project started in December 2019 and concluded in November 2022 (Smart Rural Areas, 2021). The overall aim

was to promote and inspire villages to develop and implement smart village approaches and strategies.

The most common challenges identified (E40 group, p. 10) in the selected villages (by more than four villages) relate to were[.]

- Depopulation, youth outmigration;
- Lack of services: facilities, transport. education, housing and health.

Similarly, selected villages also identified key assets in their smart village strategies:

- Attractiveness
- rich nature
- community,
- cultural heritage and tourism.

Smart villages rely on a participatory approach to develop and implement development strategies to improve their economic, social and environmental conditions, in particular by mobilising solutions offered by digital technologies (European Commission 2020)

The Startup Village - "A place (or a network of small places) that embraces innovation and ambitious entrepreneurship as a way to unlock development potential and support wellbeing in rural areas." (Goodwin-Hawkins.

A Start-up village concept is close to Smart village, but with some differences. Smart village is already heard definition, but a Start-up village is a very new term, but both concepts share the same goal: to promote rural well-being by transforming rural areas into attractive places to live and work and harnessing their development potential (Goodwin-Hawkins, Guzzo, Merida Martin, & Sasso, 2023, p. 5).

Smart village solution examples (Komorowski & Stanny, 2020, p. 11)

Smart initiatives Smart Smart community infrastructure Smart village Smart services Smart institutions

Smart Solution Group	Public Services:	Public Management:	Enterprise:
	power supply (e.g., RES)	e-administration	precision agriculture
	safety and security (e.g., visual monitoring)	waste management (e.g., container fill-level sensors)	online trade (e.g., in local products)
Areas of intervention	distance learning	town-and-country planning (e.g., digitisation)	rural tourism (based on smart solutions)
	transport (e.g., telebuses)	environmental monitoring (e.g., air quality sensors)	sharing (e.g., of specialist equipment)
	e-care		
	e-health		

Baseline requirements	Unsuitable examples
The village is physically recognisable as a scale for action. There is basic infrastructure (handware) such as internet access, some local services, and community meeting places. There are also local institutions (orgware), such as a local municipal council or community group.	Lacking or very low quality infrastructure and services. A tiny or dispersed settlement with only housing. No localised or locally engaged institutions. All material coherence provided by a neighbouring settlement.
The village has a 'sense of place' that old and new residents recognise and help develop '(software'). There are local events or groups that bring people together. There is interest in shared action to tackle local challenges.	 Residents primarily identify with a neighbouring settlement. Minimal collective engagement and lack of interest and weak institutional capacity. The local identity is not open to innovation and/or resists change.

Startup Village concept combines two dimensions (Goodwin-Hawkins, Guzzo, Merida Martin, & Sasso, 2023, p. 5) startups and villages. Both dimensions contain 5 blocks together: Innovation, Entrepreneurship, Rural space, Multiple scales, and between both dimensions –

Startup Village idea focuses on innovation and ambitious entrepreneurship to connect local businesses to extra-local production networks and tap into wider markets, resources and knowledge to enhance the competitive performance of rural areas.

Smart village examples in **Baltic states**

Looking into practical examples of smart villages The Smart Rural project (Smart Rural Areas, n.d.) by the European commission was found. Within this project already from the December of 2019 rural villages around Europe had the opportunity to get budget and help for their own specific smart village ideas.

8 examples from Latvia, Estonia, Sweden, Finland and Denmark were looked up closely. Each of them has been already realised and supports the specific solutions for the specific village to develop, work smarter and include the community in activities.

Green Railways Valmiera, Latvia (2017-2019)

This solution is about how a former railway infrastructure was transformed to create a network of hiking and southern Estonia.

This project initiates to adapt and reuse existing routes, but for different purpose and to make it public. All the ground of the trails had to be cleaned, some bridges, railings, rest benches and even pedestrian and bicycle meters, which count the number of railway visitors, had to be installed as well as rout markings, maps for all the paths (Smart Rural Areas. 2022).

Community Coding Programme and Smartphone App Alsunga, Latvia (2020-2021)

Through this smart project local community members had the opportunity to learn programming cycling trails in the north of Latvia and in and coding for themselves and use the knowledge to create things for the community. It resulted in a community smartphone app made by the local people for sales of local small food and handcrafts.

> Alsunga is a village of around 600 inhabitants and it is very rich with its' old cultural traditions – called suiti. After COVID-19 they had a big decrease of tourists and visitors so they needed some new ways of attracting people and one of the ideas was to create a useful mobile application. A local Software IT specialist conducted programming lessons on site and in distance (Smart Rural Areas, 2022).

> > ALSUNGA

B Data and State

UITU KULTÜRTELPA

Suitu kultürtelpa app (Municipality of Alsunga,

Farmers Market and eShop Southern Estonia, Estonia (2010 -)

This smart village project introduces an online shop for farmers. It started with farmers in the South of Estonia, but strengthening and developing the idea, it has already been implemented in whole Estonia.

The idea is to create an easier approach to people for local producers for whom big shopping mall large requirements, prices etc. are a big challenge and even impossible to satisfy. Small farmers could sell their products only in local fairs. After a financing model participating businesses were identified, farmers markets were opened in the biggest cities as well as an eshop were founded (Smart Rural Areas, 2022).

TALUTURG

Taluturg shops, products and map of local farmers (Taluturg

Tulundusühistu 2024. n.d.)

Remote Workspaces Network Võru, Valga, Põlva County, Estonia (2020 -)

In the process of this project remote working field is supported in three counties of Southern Estonia. So public and private distance-working facilities were provided for rent.

A common online platform was founded where people can search for a facility and can rent in their interested area. Every facility provides all needed basic things as high-speed internet access, desks, seats, meeting rooms, printing services, good comfort and possibility for a kitchen. The main target group is workers that want to work remotely and want a change in their daily routine and environment (Smart Rural Areas, n.d.).



Arenduskeskus, n.d.)





process (Alsunga viedais

ciems, n.d.)



Coworking space in rural

Upcycling Abandoned Houses Rautajärvi, Finland (2019 -)

This project in Finland shows a great example of how to use abandoned buildings in rural areas to upcycle them into new housing with the help of local materials and local people. The buyers of the new houses cover the construction costs.

This village on Southern of Finland has experienced a big decrease of residents, every year some of the daily functions are closing starting with the school, library, other services, health center, daycare although until 1960s it used to be the biggest village in the municipality.

Now many old farmhouses are vacant, the owners have built a new house next to it. The idea was to deconstruct the old houses and use the materials to build the new houses, reusing materials and avoiding new waste of construction. One by one at least 5 houses have been constructed by this project (Smart Rural Areas, 2022).

Living Heritage Sustainable Community Tärkkilä, Finland (2016 -)

More of an ownership changing process is involved in this project. Through the solution a permanent legal structure was created to take communal ownership of land to use it more for the community and the village itself.

Parallel to toe legal process the project also involves guidance and training for a sustainable community. With these actions long-term model of socially and environmentally sustainable living is secured - connecting rural land with people who are willing to live sustainable, but may not have money to invest in their own land.

This provides individual opportunities for people to pursue their personal lifestyle dreams, but will provide for ecological sound land management approaches in harmony with nature and biodiversity (Smart Rural Areas, n.d.)



A smaller scale project was created in Sweden - an installation that was fed by the local food and garden waste to generate biogas energy for cooking and heating. This kind of digester can be built and implemented in any rural community as it only needs a chamber that contains buy. a compressed air and pipes to place the waste. It has no moving parts and it is very unlikely to have technical problems.

With this small innovation biogas technology can be available to everyone, it keeps the community together for one goal and it can replace seasonal farm employment with opportunities for yearround production and employment. The only requirements - to identify local waste sources (households, farms, restaurants, and the local demand for heating, cooking and liquid fertilizer. The self-sufficient energy source and decrease of waste proportions was important for Suderbyn Ecovillage as it is located on Gotland island (Smart Rural Areas, 2022).



