



SMART VILLAGE STRATEGY OF TORUP (DENMARK)



DECEMBER 2020

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Foreword: Smart Rural Torup

Denmark

Torup – a smart*) village

Torup, situated on a peninsula between sea and fjord 60 km to the North West of Copenhagen, with its 356 inhabitants, is a hub of many diverse initiatives and activities. These initiatives are building on strong local traditions, and instrumental to some of the developments of the village were a group of people, who moved to Torup 30 years ago to form a community ØD: Økosamfundet Dyssekilde based on organic and sustainable principles. Over the years, this particular part of the village has turned into a highly attractive enclave.

Local initiatives and local competences have also been the foundation for the recent major step in terms of expanding the village with 100 new eco-homes over the next few years. To this end the village worked very closely with the municipality to develop the detailed plan for the expansion, and in addition a group of locals established a fund, Torup Fonden, to acquire the land, rather than leaving this to outside investors. Currently, this fund is planning a Torup-wide smart, sustainable, and integrated heating system, based on solar-power, along with other sources.

People in and around Torup are resourceful, not necessarily economically, but certainly personally and culturally, and to enhance the common use of these resources and competences, activities related to the Smart Rural 21 project in Torup will focus on bringing this wide range of resources to the forefront, and making them accessible and visible, especially to newcomers. The part-project will also facilitate sharing tools and equipment, and is one of the main reasons for Torup have applied to join the Smart Rural 21 project, in which we see ourselves as contributors as well as receivers. In short, we respect and build on the LEADER principles in terms of our approach to locally driven sustainable rural development. With this backdrop, Torup obtained the 2019 Danish *National Village of the Year* award.

*) we understand ‘smart’ as ‘innovative, intelligent, clever’



I. INTRODUCTION

1.1 Local governance in Denmark

Denmark has strong tradition of local governance. We elect representatives not only to the national parliament but also to municipal and regional councils. National elections are held at least every 4 years, sometimes more frequently, whereas the elections for municipal and regional councils take place every 4th year.

However, the number of municipalities have been reduced over the years from 1300, over 275 (by the year 1970), to the current 98 (by 2007), thus creating larger municipalities. Likewise, regions were reduced in numbers from 13 to 5. The arguments for these reductions in numbers have been largely administrative of nature: bigger units were considered to be more efficient, hence cost beneficial. This particular view, by contrast, has been disputed on the grounds that ‘bigger’ means more bureaucratized, and that the larger municipalities have disrupted the close links between (local) governance and the people. Torup is part of the municipality, Halsnæs Kommune, which has a population of 31.384 (2020). This means that Torup, with its 350 people, represents only around 1% of the total number of inhabitants, a negligible number, which could easily be disregarded in the bigger picture.

The establishment of Torup Ting, the local council, is a response to this disruption of the close link to the municipality. ‘Ting’, incidentally, is old Norse (from: Thing) for ‘case’ or ‘gathering’. The verb ‘tinge’ means ‘negotiate’. Thus, Torup Ting, means the place where locals discuss and decide on local matters. This has been set in stone: a traditional stone circle has been created, Torup Tingsted (illustrated on the front page), which, symbolically, has a wide and long view.

Torup Ting – the local council

With this backdrop, Torup Ting, the local council of Torup, was created in 2014, the board of which (5 members) is elected once a year at an open, common meeting. Next election will be in Spring 2021. Torup Ting is open to everyone in the local area, regardless of age. Consensus-based decisions are made at common meetings, which are open to the (local) public. Smaller working groups (Småting; i.e. Small Things: playing on words) on traffic, culture, and planning, deal with their respective topics. Other, day-to-day Småting have dealt with, for example, QR-code information on the village, dispersed across the village for visitors to access. Two-to-three open meetings annually, usually attended by approx. 60-70 people, form the hub of local democracy, starting with a song according to tradition, and often organised in relation to a theme, e.g. current local archaeological excavations, or recent academic research on rural Torup-matters. Some such meetings have been in the walk-and-talk format, taking the participants on a walk along local paths, or from one QR-code post to the next, with information on Torup and its history.

Communication between village and municipality

The municipality, in its vision for 2030, has stated its principles on local democracy: ‘Halsnæs Kommune is listening, inclusive, and communicative as a basis for a constructive local democracy’. Torup Ting has

taken this statement further in presenting a local democracy charter, i.e. an agreement which spells out the complementary roles of local governance, between Halsnæs Kommune and Torup Ting, representing the inhabitants of Torup. This reflects a need for clearer guidelines regarding cooperation and coordination between the two parties. So far, Torup Ting has a mediating and coordinating role in relation to the municipality and local matters such as roads, traffic, culture, and planning.

1.2 What is a ‘village’ in Denmark?

The official definition of a village (“*landsby*” in Danish), is a rural community with 50 to 1000 inhabitants, according to the Ministry of Environment, 2007. In earlier times, the term village meant a cluster of at least 3 farms. Most Danish villages developed and grew to around year 1960, after which development and progress stopped and the vast majority of Danish villages experienced a decline in both population and general service facilities. Torup, by all standards, present and past, is a small village, but as one of very few Danish villages, Torup has an increasing population: a so-called Warm Zone.