Micro-Biogas Digester Torup, Denmark (2021 -)

A technological innovation project in Torup was creating a smartphone application for villagers to find and share resources. The application provides to overlook the local resources and locals kills that anyone can book, rent, sell or

These services contain different fields, starting from physical tool bank where shared tools and equipment is stored. It can be combined with materials and furniture. For a physical resource bank some caretaker is needed to manage the tools and their conditions. But the app also includes mapping local skills for anyone to find a needed technician or craftsperson for their needs (Smart Rural Areas, 2022).

TAUENTER





Jocycled houses in Rautaiärvi (Rautai





21, 2021).



Sustainable Urban Design Lund Universit

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2.6. Rural settlement activation examples

10 different type of rural place activation processes around the Baltic states were summarized to show different ways of using rural

potentials and helping these places to develop as well as save historical heritage.

As seen from these examples some common factors can be defined which are needed for such process to start:

- Even a small group of active and determined people,
- Something historical in the place that can be raised and be interesting for visitors,
- · Something unique in form of function, visual affect, event that isn't available nearby,
- Events and activities in these places for the residents and visitors.

Mooste, Põlva Parish, Põlva County, Estonia

In the small village of ~448 residents (data form 2021) (Eesti statistika, n.d.) one of the things that keeps it alive is the 500-seat concert hall. It is built into the former barn. The village of the 16th century itself is known of its manor house and all the buildings built around it in the same architectural style that have been preserved in a very good condition. The village also has a n English-style park, a school, guest house, Center for Arts and Social Practice and a restorer's workshop (Põlvamaa portaal, n.d.).

The Folk house can accommodate from 80 to 600 people, including weddings and conferences. It is the largest concert hall in Southern Estonia (Mooste Mõis, n.d.).



Mõis, n.d.)

Suure-Jaani city, Põhja-Sakala rural municipality, Estonia

A rural city with ~1184 residents (Eesti statistika, n.d.) in the latest years has gone more popular because of the only water park in the region built there. The idea of a water park was by the desire to stop the depopulation in the small towns and town centers. The building was the key to improve public services and also add a new value of the place itself. The Suure-Jaani Health Center was built as a new building connecting the historical tower of a fire station (ETS NORD, n.d.).

But this small town is also known by a music festival that started in 1998. It is in the honor of the App dynasty that had a big influence on the town since the 19th century. The festival is for everyone, but still remains the focus on classical and Estonian music. Each year a new venue place has been added - cafes, fire tower, church, manor, hill and island. It is held each summer before the Midsummer Night (Suure-Jaani Muusikafestival, n.d.)





Švenčionėliai, Švenčionys district municipality, Lithuania

This small village became something else in 2017. 4 architecture friends decided to move to Švenčionėliai. Its building heritage and railway tracks impressed them to settle down and create a creative community "Miško uostos". Now this community has 50 members and their goal to create infrastructure for a comfortable and modern life in the village.

The community organizes cultural events, international art residency and engage with local youth. Since the community established in the village also an architecture studio, co-working space, a café, bistro, a photography studio, AirBnb apartments and Waldorf kindergarten were opened. Many spaces are located in the old industrial areas using the train station and former railway power plant (Lietuvos galia, n.d.).





Marcinkonys, Varėna district, Lithuania

In the Lithuanian village just by the border, an artist initiative was founded in 2017 by artist Laura Garbštienė - Verpėjos (The Spinners). It is a non profit organization and works with contemporary artists, curators, craftspeople to research and discuss rural traditional lifestyle and nature preservation. They create workshops, symposiums and exhibitions and one of the places is the train station of the village. Now this is the last stop of the train route and the exhibitions are open on Saturdays and Sundays.

20km from the village is the second place of the organization running a simple country house as a residency for artists. Laura has her sheeps there, so artists have the opportunity to herd them like in ancient times and work there with the natural materials. She says that artists and the local residents have to find small relationships and have to be very careful with the scale (Jačiauskas, 2022), (Verpėjos, n.d.).







In a small north coast village of Latvia a small café was made transforming a Soviet time fishing factory gate house. Exactly that kind of small-scale projects are needed in rural settlements. You don't always need a big palace, museum or high scraper to get attention of a place. These small projects are more for the residents, daily life, for those who has a home nearby. With this a meeting point was made in this small village.

The architecture office MADE preserved the silicate brick walls and openings, but added a timber cladding volume and openable shutters. Many elements that were found in the factory complex were reused too. And with its small scale and sustainability the small café "Pitraga pietura" has also been listed as 1 of 50 New European Bauhaus nominees for architectural award in category regaining a sense of belonging (MADE arhitekti, n.d.).









Aleknaičiai, Pakruojis District Municipality, Lithuania

In a village Aleknaičiai a Culture and Education Space – Akee – has been established. It is a community initiative that was built in 1911. and the space has given a second use This manor now has been restored in for the village's school building. The aim of all the activities here is to increase the accessibility of culture in the region, enrich the Lithuanian and international cultural discourse that is related to rural places. It is a place for researchers and artists to create sustainable projects while being sensitive to rural areas.

A residence has been opened for anyone This manor is so big that it has a interested although the spaces are still under renovation, and residents have access to different material and equipment. The residency allows freeof-charge stays if residents contribute to the local spaces (AKEE, n.d.).





Lūznava, Lūznavas pagasts, Rēzeknes novads, Latvia

In a village Lūznava stands a big, romanticized art-nouveau style manor

2015, has a status as a State protected cultural monument and is place for very different events and activities. As historical palaces, churches, manors, nowadays they can exist not only as a great heritage, but also a place for local and visitor attraction.

capacity to – guide excursions, provide residences, a chapel and a souvenir shop, to held concerts, events, exhibitions and workshops. It is a place for art and music, but most of all it is one of the cultural places for the Latgale region residents. visitors and heritage (Lūznavas muiža, n.d.).



A great project in Lithuania for several years, creating small projects in the smallest towns in Lithuania through summer holidays. The key was to encourage the local children and young people to participate in the workshops and building projects themselves so they many historical towns and villages have are also a part of the spaces that were made.

> Through the projects different small architectural objects were made after exploring the environment in each small town (up to 500 inhabitants). Since 2013 the project has provided different interventions in 50 towns. Each workshop lasted for 5 days with different activities every day parallel to the construction works. Every workshop consisted of volunteers from architecture, art, schools, youth organizations and other specialties (KAD, n.d.).







Valga, Valga County, Estonia

In the twin town of Valka/Valga that is on the border of Latvia and Estonia an international interdisciplinary residency has opened on Valga's side - VARES. The creative place is open for various fields and interests as well as the residents to meet and enjoy their ideas in different ways. It was established by the Estonian society for young architecture and the goal is to build the network to bring different disciplines together and to give an input to the quality of Estonian architecture, spatial culture and education.

The residency already has had some workshops and discussions, competitions and is a home for 40 different field artists that will create 17 in the garden. The menu contains of projects in 2024. There will be also a twoweek summer school and it is also part of the European Capital of Culture Tartu 2024 program (VARES Architecture Residency, n.d.).





Līgatne, Cēsis municipality, Latvia

In the historical center of a paper mill Līgatne lays a restaurant "Pavāru māja" or "The cooks' house". It is in a renovated building that was built in 1901 and was a maternity home. But what is more important - the owner is a chef that worked for a long time in the capital, but saw this building on sale, bought it and moved to live in his childhood city. The restaurant is special and very known not only by its Green Michelin star that was awarded in 2023, but mostly of their rural location and their slow food philosophy.

The restaurant uses seasonal products, they collaborate with local farmers and also grow the products themselves characteristics of Latvia where local products help to be unique and special. The garden of the restaurant is also a place to stop and learn about nature, see the herbs that will be soon used on the plates and for children to play before eating. Recycling organic waste and using as a new soil for the next vegetables is only logical for the restaurant (Pavaru maja, n.d.).





2.7. Village characteristics and basic needs

What is known for sure - any rural Nowadays churches in a settlement settlements including villages have these kinds of characteristics which distinguish them from urban settlements (Mare, traditions and lifestyle. 2007, lpp. 9-10), (Sharp, 2019), (Ministry of housing and local government, 1953, p. 2):

- Compact, small scale,
- Pretty simple, not complicated,
- Clear, direct and unelaborate,
- Well-defined centres.
- Boundaries are very well defined.
- Small for everyone to be recognized and easy to manage,
- Primarily а residential community,
- Use local materials.
- Green areas and especially trees are full grown as they have the space.