1.3 What smart is for Torup

Smart, as we understand the concept, means ‘innovative, intelligent and clever’. In these terms, Torup is smart, as the development of the village, especially over the last 30 years has been based on sustainability as the main innovative/intelligent/clever concept. In the early days, the term ‘organic’ was used to cover this trend, and it was mostly focusing on buildings, food, and transport. Over the years, ‘sustainability’ has developed into a wider concept, covering a number of sustainability issues, including organic, cultural, economic, and social aspects, thus aligning with EU’s 2020 goals which emphasise ‘smart, sustainable and inclusive growth’. In addition, the Local Action Group “Halsnæs-Gribskov” in its current strategy, has adopted these EU-principles. In short, sustainability is incorporated into local actions and initiatives, and in Torup this is done smartly by combining it with an open culture of mutual acceptance supporting new initiatives. Innovation grows from a long-standing local culture of self-propelled action, a truly bottom-up approach.

Relative to the Smart Rural 21 project we plan to include an overview of local resources, both in terms of personal competences, and in relation to materials and machinery. The goal is to map such resources, bringing them to the attention of local people, making them accessible and visible, especially to newcomers as the village is about to expand with 100 new homes over the next few years, as mentioned earlier. Apart from involving newcomers from their start, this initiative will have at least two effects: one is to make visible that people in and around Torup are resourceful, not necessarily economically, but certainly personally and culturally. The other is to make use of competences and equipment, to minimize waste and duplication. This is one small response to the challenges of the 21st century.

Another ambitious initiative in relation to the Smart Rural 21 project is the smart, sustainable, and integrated heating system planned for the extension of the village. We expect both local, regional, and national partners to participate with their respective expertise in terms of geothermal heating,



handling of sewage sludge, solar power, energy saving, and the organizational challenges which this cross-sectoral initiative will pose, economically as well as administratively.

II. CONTEXT

2.1 Context of the smart village strategy development

The Smart Village strategy of Torup has several sources. The current strategy, with its focus on Hvideland, was initiated by Torup Ting and its offspring, Torup Fonden. Torup however has a long tradition of forward thinking and planning, from the time of establishing a collective dairy (1890), over the creation of the local COOP (1920; 'Brugsen', still in existence), to more recent times in which the above-mentioned initiatives have flourished. Moreover, the Local Action Group Halsnæs-Gribskov has supported several of the present initiatives, thus aligning the various strategies, as mentioned above in Section 1.3. The initiative to involve Torup in the Smart Rural 21 project comes from Torup Ting's chairman, who, incidentally, also holds the chairmanship of LAG Halsnæs-Gribskov.

2.2 Existing strategies & initiatives

2.2.1 Links to existing local strategies

Building on previous developments in terms of the establishment of the Ecovillage, known as Økosamfundet Dyssekilde (30 years ago), the existing strategy includes the planning of a new, sustainable enlargement of Torup, Hvideland with 100 new homes in two steps over the next few years. The initiator for the planning for this particular development was Torup Ting, which reacted to a request from the municipality of Halsnæs to enlarge Torup. Locally, Torup Ting in turn formed a small task-force to prepare for the further decisions of authorities and municipal politicians. This resulted in a complete planning proposal, which has been adopted virtually unchanged by the authorities. It is within this framework that the Smart Rural 21 project will make an important contribution to the unfolding of further sustainable developments, primarily in the area known as Hvideland

More specifically, this means that the Smart Rural 21 project, via its consultancy offer, will assist in the development of (1) an IT-based cross-sectoral platform to support local network in terms of human and equipment resources, which will be of particular benefit to the newcomers to the village; and (2) the above-mentioned integrated, common heating system with all its sustainability aspects, thus aligning the local efforts with the overall aims of the Smart Rural 21 project for sustainable rural development. As a result of these joined forces, a new strategy will reflect both the local needs, and those of the EU, the local LAG, and the Smart Rural 21 project.

2.2.2 Links to higher level (local, regional, national, European) strategies

The Smart Village strategy of Torup aligns with that of the Local Action Group Halsnæs-Gribskov in its view on Smart, Sustainable, and Inclusive growth, as mentioned above. This means that the EUs goals play an important role in both setting up, and in implementing the local strategy. On a national basis,



the present government, led by the Social Democrats, have placed a heavy emphasis on sustainable development, thus indicating, inter alia, that the present level of greenhouse gas emissions must be reduced by 70% by 2030 (compared to year 1950). These visions and targets stem, partly, from specific national policies and ambitions, and partly from Danish obligations to comply with international agreements (EU; UN).

2.2.3 Review of past and ongoing (flagship) projects and initiatives

Over the last 30 years, the establishment of the ecovillage (ØD: Økosamfundet Dyssekilde) has played an important part ensuring the foundation for the further development of Torup, as mentioned above. During these initial years, members of ØD established a school, a kindergarten, and a common meeting hall, as well as a utility building for the local bakery/café/organic shop. This has supported and further developed an entrepreneurial spirit, commercially as well as culturally. Thus, a number of local projects and initiatives have been established, including music festival, book-town, documentary films, jazz concerts, alternative transport, common village dinners, common Torup Ting gatherings, climbing wall, repair café, farmers' market, common office space, common fund, common village enlargement planning, and common heating system, to mention a few. Alongside these initiatives, Torup features a large number of private enterprises, ranging from (eco)-farms, horticulture, and builders and other craftsmen, to alternative treatments and a flurry of yoga schools. Examples of much older institutions and services include the local COOP, the church, and the railway station, all in full operation. This abundance of initiatives forms a smart approach to rural development, as commercial and cultural offers/initiatives together constitute the attraction of Torup to a degree where it is known as one of the few so-called Warm Zones in Denmark, i.e. a rural area with an increase of the population.