In the past the scale of villages was compared to hamlets to see the difference as a village was large enough to contain a church, but hamlets were too small (Mare, 2007, lpp. 7).

"It takes a village to raise a child."

aren't mandatory, more in religious regions where it is necessary for their

In the past there were different geographical factors where and how a settlement could

be created (Sharp, 2019, p. 6). At first safety and defence was the most important thing for a settlement as any water feature as a stream was a big factor to run a settlement. In the latest centuries settlements were made more nearby a road, crossroads, on small hills to keep up from floods as well as enemies. In the latest century new settlements depended on industrial zones, new factories. Nowadays they can be created almost anywhere, but the needs for daily life are different. In the future the daily needs will be more different, but we can only discuss about those.



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VILLAGE





Population



Location



Architecture



Close connection



2.8. Connecting villages and working together

The shrinkage of a town or village can lead to a disaster and fall. Planet has exceeded its ecological capacity or footprint and sustainable shrinking is only understandable nowadays (RTT, 2019, p. 128). People needs change, world changes, our daily life improves with different opportunities how to do things and technologies help with all of that.

It should be understandable that not everything has to be saved as well as not everything has to grow out their scale and become something bigger as

it is. But what can be done to sustain the current levels and settlements with smaller and bigger solutions? Provide the right incentives. Switch from consumption to maintenance. Build to last. Control shrinkage instead of it controlling us. Treasure a compact community, and conservation. Rediscover our social and cultural roots. Encourage population stability. Restore nature. Redefine a healthy economy. All of these involve trade- offs of costs and benefits, which are evaluated against a worsening ecological footprint. Put hope on a pedestal - a stable or shrinking economy can contain opportunities for entrepreneurs, and jobs for all kinds of people (RTT, 2019, p. 128).

Some places can work towards tourism and visitors, some can work with unique events that are seasonal (RTT, 2019, pp. 130-131), but the most important thing would be to work with the existing situation, residents and daily life.

The suggestion is to **help smaller** settlements to work together as not all of them can and need all the big functions, but they can create their own sufficient system in which they can be sustainable, known from afar, attractive to anyone and work in smart ways.





SITUATION IN BALTIC STATES



3.1. Situation in rural areas



Baltic Sea Region scale

All 3 Baltic countries have a similar historical timeline for all the factors and processes that have influenced migration and demography, but each of them also has a different type of polarization. These types formed in Baltic states during the Soviet times, creating monocentric system in Latvia, partly monocentric in Estonia and polycentric in Lithuania. And these city system types also can be related to how differently the depopulation is happening in each country. In Estonia and Lithuania the distribution of population is uneven resulting in smaller cities, towns and the rural areas losing residents especially fast. In Latvia the majority of residents of the whole country lives in the capital or in its suburbs in that way the rest of the country is sparsely populated (Pociūtė-Sereikienė, 2020, p. 5).

Baltic state scale

The biggest change in Baltic states was after the collapse of Soviet Union, when the economic system changed, land was privatized and a lot of people went job seeking to other countries being the main factor of such a big depopulation. This massive emigration also decreased the amount of the natural demographical development (Pociūtė-Sereikienė, 2020, p. 5). Nowadays all three countries face big difficulties to welcome their people back from foreign countries and to achieve a balance between different scale settlements.

Challenges in rural areas

- Rural school closing
- Post office closing
- Loneliness in senior group
- Abandoned buildings
- Lower quality features
- Less investment as bigger settlements

Human Development Report: Tallinn growing and becoming denser



edition of the Estoni Helen Sonväli-Sepning, editor-in-chief of the Human Development Report a essor of environmental management at Tallinn University said on ETV/s daily rs show "Aktuaalne kaamera" that the report covers a wide range of topics

ving in favor of a gradually growing Talling, the

(Kallaste, 2020)



(Henley, 2022)





(Janauskaitė, Tizenhauzienė, TV, & LRT.It, 2024)

Ministry starting talks to close dozens of Estonia's smaller high schools



scal governments regarding closing enrollment for the high school level – Li th through 12th grade – at schools with fewer than 100 students. First up on the ministry's agenda are high schools with overall enrollment of under 40

(Hindre, Rohemäe, & Lillemäe, 2024)

Estonia State continues to close rural schools, preliminary injunction revoked



in the fall of 2023 is therefore valid. The court reached the same co regarding the Virtsu school.

(Nael & Kersa, 2023)

Latvia's population continues to age



Latvia's median age increased by 1.8 years from 2013 to 2023 to reach 44 years. according to fresh data on popu Eurostat February 15. ure and ageing published b

Small entrepreneurs are discovering Lithuanian



(Ribačiauskienė, TV, & LRT.It, 2024)

Latvia

In Latvia even in the start of 20th century a big interest moving towards urban areas was seen as a lot of big factories opened in the cities (Skujenieks, 1922). That's when rural areas already started to shrink. In the country the most developed and populated area is the capital. Areas in the rural and especially nearer to border to Russia and Belarus have a big lack of development comparing to the other regions. But in the whole country rural schools are closing and the population is aging overall.

Lithuania

As the other Baltic states also Lithuania turned to a market-led economy after the Soviet times, but it had a rapid decline in the settlement system already before. The main reason is the increasing polarization of the country (Pociūtė-Sereikienė, 2020, p. 2). Country also deals with a big demographical decline as well. The shrinkage is due to emigration and suburbanization but low birth-rates and high emigration are the main reasons for rural shrinkage (Pociūtė-Sereikienė, 2020, p. 6). Since the 1990s, Lithuania lost almost one-guarter of its population, and some regions within the country lost more than 50% of their residents (Rūta & Maarten van, 2017).

(Eng.LSM.lv, 2024)

Reda Gilyté, Aina Nizgirdé, LRT TV, LRT.it



(Gilytė, Mizgirdė, TV, & LRT.lt, 2024)

V

The Minister

Jēkabpils gets creative to keep school open



February 12, 16:31 Education and Science

In the fight to preserve schools, lekabpils municipality has taken up new creative methods - changing the school's official address from the city to a rural area so it can continue to receive state funding with the same number of pupils, Latvian Radio reported on February 12.

(Eng.LSM.lv & Dēvica, 2024)

Lithuania's rural municipalities left without public transport amid stricter rules for carriers





1





NEWS ERR 29.06.2023.07.02









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Estonia has traditionally been a very rural country. This strong rural tradition was hit hard by independence. The State and collective farms have largely closed; and the whole farming industry has been affected by the loss of the large Soviet market, competition with EU producers, EU regulations, lack of capital and the land reform process. The Estonian markets in agricultural inputs and produce are becoming dominated by foreign companies. As a result, there has been a 75% reduction in agricultural jobs; very large areas of farm land are disused; and many farm units are now used at most for hobby farming (Halhead, 2005).



Baltic state scale - chosen

municipalities

Depopulation changes in LAU2 regions in 2000/1-2011 % (Pociūtė-Sereikienė, 2020, p. 4)





Latvia - Bauska municipality

• Sooru - 236 residents **2**Tsirguliina - 410 residents 3Laatre - 165 residents ●Lüllemäe - 205 residents ●Hargla - 178 residents



●Zālīte - 274 residents 2Rosme - 82 residents **3**Bērzi - 251 residents OUzvara - 903 residents Skaistkalne - 550 residents



Lithuania - Vilnius municipality

- - Sužionys 397 residents 2Lavoriškės - 522 residents 3 Rukainiai - 662 residents Medininkai - 413 residents Steturiasdešimt T. - 376 residents





3.2. Analyses about villages in 3 municipalities

To understand more of the current situation in small settlements as villages in Baltic states, **3 municipalities** were chosen in each country Each municipality has their own specific character, location, size, but they all are facing the shrinkage of the rural areas

After contacting specific municipalities and researching overall **5 villages in** each of the municipality were **chosen** to compare and see the common and different characteristics of rural villages in Baltic states.

These villages were chosen after the resident amount and after the fact that they all are decreasing in resident numbers. All villages have not more than 1000 residents.

As each country, region and municipality has their own traditions, history, location specifics, economical stage, these municipalities or the villages in them cannot be compared as similar in all ways and these differences were also seen after comparing them. To know a more detailed view on rural villages a longer and more complexed research would be needed.