2.3 Cooperation with other villages

Other villages look to Torup for inspiration, and Torup is inspired by others. Thus, the chairman of Torup Ting is on continual "Rural Matters speaking tours" around the country, and a large number of visitors find their way to Torup. The numbers of activities have increased considerably since 2019 when Torup was awarded the National Village of the Year honour. Visits to Torup are often thematic, including themes as village development, eco-building, village organisational matters, local democracy, the creating of a book-town, etc. Torup takes part in several nationwide projects and initiatives, including DELTAG (cultural institutions in Denmark), Repair Café Denmark, LØS (i.e. Ecovillages in Denmark). Several LAG-projects are situated in and around Torup, thus forming a hub of projects which illustrates the value of local cooperation and the importance of investing in rural districts. Through LAG Halsnæs-Gribskov, Torup is engaged in ELARD, and thus, through its membership in The Council of Rural Districts (Landdistrikternes Fællesråd).

As mentioned previously Torup Ting has initiated the creation and presentation of a (draft) local democracy charter, i.e. an agreement which spells out the complementary roles of local governance (Halsnæs Kommune/Torup Ting). This will serve as a point of inspiration for other local councils, both within and outside Halsnæs Kommune.



III. KEY CHARACTERISTICS OF TORUP

3.1 Key characteristics of the village and rural area

Closest towns:

Table 1: Closest town or city

Name of closest town or city	Population of town or city	Distance between village and town/ city
Frederiksværk	12,694 (2020)	7 km
Hundested	8,616 (2020)	6 km

Table 2: Key statistics (as provided by the municipality, Halsnæs Kommune, August 2020)

Indicator	Value	Latest year	Comments	Source of information
Population <i>Out of which migrants</i> <i>Out of which people with disabilities</i>	356 not available			
Elderly dependency ratio %	42 %		The ratio between the elderly population (aged 65 and over) and the working age population (aged 15-64)	CPR
Unemployment rate %	7%	2019	Percentage of unemployed aged 15 and over, divided by the labour force (those aged 15 and over)	CPR+DFDG
Employment rate %	63%	2019	Percentage of those employed who are aged 15 and over divided by the working age population (aged 15-64)	CPR+DFDG
Participation rate %	70%	2019	Percentage of the labour force aged 15 and over divided by the population of those aged 15 and over	CPR+DFDG
Age structure:				
Share of population aged 0-14	23 %	2020	Retrieved by 29/6/2020	CPR
Share of population aged 15-59	47 %	2020	By 29/6/2020	CPR
Share of population aged 60-65	7 %	2020	By 29/6/2020	CPR

Share of population aged 65+	23 %	2020	By 29/6/2020	CPR
Educational attainment:				
Share of workers with tertiary education	n/a			
Share of workers with primary education	n/a			

3.2 Key challenges

A small village like Torup has a limited number of inhabitants, evidently few people to support and make use of the local services. This is a challenge for Torup as for many other villages, and the main Danish trend being further depopulation of rural areas unfortunately only worsening the situation. Being situated on a peninsula the experience of remoteness can seem more evident for Torup, due to the limited access, even being only 60 km from Copenhagen.

The municipal reform of merging small units was carried out with the intention to improve efficiency and reduce costs, but an unfortunate effect that is clearly felt in small villages like Torup is the increased distance to the municipal decision-makers as well as to the municipal administration and service.

As a result of the trend of depopulation of rural areas mortgage institutions are very reluctant to provide loans for the purchase of real estate in these rural areas which leaves possible potential buyers with financial difficulties. The general sustainable approach that characterizes Torup - which is also apply to Hvideland has a clear challenge in terms of heating, as the one that is currently in use is largely individualised, and oil-fired boilers are used to some extent.

When planning an extension of a magnitude, as is the case for Torup, where the population will possibly increase by 50 -100% over the next few years, then there will be a big risk that the current culture will not necessarily be continued. This risk is likely to increase the greater the expansion and the less contact there is between the current and future residents. If promotion, sales and construction take place under the auspices of outsiders - ie completely without "hands on" from the locals, the risk of diluting the current valuable village culture will further increase.

Although Torup is growing and we actively support this development, some challenges remain, as mentioned below.

3.2.1 Fast and reliable Broadband

With a growing number of home-based workplaces, including the commuter hub at Dyssekilde Station, and the need for all enterprises and shops to be fully IT-connected, the need for fast and reliable communication is increasing. So far, this has by-passed Torup, in spite of local pressure to upgrade IT-connectivity facilities. This state of affairs may change in terms of upgrading such facilities in 2021, due to current special state-funded initiatives in this area, which are followed up by local initiatives.



3.2.2 Transport

The local train stops in Torup every half hour during the day. This is vital to the transportation options, for school children as well as for other commuters. In this case, as for fast broadband mentioned above, the policy decisions are made in other fora than that of the municipality. This is an issue, as means of IT communication and transport are pivotal to the development of rural areas, but decisions on such matters do not necessarily take local needs into account. In the Spring of 2020, for instance, the railway company (public as it may be) had planned to cut the number of stops in Torup. Thanks to heavy lobbying on the side of representatives from Torup at all political levels (local, regional, and national), this destructive plan was abandoned – at least for the time being. This example, however, points to the vulnerable nature of services, and to the exposed position of policies that affect rural areas deeply. Moreover, this example of lobbying underscores the constant struggle to keep, and preferably improve, public/common services in rural areas.