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3.3. Similarities and differences between the villages

After comparing all the villages spatially and together with the surrounding where they are located **some similarities**, but also some specific characteristics were found that could describe the situation for each of the municipality.



Special characteristics

- main roads

- Mainly the center of the village is around a shop, school or cultural center (not so much around a church as in the past)
- Some industrial, agricultural and farming facilities in nearby areas
- Mainly houses have wooden heating

Common characteristics

- Some few main roads
- Low story buildings, mainly private houses
- Mainly wooden or brick buildings
- Historical houses and historical objects
- Almost any pavement for pedestrians, only on some
- The architecture isn't always similar in all village area, can see differences from the times when they were built, no overview of the look.
- Many empty buildings, usually bigger public buildings. • Every village has a bus stop
- A lot of green areas with or without trees
- Very few and small shops
- Almost any village has a pharmacy
























The official settlement unit division were also compared for each of the country. **Differences in the scale, name and hierarchy were found between the countries.** Conclusion was made that it is hard to choose and compare villages in such history and geography related countries as they all have their own specific settlement system.

Estonia

Settlement units are (The Law on the Administrative Division of the Estonian Territory, 2023):

Cities; Villages; Townships; Hamlets.

• A village - a sparsely populated settlement or, in general, a densely populated settlement with less than 300 permanent residents (Vabariigi Valitsus, 2023).

Latvia

Settlement units are (Saeima, 2020): Cities; Villages; Small villages; Homesteads.

• A village – any settlement that is bigger than small villages, but don't exceed 5000 permanent residents (Saeima, 2020).

Lithuania

Settlement units are (Lietuvos Respublikos Seimas, 1994): Cities; Towns; Villages.

 A village – a residential area that don't exceed 500 residents Lithuania (Lietuvos Respublikos Seimas, 1994).

03

Estonia - Valga municipality











Latvia - Bauska municipality











Lithuania - Vilnius municipality













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Estonia - Valga municipality





Latvia - Bauska municipality



Jalīte







Lithuania - Vilnius municipality











03

3.4. Comparison of spatial and functional qualities

All 15 villages were compared by spatial and functional gualities listed in the table to the right. Qualities were defined in 5 groups - form of the village, centre of the village, functions, outdoor equipment and places and infrastructure elements.

The qualities in these groups were chosen after all the research - which spatial un functional qualities define a settlement and what are the basic needs for a daily life in a settlement.

Estonia

- The most qualities a library, a bus stop and a bus stop cover.
- Lack of qualities some element in the centre, administration.

Latvia

- The most qualities compact form, a shop, streetlights and a bus stop.
- Lack of qualities a café or restaurant, swimming places, benches, accessibility to railway.

Lithuania

- The most qualities a shop, cemeteries, streetlights, a bus stop and a bus stop cover.
- Lack of qualities benches and accessibility to railway.

Estonia - Valga municipality





	F	orm	we	ll defir center	ned r				S	ociofu	nctior	าร						0	utdoo	rs				II	nfrast	ructur	re	
Sooru Tsirguliina Laatre Lüllemäe Hargla 15	0	0 defined boundaries	1 0 0 0 green area	L O O - square	○ ○ ○ ○ fountain/sculpture/statue	1 1 0 0 church	L O O L kindergarten	0 2chool 1 1	to 0 0 0 1 1	doys 0 0 1 1	o – o o cafe/restaurant	L L Library	o o o administration	o - o culture house	0 0 0 pharmacy/medical center	- 0 0 - 0 playground	sports field	o → → o → park/recreational area	0 0 1 0 1 Swimming place	o o − −	L L O O Historical place	L L O O cemetery	0 - 0 sidewalks	0 streetlights	0 0 0 0	pus stop	bus stop cover	O O O L O railway stop
Estonian villages 73	3	4	2	2	0	3	2	3	2	3	1	5	0	3	2	2	4	3	2	3	2	3	3	4	1	5	5	
Zālīte 8 Rosme 5 Bērzi 13 Uzvara 17 Skaistkalne 20	1 1 1 1	1 0 1 1 1	0 0 1 1	0 0 0 1	0 0 1 0 0	0 0 0 1	0 0 0 1 0	1 0 1 1	0 0 0 1	1 1 1 1	0 0 0 0	0 1 1 1 1	0 0 1 1 0	0 0 0 1 1	0 0 0 1	0 0 1 1 0	1 0 1 1	0 0 1 1 1	0 0 0 0	0 0 1 1	0 0 0 1	0 0 0 1	0 0 0 1	1 1 1 1	0 0 0 0	1 1 1 1	1 0 0 1	0 0 0 0
Latvian villages 63	5	4	3	1	1	1	1	4	2	5	0	4	2	2	2	2	4	3	0	2	1	1	1	5	0	5	2	0
Medininkai 17 Keturiasdešimt Totorių 8 Lavoriškės 19 Rukainiai 15 Sužionys 18	0 1 1 0 1	1 1 0 0 1	1 0 0 0	0 0 1 0	0 0 0 0	1 0 1 1	1 0 1 1 0	1 0 1 1	0 0 1 1 0	1 1 1 1	0 0 1 0 0	1 0 1 1 1	1 0 1 1 0	1 1 0 0	1 0 0 1	1 0 1 0	1 0 1 1	0 0 0 1	0 0 0 1	0 0 1 1 1	1 0 1 0	1 1 1 1	0 0 1 1 1	1 1 1 1 1 1	0 0 0 0	1 1 1 1	1 1 1 1	0 0 0 0
Lithuanian villages 77	3	3	1	1	1	4	3	4	2	5	1	4	3	2	2	3	4	1	1	3	3	5	3	5	0	5	5	0
Together by function	11	11	6	4	2	8	6	11	6	13	2	13	5	7	6	7	12	7	3	8	6	9	7	14	1	15	12	1

Lithuania - Vilnius municipality



Lithuanian villages	77	3	3	1	1	1	4	3	4	2	5	1	4	3	2	2	3
Sužionys	18	1	1	0	0	1	1	0	1	0	1	0	1	0	0	0	1
Rukainiai	15	0	0	0	0	0	1	1	1	1	1	0	1	1	0	1	(
Lavoriškės	19	1	0	0	1	0	1	1	1	1	1	1	1	1	0	0	1
Keturiasdešimt Totorių	8	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	(
Medininkai	17	0	1	1	0	0	1	1	1	0	1	0	1	1	1	1	

		Fo	rm	wel c	l defin xenter	ned				So	ociofu	nctior	าร						0	utdoo	rs				Ir	nfrast	ructur	e	
Sooru	points	- compact	- defined boundaries	o green area	- square	o fountain/sculpture/statue	o church	→ kindergarten	o school	o post	o shop	o cafe/restaurant	Library	o administration	 culture house 	o pharmacy/medical center	o playground	→ sports field	→ park/recreational area	→ swimming place	→ water feature	o d Historical place	o cemetery	sidewalks	- streetlights	→ benches	bus stop	→ bus stop cover	 railway stop
aatre	14	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	1	0	1	0	1	0	1	1	0
üllemäe	18	1	1	1	0	0	1	0	1	1	1	1	1	0	1	0	0	1	1	0	0	1	1	1	1	0	1	1	0
largla	15	0	0	1	1	0	1	1	1	1	1	0	1	0	1	0	1	1	0	0	0	1	1	0	0	0	1	1	0
stonian villages	73	3	4	2	2	0	3	2	3	2	3	1	5	0	3	2	2	4	3	2	3	2	3	3	4	1	5	5	1
fälite	8 5 13 17 20	1 1 1 1	1 0 1 1 1	0 0 1 1 1	0 0 0 1	0 0 1 0 0	0 0 0 1	0 0 0 1 0	1 0 1 1 1	0 0 1 1	1 1 1 1	0 0 0 0	0 1 1 1 1	0 0 1 1 0	0 0 1 1	0 0 1 1	0 0 1 1 0	1 0 1 1 1	0 0 1 1 1	0 0 0 0	0 0 1 1	0 0 0 1	0 0 0 0	0 0 0 1	1 1 1 1	0 0 0 0	1 1 1 1	1 0 0 1	0 0 0 0
atvian villages	63	5	4	3	1	1	1	1	4	2	5	0	4	2	2	2	2	4	3	0	2	1	1	1	5	0	5	2	0
/ledininkai	17	0	1	1	0	0	1	1	1	0	1	0	1	1	1	1	1	1	0	0	0	1	1	0	1	0	1	1	0
Keturiasdešimt Totorių	8	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	1	1	0
avoriškės	19	1	0	0	1	0	1	1	1	1	1	1	1	1	0	0	1	1	0	0	1	1	1	1	1	0	1	1	0
Rukainiai	15	0	0	0	0	0	1	1	1	1	1	0	1	1	0	1	0	1	0	0	1	0	1	1	1	0	1	1	0
SUZIONYS	18			0	0	I		0		0		0		0	0	0					I				I	0			0
ithuanian villages	77	3	3	1	1	1	4	3	4	2	5	1	4	3	2	2	3	4	1	1	3	3	5	3	5	0	5	5	0
ogether by function		11	11	6	4	2	8	6	11	6	13	2	13	5	7	6	7	12	7	3	8	6	9	7	14	1	15	12	1