3.3 Main assets & opportunities

One of the most important assets for Torup is its inhabitants and the way the inhabitants are very engaged, coordinating and supporting many diverse initiatives and activities. These include a music festival, Torup Booktown with second-hand books and cultural events, Farmers' Market, Repair Cafe, common village dinners, a commuter-hub with common office space, jazz concerts, alternative transport, a local council, and, most recently, Folkeuniversitetet of Torup, i.e. a local branch of the Danish University Extension.

Such initiatives are building on strong local traditions, which has resulted, inter alia, in a parent-initiated school and kindergarten, a common meeting house, an intensely restored railway station, and a utility building containing a café, a bakery, and an organic shop. Instrumental to some of these developments were a group of people, who moved to Torup 30 years ago to form a community ØD: Økosamfundet Dyssekilde based on organic principles. Over the years, this particular part of the village has turned into a highly attractive enclave.

In Torup the active involvement is combined with an open culture of mutual acceptance supporting new initiatives. Recent examples of this include three cases: the establishment of Torup DOKby (showing documentary films in unusual places); Torup Climbing Wall along with a newly-formed climbing club; and Torup Bogbys Folkeuniversitet, i.e. the local branch of the Danish University Extension – the first two have been supported by Torup Ting, and the latter by Torup Bogby. These are current examples of how the Torup inhabitants facilitate the short distance from idea to concrete action.

Earlier, the local school, the kindergarten, and the common assembly hall were established on local initiative. Innovation grows from this long-standing local culture of self-propelled action, a true bottom-up approach. One recent such initiative is the launching of a local doctor in a new medical clinic, which, along with a number of other local initiatives such as an alternative transport project

(Sykkel), and the extension of the local bakery (Kornsang), both supported by LAG (the Local Action Group).

The project Talents and Tools is planned to include an overview of local resources, both in terms of personal competences, and in relation to materials and machinery. One of the aims of this plan is to minimize waste and duplication, hence a small response to the challenges of the 21st century. Other such responses include e.g. the establishment of several interlinked projects, grouped in and around the abandoned local railway station, Dyssekilde Station (fully restored on local initiative in 2011-12): Sykkel (i.e. Bicycle), a demonstration and bike-rental project for alternative transport with electric cargo-bikes and velomobiles; Torup Marked, i.e. a Farmers' Market with local produce every fortnight, a local tourist attraction, based on the concept of food-mileage, and a member of the local association Halsnæs Spisekammer, i.e. Halsnæs Larder; Torup Booktown, i.e. recycling/selling second-hand books to ensure economy for cultural events; Torup Deleværksted, i.e. a Repair Café taking care of fixing minor appliances and machinery rather than discarding such items; the Station Garden, i.e. an open, edible garden tended by a group of volunteers; and a Commuter Hub, i.e. a common office space, at the moment comprising main office in Denmark of a global certification company, along with the headquarters of the local fund, Torup Fonden.

Such initiatives point to the strength of local initiatives and support in terms of creating rural careers and opportunities, along with rural cultural development, with a view to local food, recycling, and reducing the need for commuting.

Being aware of the inhabitants – their culture and behaviour – being the most important asset of Torup, we are also very much aware that we must nurture that culture to preserve it for the future.

Torup has a tradition for innovation and planning ahead, which can be observed in the history of the village. This tradition has been supported and further developed by the settlement of Økosamfundets Dyssekilde and by the subsequent initiatives mentioned above.

3.3.1 Voluntary work and Reports

Torup is fortunate to harbour a multiplicity of voluntary work, which means that many projects and initiatives exist alongside one another. This is a double-edged sword though, as individuals / volunteers may lose their engagement if over-used.

Torup, over the years, has been the object of several types of analyses, ranging from architectural thesis work, over traffic restructuring proposals, to reports on local archaeological excavations. A recent thorough mapping exercise on the inner life of Torup and its brand was carried out by the University of Copenhagen based on interviews, questionnaires, and observations over a longer period of time in the comprehensive report: Jepsen, M. R., & Busck, A. G. (2019). Hvad skaber rurale succeser og hvor langt rækker brandet? Eksemplificeret ved Torup landsby i Halsnæs kommune. [What creates rural successes, and how far does the brand reach? Torup in Halsnæs Municipality as an example]. Frederiksberg: Institut for Geovidenskab og Naturforvaltning, Københavns Universitet. IGN Rapport. Some of the main points of this particular piece of research were:

- that Torup has a supportive culture of acceptance of new initiatives;



- that several individuals form a core of volunteering enthusiasts;
- that Torup has a conscious awareness of formulating policy directions in terms of sustainability in a broad sense; and
- that the Torup brand is widely known beyond the local area, due to a conscious and constant flow of news-communicés from Torup to a range of media, both locally, regionally, and nationally. Again, voluntary work is crucial in this respect, too.

3.3.2 Eco / sustainable focus

Organic, sustainable, eco: different concepts have been used over the years to focus on sustainability as a key factor in societal development. Torup has been consistent to align practice and policies in this respect. This is reflected in both the buildings, in the social life, and in the cultural initiatives of Torup. Behind this is an economic consciousness, in so far as Torup does not rely on external funding. The establishment of the above-mentioned Torup Fonden is one such current example. Torup Fonden, in turn, is instrumental in the development of the Expansion of Torup; the new, sustainable part of Torup, known as Hvideland, which will create space for up to 100 new homes over the next few years.

3.4 Key characteristics of the local community

The main local stakeholders are, naturally, the inhabitants of Torup. The above-mentioned local council, Torup Ting, however, provides the link between the local authorities such as Halsnæs municipality, and the local population. In these terms, the municipality, Halsnæs, is a stakeholder in so far as municipal policy decisions affect the lives of people in the local area in and around Torup.

The local council, Torup Ting, builds on a wide engagement, with well-attended open common meeting 2-3 times a year, and on the engagement in the thematic subgroups, known as Småting, on specific matters such as roads/paths, QR-codes etc. as mentioned above; projects such as Sykkel (alternative transport), Torup Dokby (documentaries), Torup Folkekøkken (common village dinners); infrastructure such as railway or broadband; and general information on and welcoming to Torup on www.torupting.dk, which also contains a calendar describing events in the local area. More ad hoc subgroups, over the years, have dealt with for instance a locally distributed Corona-package with current information on local services and projects, or another group which created the plan for the enlargement of Torup, known as Hvideland; or a group which established the local fund, Torup Fonden to facilitate the future development of the local area, including a common and sustainable heating system. Such initiatives were instigated by the leadership of Torup Ting. These examples serve to illustrate the link between intentions and actions in terms of a broad involvement of inhabitants in and around Torup.

3.5 SWOT Analysis

Table 2: SWOT analysis

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Well established local democracy • Very good engagement / involvement (many volunteers) • Human capital (diverse and resourceful) • A culture of acceptance • A tradition for acting on needs (not just wait) • Sustainability is part of the Torup DNA • Railway with trains every ½ hour • High level of local services for a village this size (School, kindergarten, assembly hall, shared office-space, shops) • Good cooperation with municipality (trust established) 	<ul style="list-style-type: none"> • A small village with few people • Remoteness – limited access (situated on a peninsula) • Heating (homes and community buildings) mainly based on fossil fuel • Weak guidelines for cooperation with authorities • Lack of fast and reliable broadband
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Trends of decentralisation • Attracting / integrating (resourceful) newcomers • Opportunity for better work/life balance • Growing interest for sustainability • Create further commuter-hubs/common workplaces 	<ul style="list-style-type: none"> • Lack of integration of present and new inhabitants • Infrastructure: railway cuts; lack of fast IT-connections • Societal/administrative centralisation • Lack of capital/ access to house bank loans • Danish trend is depopulation of rural areas • Reluctance for mortgage for houses in rural areas • Outside investors/entrepreneurs buying the land for development

IV. INTERVENTION LOGIC

4.1 Overall objective

The overall objective in relation to the specific actions (listed below) is to enhance the attractiveness of Torup in several respects and that way ensure a further increase in number of inhabitants. Firstly, the enlargement of Torup with Hvideland, i.e. 100 new homes, along with new spaces for micro-enterprises in this specific part of Torup will, in itself, create new dynamics and opportunities; secondly the concrete activities (Tools & Talents; Common Heating) will support social coherence, and support smart solutions to recycling, common use of talents and resources, and, in general, a shared economy: together these initiatives will enhance the attractiveness and the quality of life in Torup, and set an example for developing rural areas on a sustainable basis. In this respect, Hvideland and thus the expansion of Torup, is an integrated part of the overall developmental strategy for Torup. In formulating and implementing this strategy, Torup Ting is instrumental in creating these unique possibilities. This, in turn, sets an example for rural areas to take a lead in local development: rural areas need to keep a steady hand on the tiller, themselves, in this case by establishing the local fund, Torup Fonden, on the initiative of Torup Ting.

4.2 Specific & operational objectives in response to SWOT

Extension of village to increase population, thus sustaining basic services, which otherwise will be difficult to maintain, shops included. On the other hand, the extension of the village – which originally was suggested by the municipality to be much bigger – calls for a balance to maintain the local culture of inclusion and acceptance. To ensure local ownership, the local fund, Torupfonden (an offspring of Torup Ting) has taken the lead in this development.

Specific objective 1: Increase population by extending the village

Background: Torup is one of the very few villages in Denmark with an increase of the number of inhabitants – a so-called ‘Warm Zone’. The village even has more people waiting to buy a house or land to build their own house in or around the village. It was agreed to expand the village to the South centered around the farm Hvideland, and with the farm-buildings to be used for different services and enterprises. In line with the present Eco-part of Torup “Dyssekilde” the extension was planned to be building on sustainable principles and if possible, also on alternative ownership.

The purpose of the extension is to answer to the needs for more houses / building sites and to increase the population, hence support the present services of the village.

It is crucial that the present culture of the village: welcoming, democratic, sustainable, openminded, enterprising and active will survive, and that this will also include the newcomers.

Operational objective 1.1: Development and approval of plan for extension (Hvideland)

To be allowed to extend the village a development-plan had to be made and approved by the municipality (Halsnæs). The municipality was aware of the need for building sites, and had plans for a massive extension of the village (14 HA; 300-400 building lots).

This was not to our liking though – as would outnumber the “original inhabitants” and easily water down the culture, which we want to maintain. As an alternative we, i.e. Torup Ting, created a different development plan for only 100 houses, all placed around the farm buildings of Hvideland to the South of Torup – with easy access to shops, school, kindergarten, and railway-station. for the village. The plan was presented to the municipality and approved with hardly any changes. Specific rules apply to sewage handling, to energy production, and to sustainability guidelines ensure that building materials and methods align with the sustainability intensions of this new developmental part of Torup.