Village qualities



Baltic states

■Estonian villages ■Latvian villages ■Lithuanian villages

3.5. Qualities and needs of rural villages

There are some similarities, but also differences between the municipalities. Some common qualities that exist or a lack of some qualities are seen when comparing all municipalities together in a scale of the Baltic states.

- The most existing qualities were – a shop, a library, a sports field, streetlights, a bus stop and a bus stop cover.
- The least existing qualities were

 elements in the centre, a café or restaurant, swimming places, benches and accessibility to railway.





COMPARISON OF 3 VILLAGES IN BALTIC STATES



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		Fo	rm	we	II defir cente	ned r				So	ociofu	Inctio	าร						0	utdoc	Irs				II	nfrasti	ructu	re	
	points	compact	defined boundaries	green area	square	fountain/sculpture/statue	church	kindergarten	school	post	shop	cafe/restaurant	Library	administration	culture house	pharmacy/medical center	playground	sports field	park/recreational area	swimming place	water feature	Historical place	cemetery	sidewalks	streetlights	benches	bus stop	bus stop cover	railway stop
Tsirguliina	14	1	1	0	0	0	0	0	1	0	0	0	1	0	1	1	1	1	0	0	1	0	0	1	1	0	1	1	1
Zālīte	8	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	1	0
Rukainiai	15	0	0	0	0	0	1	1	1	1	1	0	1	1	0	1	0	1	0	0	1	0	1	1	1	0	1	1	0

Village qualities











4.1. Method of choosing between villages

After comparing all the spatial and functional qualities of all the 15 villages **1 village form each municipality** was chosen to look into it in more details.

They were chosen after the comparison table having the middle amount of the qualities of each municipality and these had existing schools on site. As the schools in rural areas are closing it is necessary to work and strengthen the existing ones as a priority. After that would come all the settlements were new schools would be needed as it would take much more money to build a new school and overall strategy for the place to keep and welcome new people.

From Valga municipality in Estonia – Tsirguliina village was chosen.

From Bauska municipality in Latvia – Bērzi village was chosen.

From Vilnius municipality in Lithuania – Rukainia village was chosen.

4.2. Visual look and built up type

Each of the village has a unique spatial form, existing functions and history, but they all also have many common characteristics – **low height buildings, 1-2 main roads, a lot** of green and empty areas, mainly private houses with pitched roofs and some block or brick apartment buildings, abandoned buildings, no common design in the architecture.



Tsirguliina

Bērzi

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2 Lavoriškės

8 Rukainiai

4 Medininkai

Keturiasdešimt Totorių



Rukainiai

Estonia - Valga municipality Tsirguliina





Latvia - Bauska municipality Bērzi





Lithuania - Vilnius municipality Rukainiai









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4.3. Location, borders and connections

Each of the village was analysed through the location in different scales - where it is situated in the country scale, in the specific municipality scale, how big is the whole village border and how big is the actual built up area within the borders.

Although it wasn't an intention, but in the end all of the chosen municipalities and also the 3 villages in each of them are really close to the country **boundary**. This factor opens an opportunity to also compare how villages work and connect between other villages and maybe villages in the other country in each situation. How and if the villages are connecting to the other country depends a lot on what kind of country is it especially nowadays with so many political, military and economical changing factors around. If in Tsirguliina and Bērzi village case the closest border country is another Baltic state, realistic connections can be seen now and also in the future. But in Rukainiai case the closest border country is Russia, which nowadays maybe would be the most unattractive place to live nearby.

Estonia - Valga municipality - Tsirguliina



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Through the research about connections between places, a "Central place theory" (King, 1985) was found and used as a base idea to try to show connections between different settlements in each case. The connections were drawn mainly if there were some direct roads leading to the other village, including the biggest city, town and the same size villages as the case village around.

With this method realistic connections can be seen to understand which of the settlements in the same size are or could work together and strengthen their surroundings. Each of the cases are pretty different in the way how good they are connected to bigger cities, if they are connected to settlements in the other border country, if the connections between the same size settlements are long or short, if there are even any connections and if they are parallel or in different directions.

Each case also differs with their functions in the specific village and around it as well as the land division sizes and forms.

Estonia - Valga municipality - Tsirguliina



Lithuania - Vilnius municipality - Rukainiai

Accompanie

Municipality scale

Settlement border scale



Built-up area scale



Built-up area scale



Built-up area scale

4.4. Existing functions, challenges and opportunities

Existing functions in each village and around them were mapped. It can be seen how in each case the functions are scattered by other settlements or by being next to a bigger road. Almost each of the village has the biggest amount and diverse of functions in the surroundings, but they still lack a lot of daily functions.



		STENGTHS	WEAKNESSES	STENGTHS	WEAKNESSES	STENGT
Library	DentistSports field	 A big school and a sports field Grid road system, makes it 	 On one side only private houses, on other – some apartment buildings 	 A big historical school with addition and a sports hall A big bus stop place 	 No forest or green recreation area around Private bouses a few 	A churchA school
Kindergarten	Administration	feel compact		A big bus stop place	apartment buildings	
Civic center	Nursing home	OPPORTUNITIES	THREATS	OPPORTUNITIES	THREATS	OPPORT
Church	Gym	 A railway stop and bus stops 	 The railway is dividing both sides of the village. Low 	• Existing green area in the middle of the village	 Only two shop far away from residents and a 	• Many burroad
🛱 Shop	Accommodation	• A green area next to the village and lakes	accessibility.No public functions, even	 Old playground area A par feeling Circular road system 	school • Abandoned public placeS	
Post	Museum		no shop.	Circular Toad System		
Restaurant	Film archive					

Rural Settlements: enriching villages through the network of shared qualities The case of Tsirguliina village in Estonia

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THS	WEAKNESSES
h J	 Just 2 shops Mainly private houses, few apartment buildings Hard to understand the center of the village and the boundary
TUNITIES	THREATS
us stops by the	 Very scattered village Very scattered public functions

Latvia - Bauska municipality Lithuania - Vilnius municipality Estonia - Valga municipality

Tsirguliina

Bērzi

Bērzi

with

the

number of

they are too small.

Rukainiai

Estonia - Valga municipality

Valga maakonna ruumimudel piirkondlik kesku kohalik keskus Išhikeskus
 Valga maakonna pi ---- omavalitsuse plin raudtee roheline võrgusti ↓ lennuväli Mulgi Elamus

Spatial model of valga county (Valga county, 2019, p. 17)

Tsirguliina

In this case a good opportunity for at least 3 the same scale villages to work efficiently together can be seen. The distance between them, the diversity in functions in each of them and the size helps to connect them in a different scale connection.

Latvia - Bauska municipality



Apdzīvojuma struktūra (SIA Baltkonsults, SIA JB Consulting, SIA Preime)

Lithuania - Vilnius municipality



Rukainiai

the village itself too.

General plan of the territory of Vilnius municipality (ŠIMKŪNIENĖ, 2008)



4.5. Municipality vision and realistic ways how to develop each case

Looking from the municipality point of view each village has a certain place in the settlement hierarchy. Although in the vision and spatial maps each village is shown with a big importance and with a big meaning in the municipality, **the** scale of the importance isn't regarding the existing value and situation. They all are drawn as a local centre, but without the main functions that they all lack, it cannot work as an efficient centre for the surroundings.

In this case the village is also the only one in that size comparing to the surroundings. It is drawn as local centre although is really scattered as a road type village. The suggestion in this case would be to strengthen





PROJECT - ANALYSES









5.1. Project place

Tsirguliina village was chosen as the design part village as it has the features need to try to create a sustainable network with other similar scale villages in near area.

Tsirguliina village has a school, but through time it has been decreasing in students and in the last years even combined with a kindergarten to use municipality building more effective. The resident number in all these villages is decreasing together with provided services. These three villages - Sooru, Tsirguliina and Laatre have already some common historical events, but also each of them has a different story and character.



Estonia - Valga municipality





As concluded before - each of a settlement is unique. That is also seen with these even so closely located villages - each of them has a different form, length, character, history, building typology and geographical features.

But what is in common with all of them - residents are leaving, daily needed services are closing, more abandoned buildings are left. All of them are closely related to agricultural and cultivation. They all are really green, have some water feature near to it. **They all have been a bigger villages in the past because of a big manor or factory, but nowadays they are shrinking and must be recreated to be more compact and relate to the existing scale.**



Sooru

Tsirguliina

56

05

020
 Sooru
Tsirguliina
3 Laatre
4 Lüllemäe
Hargla

Laatre

Estonia - Valga municipality Sooru





SOORU PAISJÄRVE TERVISERAJAD

Estonia - Valga municipality Tsirguliina





Estonia - Valga municipality Laatre



































Sooru



1894-1922

1963-1989

1994-2020



2024 - Laatre general plan

Through times all three villages have been developing at the same time, but each in their own way and scale. In the past, if a village didn't have a church or a manor, probably it wasn't on the map as it can be seen in the oldest map from the mid-19th century - Tsirguliina village wasn't even on the map, only Sooru with its manor and Laatre with its church can be spotted.

Around the start of 20th century the railway route Valga - Tartu was built and Tsirguliina village was pointed out on the map. All three villages were connected by a road from the very start and around the end of 20th century some shortcut roads were made to straighten the main roads out and create them probably also wider as car industry was developing more and more.

Nowadays each of the village has their own village land and boundary and a lot of forest and agricultural lands around and between them.

References of the maps: in the bibliography

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5.3. Place in a municipality scale

Project place is in the Valga County that is divided in 3 municipalities (Valga county, 2019). Valga municipality is the one where all three villages are situated. As each county also each municipality has their own strategies and plans for the future. County's plans are in a wider context, but municipality's plans are more scaled down and specific for certain places.

The total area of the county is 1919 km², the average population density in the county is 15 people per square kilometre (Valga county, 2019). Valga municipality's area is 750 km², the population is concentrated in Valga city and Tsirguliina region, the rest is sparsely populated (Geomedia OÜ, 2020, p. 4). Valga municipality is a tourist destination of South Estonia with its combination of the closeness to nature, smart Estonian-Latvian border cooperation and diverse cultures of coherence (Valga county, 2019, p. 18).







A network of Valga centres (OÜ Hendrikson & Ko, 2013-2017, p. 18)







← Share of immigration from outside Estonia



base scenario (year 2018 = 100%) (Geomedia OÜ, 2020, p. 12)

Nowadays all Valga County is facing population decline and no big development pressure is felt. In the county scale it is believed that focusing on the existing centres and strengthening them can guarantee good quality of life in a picturesque area (Geomedia OÜ, 2020, p. 5).

According to the population register, a total of 15 459 people lived in Valga municipality in 01.01.2020 as of 12,040 of them (77.8%) in the city of Valga. Population has been steadily declining over the past 10 years (Geomedia OÜ, 2020, p. 5).

According to the base scenario, the population of Valga municipality continues to decrease by 0.608% per year, and by 2040 the municipality's population will decrease compared to OÜ, 2020, p. 12).

- county, 2019, p. 7) that can be addressed to the Valga municipality as to the Valga county overall:
- Ruralisation, population decline (in some places population loss) and young people emigration.
- · Low added value of jobs, loss of jobs and low entrepreneurship and employment, low salary.

Infrastructure with uneven quality

2018 2020 2022 2024 2026 2028 2030 2032 2034 2036 2038 2040

Population forecast in Valga municipality until 2040 by age group,

- ← Total number of residents
- → Age 0-14
- ← Aae 16-64
- ← Age 65+

2018. almost 14% in a year (Geomedia

There are some key issues (Valga

and availability (road network, internet connection, transport).

- The quality and availability of public services varies from place to place.
- Valga county does not have a uniform positive image.

In the national plan ESTI 2010 (Valga Maavalitsus, 2007, p. 3) an idea to develop a Valga-Tartu-Narva route "Via Hanseatica" was proposed that could also connect with The King's route, but as all the economic

and political situation in the world is changing, maybe the idea to create this kind of route would stay, but excluding the connection to Russia.

In the nationwide plan "Estonia 2030+" (OÜ Hendrikson & Ko, 2013-2017, p. 16) goals for high-quality and diverse living environment have been set for everywhere in Estonia and they include 2 main principles:

- 1. preservation of the existing scattered settlement structure
- 2. increasing the compactness of urban space.



The development concept of the Via Hanseatica (Valga Maavalitsus, 2007)



An overview diagram of the settlement structure: centres in the area of operation and in the support area and the character of the settlement (OÜ Hendrikson & Ko, 2013-2017, p. 17) Definitions (OÜ Hendrikson & Ko, 2013-2017, pp. 72-73):

- Linnalise asustuse ala Urban settlement area
- Linnalähivöönd Suburban zone
- Siirdevöönd Transition zone
- Tugitoimepiirkond Support area
- Ääreala Peripheral area

	Local centre	Central city	Neighborhood centre	Local centre	Regional centre	Count
•Services are based on private and			Private community			
community initiative – shops,	Ŧ	Ŧ	 Services based on 	Ť	Ŧ	•
community centres, village			initiative			
squares	 Local government service centre 	Pharmacy	 Grocery store, 	 Kindergarten 	•Gymnasium	 State high :
Public transport stops	•Kindergarten	•Car fuel point of sale	community centre etc.	 Elementary school 	Cultural centre	 Vocational
	Youth Centre	•Car repair		Youth centre	 Swimming pool 	 Library
	 Reception by a police officer 	 Building material store 		People's House	 Nursing home for the 	 Competitio
	 Post office or post machine 	•Gymnasium		•Library	elderly	•Health spo
	Elementary school	 Hospital and primary care 		•Outdoor sports field	Primary health care centre	•Regional ho
	Day centre	Health care centre		•Gym	(family doctor)	•Departmen
	• Library	Dental care		Health lane	Dental office	unemployn
	•People's House	Nursing home for the elderly		Day centre	Pharmacy	•Health Insu
	 Social Worker reception 	 Ambulance station 		 Social worker 	 Ambulance Station 	customer s
	•Gym	Cultural centre		 A police officer 	National Rescue	•Other regio
	Health lane	 Vocational school 		 Volunteer rescue 	Command	offices
	 Food and convenience store 	Bank office		command	District police workplace	 Bank office
	Volunteer Rescue Command	Police station		 Municipal government 	•Office of the	
	Outdoor sports field	Post office		 Post office or machine 	unemployment insurance	
		 Regional of state institutions 		Cash machine	fund	
		Service offices		 Car fuel point of sale 	 Building material store 	
		National Rescue Command		 Food and basic necessities 		
		•Cash machines		•Goods store		
		Health sports centre				
		 Catering establishments 				
		•Swimming pool				
		Veterinary point				

Competition stadium

y centre

- school school
- n stadium
- rts centre
- ospital
- nt of the
- nent fund
- rance Fund
- service office
- nal service

The possible expansion of compact settlement is seen only for larger cities and the surroundings (OÜ Hendrikson & Ko, 2013-2017, p. 16). Although it is based on the usual situation as people commute from rural areas to urban ones and that also goes hand in a hand with the people amount and services.