Operational objective 1.2: Purchase the land and farm buildings

Parallel to developing and obtaining approval of the development plan for the village extension, negotiations were carried out with the farmer in question. An exception also had to be sought to lift the agricultural duty on the area in question, and the chairman of Torup Ting acted as mediator in the negotiations concerning the sale of the remaining farmland of Hvidelandsgaarden.

Aligning with the general approach of the village, Torup Ting took steps to avoid external investors to buy the land and prepare it for building. On this basis the Torup Fund was created through crowdfunding: EUR 40.000 were collected over a period of 5 weeks among local people to form the basis capital of the fund, which ensured a firm foundation to borrow money to purchase the land and the farm building.

Operational objective 1.3: Establish alternatives to general funding practices for private homes (mortgages)

Difficulties can occur when trying to purchase a building site or a house in rural areas in Denmark. Torup wants to define and establish alternatives to the present options on the market. This could be done in line with the way the shops, restaurant and the farmland has been financed: based on crowdfunding – and could include cooperatives and shares.

Operational objective 1.4: Plan/ensure “welcoming and involvement” Integration

To ensure the village to continue as a whole and the present culture to continue and also cover the newcomers, several actions have been planned to ensure welcoming and involvement of these. As mentioned, the farm buildings will not be demolished, which would be the standard solution when preparing a new building lot. Instead the farm buildings will be brought to use as a new sub-center. Thus, will ease the way for the potential newcomers, hence ensuring integration.

Apart from the general welcoming attitude some more practical measures to be taken will be ensure activity in the farm building – for instance will the tools and equipment bank be established at the farm. Also shared offices and workplaces will be established together with small flats/rooms for rent,

for both visitors, and, presently, for builders. In addition, on the ground, wind-breaking hedgerows have been established for the area itself to appear more welcoming – and green. To ensure success the implementation of the plan will be monitored to follow both the planned expansion and integration.

Specific objective 2: Sustain and improve local services

Local services, such as shops, school, kindergarten, assembly hall, restaurant - all created by local initiatives over the years – need continuous support and development.

Operational objective 2.1: Ensure continuation of present shops and restaurant

Local use of shops and restaurant is the backbone of these services. Their sustainability will be enhanced by an increase in population.

Operational objective 2.2: Ensure continuation of school, kindergarten, assembly hall

The Hvideland expansion will ensure more use of local services

Operational objective 2.3: Ensure collective traffic

Public transport is crucial to the development of the local area in terms of job-commuting, access to the local school, tourism, etc. To ensure the present status of the ½ hourly trains, the Torup Ting, on behalf of the local area, village continues to lobby on all political levels (local, regional, national).

Moreover, alternative transport is provided by the Torup based project ‘Sykkel’ which focuses on sustainability in terms of electric cargo bicycles.

Operational objective 2.4: Ensure availability for fast broadband

Fast broadband is pivotal in terms of creating and sustaining flexible workplaces, commuter hubs and suchlike facilities. To ensure that this service is established Torup has coordinated the establishment of technical solution with local broadband providers.

Operational objective 2.5: Establish “caretaker”-function to provide service

The Village Caretaker is a service to help people with small tasks in their homes, and to handle some of the practical tasks/storage/maintenance in relation to the Tools/Talents app, mentioned below.

Operational objective 2.6: Formal agreement concerning guide for cooperation with municipality

The municipality Halsnæs, in its 2030-vision, expressed an intention to ensure good dialogue and cooperation with the villages in the municipality. Torup has frequent meetings with top-level representatives from the municipality, and they want to ensure the good intentions expressed will be kept. On this basis a formal agreement on cooperation between the municipality and the villages is being developed on the initiative of Torup Ting.

Specific objective 3: Torup Tools and Talents / Support sustainability and involvement

The aim is to support sustainability, reuse/recirculation – and, in addition, to also strengthen social relations in the community

The IT-application to be developed will support the sharing of physical tools and utensils for household, gardening, maintenance etc. as well as the sharing of human resources/services in various areas.

Operational objective 3.1: Uncover needs and possibilities

Describe aims and objectives in relation to ‘Tools and Talents’ app

Operational objective 3.2: Establish model for organisation: hire / rent / insurance maintenance

Establish data for the app (more specific: organisation, insurance and price-setting). The tool bank will be established in one of the wings of Hvideland (the farm building), and the village caretaker will be in charge of supervising and maintaining the daily operations of the tool bank.

Operational objective 3.3: Development of app

Development of ‘Tools and Talents’ app, including planning of the launching and evaluation of the actual use and usefulness of the app.

Operational objective 3.4: Implementation of app

Implementation of ‘Tools and Talents’ app, including the launching, evaluation and necessary corrections of the app

Specific objective 4: Torup Sustainable Common Heating

To align with the general sustainability approach, and to minimize the use of inefficient and individual heating systems, including oil-burners, the local semi-public company Halsnæs Forsyning [Halsnæs Supply] joins Torup in a parentship with the intention to develop a new, sustainable and integrated common heating system. Whether this goal will in fact be reached relies on the continuing negotiations, the financial implications, and the possible technical solutions.