It is an urban development kind of view thaw works only in one way. It should be seen more like a system between places in different connections not only from the smallest settlement to the largest. With time there also have been a change of lifestyle, mindset, prices and opportunities. Now there are more people that can work in a distance. from anywhere they want, people value the quality of nature more and more and they care about the place where they are spending their daily hours.

The general principles of spatial development of Valga municipality (Valga Vallavalitsus):

- Qualitative living environment;
- Sustainable built environment;
- Valued cultural heritage;
- Natural environment preserved as diversity;
- Economy with low environmental impact.

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5.4. Distances between the villages

As this is a rural area, of course, the distances can be very short by car or bus, but they aren't walkable distances, because that has never been the intension. In the past people could walk many kilometres just to get to the school or a bar, but nowadays our lifestyle is much more into using time as useful as we can.

Besides the distances between the project villages, it is also important what are the closest destinations further in the surroundings. There are some closest villages that can be reached by car or public transport as Hummuli, Sangaste and Lüllemäe. But there are also connections to bigger cities as the main city in Valga County - Valga - that can be reached by car and bus, as well as by train in a short amount of time. As a railway route goes through Tsirguliina village, it is also a very good opportunity to use as it is possible to travel not only to Valga by train, but also to Tartu that is the second biggest city in Estonia.





As it is seen from the walkabillity and bikeability distances - it is sure that in rural areas it isn't needed to be walkable between settlements for daily needs. But it is clear that it can be and should be bikeable as it allows people to go from one village to another for different purposes daily and also just for leisure. It is an affordable, sustainable, reliable transport way for all ages. Children can go to school or sports practices by themselves and be safe, visitors can include the area into bike routes around South of Estonia, anyone who don't have and/or don't need a car living in rural area, can easily go wherever they want.

As South of Estonia as all three Baltic states have all 4 seasons every year, of course, it couldn't be trusted only on bike transport in different weather conditions. That's why **the existing public transport is really important and shouldn't be decreased.**

5.5. Summary of the past, nowadays and future vision situation of the villages

As each of the three villages are also different in their past, features and potentials, their key factors were summarized to have an overlook to each character. A future vision was made for each of the village after analysing all of their advantages and disadvantages.



Laatre state farm veterinarians Helve Saul

Laatre castle

A view of the large farm of Laatre state farm View of Laatre

- Past
- Agriculture
- Primary school
- Manor with a
- park by a river
- Scout camping

STENGTHS

- Compact village
- Big green areas arour
- Recreational area with swimming place An existing promenad
- highway bus stop till 1

OPPORTUNITIES

- Private houses mixed apartment buildings
- An empty and big bus in the middle of village

STENGTHS

 A big school and a spo Grid road system, mal compact

OPPORTUNITIES

 A railway stop and bus A green area next to t lakes

STENGTHS

- A nice park in the mide
- A lake with a swimmir • Mix of apartment and houses
- Really close to the high highway bus stops

OPPORTUNITIES

- A big, abandoned build be for shopping
- A bus stop by the par Connect the park till the creating a public zone

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Existing situation

MEAKNESSES • Some old buildings, needs refreshinga river and e from the he village THREATS • Very few public functionswith stop square VEAKNESSES • On one side only private houses, on other - some apartment buildingsbrts field kes it feel WEAKNESSES • On one side only private houses, on other - some apartment buildingss stops he village and THREATS • The railway is dividing both sides of the village. Low accessibility. • No public functions, even no shop.de of village pg spot private hway and WEAKNESSES • A small village, but a little too scattered of functions • Many car repair places • A nice church left out of the village • Many abandoned places		
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s stops he village and THREATS 	orts field kes it feel	WEAKNESSES • On one side only private houses, on other – some apartment buildings
WEAKNESSES 	s stops ne village and	 THREATS The railway is dividing both sides of the village. Low accessibility. No public functions, even no shop.
ding used to the church, the church, the church, the church of the c	dle of village ng spot private hway and	 WEAKNESSES A small village, but a little too scattered of functions Many car repair places A nice church left out of the village
	ding used to c ne church,	THREATS • Many abandoned places

Future

- Organic restaurant together with shop
- Hiking routes around the river
- Kindergarten with common green area with community house

- Accommodation place
- Youth centre
- Big sports area for all ages
- A shop with a cafe by the railway station
- Bike routes by the railway
- Landscaped park with canoe storage and picnic places
- Medical centre
- Kindergarten by the main road
- A shop with repair and exchange feature

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PROJECT - DESIGN

"Sharing is caring."

6.1. How design can get settlements together and communicate

As mentioned before - there are some factors that can be affected in a shorter or longer time, easier or it is really impossible to affect them. For daily quality of life and people satisfaction sometimes nothing too big is needed. Not always you need to spend a lot of money, build a lot and start from nothing.

In historical places it is easy to already have some character and features that can be strengthened and improved. That's also the case of smaller and bigger settlements in shrinking situations as new places shouldn't be made as there is no need for them at that time.

The focus must be on the basic needs, some special and unique features, but small details are usually the ones that are the most seen and valued. In rural areas simple elements and design can be implemented easily, using local materials, existing materials and structures. And to be sustainably working village in a shrinking situation, working together with other areas is important. A communication platform with the municipality, residents and activists are needed for specific projects as for daily needs.

06

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To create new connections, destinations, daily functions, but also features for visitors and unregular activities, **3 main** target groups were defined. They are prioritized in this order:

- 1. Existing residents as we need to focus on existing functions and needs the most and start from there.
- 2. Tourists as visitors are an opportunity to get some recognition and extra income, as well as activities in the area.
- 3. New residents to have a future perspective for a place a rebranding strategy is needed to recreate the picture of a place so that people would like to not only visit the area, but also to settle there.

1. Existing residents

- Cover daily functions
- Comfort daily lifestyle
- Create a future view

2. Tourists

- Point out sightseeing options
- Boost additional economy part
- Bring investors to the site

3. New residents

• Offer modern living in rural area Rebranding the site • Show everyone the potential of the places


6.3. Levels of being sustainable and working together

As in this project situation the ability to sustainably work together between settlements is important, a creation of a system between these settlements is one of main goals for the project besides creating a home feeling, attractive space for everyone and a future perspective so people don't want to leave these places for bigger cities.

To achieve these goals there can be different level solutions

including just exploring and learning from existing examples as well as participating in rural area related projects, using design solutions for places and specific elements, physically connecting and working together and rebranding the existing image of the villages.

Attract visitors and



6.4. Existing and introduced phyisical connections between villages

In the area around the three villages **the best existing connections are by car and public transport**. There are 3 bike routes that go around the South of Estonia or even is connected to Tallinn and other countries, they aren't provided by a separated bike line and they don't involve these villages, only Sooru village. Walkable routes that aren't in the settlements are really rare and fragmented.

Connections between existing routes and new routes are introduced through the project.

<image>

Pedestrian pavement routes



Pavement routes that can be used also for biking

Design proposal



Pedestrian walkway routes for daily and hiking purposes



Biking routes between settlements and cities

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Public transport routes and stops



Public transport new routes to connect parallel settlements



6.5. Strategy for each of the target groups



1. Existing residents - daily use

For this target group the main daily functions to have in a settlement were defined and pointed out

in each of the village if it is an existing function or it is needed there. These basic need functions are:

- A kindergarten;
- A shop;
- A centre;
- Accessibility to public transport.

Then in each of the village existing and new additional daily use functions were defined that are more unique and bigger as there isn't a need for those in each of the village, but they can work together to use them between themselves when wanted.

For connections daily transport options were chosen - railway, public transport, bicycle.



Program strategy

Tsirguliina





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Ö A

Ø

Laatre



Kindergarten - **new**

Shop - upgrated

Well defined centre - **new**

Transport - existing

Medical centre

Second hand/ exchange shop

Picnic place

Canoe renting and storage place







2. Tourists - visitor attractions and leisure time opportunities

For this target group **recognizable** interesting cultural and monuments and places were pointed out in each of the village and around them, creating hiking and biking trails with spots to see along them. As a stream is going along all of the villages that also has been pointed out in the general plan (X-GIS2. Maa-amet) as a potential stream for a canoe route, this kind of route was also created.