Operational objective 4.1: Options & objectives

Describe aims, objectives, and options in relation to Torup Common Heating. Communication to ensure support amongst citizens

Operational objective 4.2: Organisation and solutions

Develop organisational and technical solutions to the establishment of Torup Common Heating

Table 3: Setting objectives in response to SWOT

Specific objectives	Operational objectives	Answering to: Challenges & threats	Using: Strengths & Opportunities
<p>Specific objective 1: Sustain / increase population by village extension</p>	<p>Operational objective 1.1: Development and approval of plan for extension (Hvideland)</p> <p>Operational objective 1.2: Establish fund to buy land for development through crowdfunding</p> <p>Operational objective 1.3: Establish alternatives to general (bank) funding practices (mortgages)</p> <p>Operational objective 1.4: Plan “welcoming and involvement” Integration</p>	<p>A small village with few people</p> <p>Lack of capital/ access to house bank loans</p> <p>Danish trend is depopulation of rural areas</p> <p>Reluctance for mortgage for houses in rural areas</p> <p>Outside investors/entrepreneurs buying the land for development</p> <p>Weak guidelines for cooperation with authorities</p> <p>Integration of present and new inhabitants</p>	<p>Well established local democracy</p> <p>Very good engagement / involvement (many volunteers)</p> <p>Human capital (diverse and resourceful)</p> <p>A culture of acceptance decisions by consensus</p> <p>A tradition for acting on needs (not just wait)</p> <p>Sustainability is part of the Torup DNA</p> <p>Good cooperation with municipality (trust established)</p> <p>Attracting/integrating (resourceful) newcomers</p> <p>Opportunity for better work/life balance</p> <p>Growing interest for sustainability</p> <p>Create further commuter-hubs/common workplaces</p>

<p>Specific objective 2: Ensure / sustain local service</p>	<p>Operational objective 2.1: ... Ensure continuation of present shops and the restaurant</p> <p>Operational objective 2.2: ... Ensure continuation of school and kindergarten</p> <p>Operational objective 2.3:.. Ensure collective traffic</p> <p>Operational objective 2.4: Ensure availability for fast broadband</p> <p>Operational objective 2.5: "Caretaker" to provide services</p> <p>Operational objective 2.6: Formal agreement concerning guide for cooperation with municipality</p>	<p>Weak guidelines for cooperation with authorities</p> <p>A small village with few people</p> <p>Remoteness – limited access (situated on a peninsula)</p> <p>Infrastructure: railway cuts; lack of fast IT-connections</p> <p>Societal/administrative centralisation</p> <p>Lack of integration of present and new inhabitants</p>	<p>Very good engagement / involvement (many volunteers)</p> <p>A culture of acceptance</p> <p>A tradition for acting on needs (not just wait)</p> <p>Railway with trains every ½ hour</p> <p>High level of local services (School, kindergarten, assembly hall, shared office-space, shops)</p> <p>Create further commuter-hubs/common workplaces</p>
<p>Specific objective 3: Torup Tools and Talents / Sustain resources: social & human capital and tools & materials</p>	<p>Operational objective 3.1: Uncover need and possibilities</p> <p>Operational objective 3.2: Establish model for organisation: hire / rent / insurance maintenance</p>	<p>Lack of integration of present and new inhabitants</p>	<p>Very good engagement / involvement (many volunteers)</p> <p>Human capital (diverse and resourceful)</p> <p>A culture of acceptance</p> <p>A tradition for acting on needs (not just</p>

	<p>Operational objective 3.3: Development of app</p> <p>Operational objective 3.4: Implementation of app</p>		<p>wait)</p> <p>Sustainability is part of the Torup DNA</p> <p>Attracting (resourceful) newcomers</p> <p>Opportunity for better work/life balance</p> <p>Growing interest for sustainability</p> <p>Create further commuter-hubs/common workplaces</p>
<p>Specific objective 4: Torup Sustainable Common Heating</p>	<p>Operational objective 4.1: Establish Options & objectives</p> <p>Operational objective 4.2: Organisation and solutions</p>	<p>Weak guidelines for cooperation with authorities</p> <p>Heating (homes and community buildings) mainly based on fossil fuel</p> <p>Lack of capital/ access to house bank loans</p>	<p>A tradition for acting on needs (not just wait)</p> <p>Sustainability is part of the Torup DNA</p> <p>Good cooperation with municipality (trust established)</p> <p>Trends of decentralisation</p> <p>Attracting (resourceful) Newcomers</p> <p>Opportunity for better work/life balance</p> <p>Growing interest for sustainability</p>

4.3 Smart solutions: actions, outputs and results

Included in 4.2. See also below: Table 5

Table 4: Intervention logic: objectives, activities, expected results and outputs

Specific/ operational objectives	Activities planned or taken	Expected results	Expected outputs
Specific objective 1: Sustain / increase population			
Specific objective 1.1: Develop and get approval of plan for village extension (Hvideland)	1.1.1 “Local development plan” developed	<ul style="list-style-type: none"> • Ensure framework enabling building-preparation and -permission • Improved mutual knowledge and social linkages 	<ul style="list-style-type: none"> • Purchase the area, ready for dividing into building sites • Preparations (water, electricity, sewerage done) • Lots ready for sale
	1.1.2 Coordination with Municipality to ensure approval		
Specific objective 1.2: Establish fund to buy land for development	1.2.1 Establish Ltd through local crowdfunding 1.2.2 Crowdfunding (sponsorship and loans) /borrowing money 1.2.3 Purchase the land and building	<ul style="list-style-type: none"> • Ensure ownership to the land (avoiding external investors in the project) 	<ul style="list-style-type: none"> • Lots sold and houses built • Common meeting space and new workplaces