These and other culture heritage places in all of the Estonia can be find on a public website (X-GIS2. Maa-amet) that also includes information about the place, history and the condition of the place.

For connections leisure transport options were chosen - railway, hiking, bicycle, canoe.

Picture references: (Kõik õigused reserveeritud)



The main building of Hummul Manor

A well-preserved example of the Tudor style, a special variation of Neo-Gothic. Completed on the model of Sangaste Castle. The architecture of the building is influenced by the manor architecture of Northern Latvia, which is specific to the transitional area of Southern Estonia. In the 1930s, the manor housed a school.



Hummul manor park

An example of park architecture typical of the era and region in a manor complex. The park is large and covers an area of 10 hectares. A boulevard leads to the heart of the manor, which ends in a square surrounded by a ring road in front of the main building.



Sooru manor barn

exceptional architecture of a manor ensemble, which is modeled on peasant architecture. A medium-sized wooden building with hewn horizontal walls in the main part. Covered with a pitched roof. chipboard as a coating. End wall half-slices with brick-filled wafer walls. The surface of the bricks is plastered.

An economic building with the A unique classicist country church. The interior features a neo-rococo pulpit and an altar cabinet with the painting "Christ on the Cross".

Laatre Church





The main building of Sangaste Manor and park





Mainly in the 19th century. v. IV. formed the most representative historicist ensembles in Estonia. The design is based on Neo-Gothic style. There is plenty of high-quality carpentry and stucco work here, as well as tiled stoves, fireplaces, etc. also the rooms on the upper floor, the layout of which has been largely preserved.

Sooru manor park

A typical example of an old mixed-style manor park. The park (5.8ha) is divided into two parts, separated by streams. The main building was located on a high and narrow promontory, so no squares were formed around the building, only a narrower square with a front yard towards the economic buildings.



Laatre church garden

A typical, well-preserved and maintained church garden of the era. The church garden surrounds the churches built in 1831, which were erected in place of the wooden church that was previously located in the same place.

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The main building of Paju Manor

An example of a typical late classicist mansion of the area. In 1748, the Paju manor (Luhde Grosshof) was separated from the Luke (Lugož) manor in Latvia. Later there was a school in the manor. Since 1960, there has been a boarding house in the manor. Currently (2003) the manor houses the Paju Hooldekodu NGO.



The site of the Paju battle of the War of Independence

The location of an important battle in the War of Independence. The Battle of Paju was a battle between Estonian and Red Army units during the liberation of Valga during the Estonian War of Independence on January 31, 1919 under Paju manor.





• • • New bike routes

New kanoe routes



- . Warm Brethren Church of Prayer
- 2. Hummul manor fish farm
- 3. The main building of Hummul Manor and park
- 4. The ruling house of Hummul manor
- 5. Lüten farmstead
- 6. The spring of St. Hans
- 7. Tsooru town hall
- 8. Sooru manor barn-dryer
- 9. Sooru manor barn and park
- 10. Supa farmstead
- 11. The post road section around Tuulemäe
- 12. The knight's manor of Tõllistev
- 13. Pajusaare ranch manor
- 14. The site of the Paju battle of the War of Independence
- 15. The main building of Paju Manor
- 16. Sangaste railway station
- 17. Rampe manor building
- 18. Tsirgulina ash base
- 19. Rampe cattle manor
- 20. Laatre pig farm
- 21. Köstr's farmhouse
- 22. Laatre Church and churchyard
- 23. Ligaste village museum in the dairy house
- 24. Sangaste village school building
- 25. Sangaste village school
- 26. Sangaste Forest Park (Jänesepark)
- 27. Mustaches in the forest park
- 28. The main building of Sangaste Manor, ruling house, stable and stable shed, boundary wall, gardener's house, gardener's tool shed, barn, manor dairy
- 29. Sangaste manor rake 1
- 30. Booth ranger's place
- 31. Laatre airfield bomb depot
- 32. Þoru cross pine
- 33. Oruste Poorhouse, school building, Laatre town hall
- 34. Üru ranch manor



Cafes, restaurants

Nature & culture

Cooking together Artistic workshops Events in culture house Outside concerts Swimming place and recreation

Education & accommodation

Sports games Youth parties/inside concerts Markets Accommodation for visitors Exhibitions and installations by the school

Production & health

Picnics Exhibitions Repairing and fixing workshops Canoe renting and storage place Swimming place



6.6. Design between the villages

Design proposals were made not only for each of the village, but also for the connections between the villages and for the new connections. **No new car transport roads weren't made, only pedestrian and bicycle trails being very careful with the existing nature, greenery, land uses**, but creating them in places where they are really needed and could be functional and also enjoyable.



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Pedestrian path / Bicycle trail



D-D Hiking and bicycle trail by the highway



6.7. Concepts of the villages and ideas for sustainable changes

After analysing each village an overall concept was made based on their features and potential.

Sooru



- Restore existing but forgotten paths.
- Transform the centre of the village from a big bus stop to a shop with a meeting place.
- The shop can work as with a staff as without it using vending machines and exchange pantries for the residents.
- Use existing barn-dryer for the culture house and new kindergarten needs.
- Use together the green area between the culture house and kindergarten for all needs.
- Transform an existing barn into a restaurant place where the ingredients can be grown around it.
- The restaurant can be as a community place for the residents to cook together as also a place for visitors to rest after swimming and concerts with food made by the grandparent recipes of Sooru.
- Create a new shortcut connection from the village centre to the route around the lake.

Tsirguliina



- Use efficiently large areas by the railway create pedestrian and bicycle path addition to new greenery and elements as lanterns and benches.
- Create few more railway crossings on the ground level, connecting both sides of the village.
- Transform the existing old brick factory place in the south into a public, green recreation area, using the historical water towers as symbols and climbing elements.
- Connect 2 green areas in the village by developing the centre of the village around the railway station not only for the residents, but also for the biodiversity and animals.
- Transform an existing residential house by the railway station into an accommodation place to rent for visitors.
- Recreate the Village centre just by the railway station, adding a new shop place, sports fields and a youth centre.

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Laatre

• As a village where the main functions are by the main road, it should be strengthened and additional functions created by this route.

• Create a village centre between the historical manor park and the existing shop building, where the bus stop also is located.

• Transform the existing building with a small shop, dentist and pharmacy into a medical centre that can service also other villages.

• Create a new kindergarten on the other side of the medical centre where a green area for children would be also available.

• The existing sop building function upgraded to more sustainable lifestyle - exchanging and repairing stuff.

• Build a simple, small-scale structure in the park area where the historical manor was to have a place for canoe storage and picnic for everyone.

Functions - using local advantages and modernizing environment





Selling things through machines - can work 2/7, don't require personal all day for few needs

Shops - recycling



Exchanging and fixing things between residents - second chance for things and less waste, cheaper, getting closer between residents

Post - without a post office



Úsing package system as Omniva etc.

Kindergarten - include elderly



Provide nanny courses for the elderly communities in the villages - local nannies to help parents + helping with loneliness

Transport - share a car



Common car rides, communicate through apps and group chats



Let the elderly people express their knowledge and as residents as visitors to taste traditional grandparent meals from the village!

Cafe - share ingredients

Cafe - grandparents menus



Creating a common kitchen place, a place to eat together, next to a picnic place, have a common pantry

Cafe - cook together



Every weekend different family can make their own dish

Outdoor library - sharing



Book exchange point for free

Community centre - include everyone



Residents from different age groups through the week, workshops and can create their own events

Empty buildings - renting for visitors



If no one wants to buy a property - let interests rent them for vacations or specific time

Playgrounds - use local materials

Using local materials and rural

resources to create a playground - old

trees, haystacks, rocks, small gardens



mpkin Hollow)

These are some of sustainable and small change type of ideas that can be used in these and other settlements. These ideas can help to decrease waste, expanses, but keeping the needed services, getting the community together and sharing as materials, tools as knowledge and experience.

6.8. Design ideas for each of the village



Nature & culture





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Sooru



Sustainable Urban Design Lund University















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Tsirguliina







Youth centre

Accommodation places



Tsirguliina









Laatre











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"If you want to go fast, go alone. If you want to go far, go together." -African Proverb

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