<p>Specific objective 1.3: Establish alternatives to general (bank) funding practices (mortgages)</p>	<p>1.3.1</p>	<ul style="list-style-type: none"> • Enable newcomers to have alternative financing of their new homes 	<ul style="list-style-type: none"> • Possible agreements with financial sources
<p>Specific objective 1.4: Plan “welcoming and involvement” Integration?</p>	<p>1.4.1 Tool-bank at the farm</p>	<ul style="list-style-type: none"> • Making Hvideland an included part of Torup • Strengthening inclusion (integration) connection between present inhabitants and newcomers. • Ensure involvement and support of village-extension 	<ul style="list-style-type: none"> • Trees planted in / around the area • Farm building renovated (for kindergarten, tool-bank and offices, additional rooms for staying overnight) • Pioneers living in the main farm building • Common meeting space in renovated main farm building
	<p>1.4.2 Establish offices / workplaces at the farm</p>		
	<p>1.4.3 Planting of trees in and around the Hvideland area and renovating the farm-building</p>		
	<p>1.4.4 Monitoring and validating the strategy</p>		
<p>Specific objective 2: Sustain and improve local service</p>			
<p>Specific objective 2.1: Ensure continuation of present shops and the café</p>	<p>2.1.1 Support local shops and services</p>	<ul style="list-style-type: none"> • Sustain/support services 	<ul style="list-style-type: none"> • Continued services

<p>Specific objective 2.2: Ensure continuation of school and kindergarten</p>	<p>2.2.1</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
<p>Specific objective 2.3: Ensure collective traffic</p>	<p>2.3.1</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
<p>Specific objective 2.4: Ensure availability for fast broadband</p>	<p>2.4.1</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
<p>Specific objective 2.5: "Caretaker" to provide services</p>	<p>2.5.1</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •

<p>Specific objective 2.6: Formal agreement concerning guide for cooperation with municipality</p>	<p>2.6.1</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
<p>Specific objective 3: Torup Tools and Talents. Sustain resources: social & human capital and tools & materials</p>			
<p>Specific objective 3.1: Uncover need and possibilities</p>	<p>3.1.1</p>	<ul style="list-style-type: none"> • Establish base for app development • Organise input & development 	<ul style="list-style-type: none"> • an “easy to use”-app
<p>Specific objective 3.2: Establish model for organisation: hire / rent / insurance maintenance</p>	<p>3.2.1</p>		<ul style="list-style-type: none"> •
<p>Specific objective 3.3: Develop App</p>	<p>3.3.1 Specifications developed</p>		<ul style="list-style-type: none"> •

<p>Specific objective 3.4: Implement App</p>	<p>3.4.1 Make use of app – trials and evaluation</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
<p>Specific objective 4. Torup Sustainable Common Heating</p>			
<p>Specific objective 4.1: Establish Options & objectives</p>	<p>4.1.1 Mapping and overview of options; establishment of partnership 4.1.2 Decisions made on the basis of mapping</p>	<ul style="list-style-type: none"> • Development of plans for organizational and technical options and solutions in partnership • Matrix of options developed 	<ul style="list-style-type: none"> • Plan for Torup Common Heating, including securing local support
<p>Specific objective 4.2: Organisation and solutions</p>	<p>4.2.1 Halsnæs Supply to deliver overview</p>	<ul style="list-style-type: none"> • Mapping 	<ul style="list-style-type: none"> • Decision on preferred organisational and technical solutions
<p>Specific objective 4.3: Approval and finance</p>	<p>4.3.1 Halsnæs Supply delivers overview</p>	<ul style="list-style-type: none"> • Possible financing approved 	<ul style="list-style-type: none"> • Decision on preferred financing

Specific objective 4.4: Implement (install and run)	4.4.1 Creating heating system	<ul style="list-style-type: none"> • Heating system installed 	<ul style="list-style-type: none"> • Heating system in operation
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Table 5: Planning actions

Actions planned or taken	Timeline [From – To]	Necessary human capacity	Necessary technical capacity	Financial resources needed
Action 1: Extension Hvideland	2020-202?	<ul style="list-style-type: none"> • Organisational and human capacity to co-operate with new-comers and authorities • Expert knowledge of technical options in terms of sewage, rainwater reuse, solar energy 	<ul style="list-style-type: none"> • Technical infrastructure of various kind: Electricity, water, sewage, rainwater reuse, solar energy 	<ul style="list-style-type: none"> • ?
1.1.1 “Local development plan”	2020 (done)	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
1.2.1 Establish Ltd through local crowdfunding	2020 (done)	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
Action 2: Tools and Talents	2020-2022	<ul style="list-style-type: none"> • IT expertise; local management 	<ul style="list-style-type: none"> • IT-software • Broadband • Building / storage for tool-bank 	<ul style="list-style-type: none"> • € 7.000+.....

Actions planned or taken	Timeline [From – To]	Necessary human capacity	Necessary technical capacity	Financial resources needed
Action 3: Common Heating	2021-2023	<ul style="list-style-type: none"> • Expertise in integrated heating • Organisational clout • Technical and economic overview & insight 	<ul style="list-style-type: none"> • Planning • Technical infrastructure 	<ul style="list-style-type: none"> • ? • € 100,000
Entire strategy	2020-2023			EUR 107.000++



V. MANAGEMENT AND MONITORING

5.1 Management

Local strategy planning and the Smart Village process has been initiated by Torup Ting, which will also be responsible for the implementation as well as management, including the financial management. Torup Ting has its own budget, which was expanded in 2019, due to the prize in relation to the Village of the Year Award. The inhabitants are involved in the formulation and implementation of the strategy through their involvement in Torup Ting, and Torup Fonden, and through the activation of Småting (sub groups), and, importantly, through open, common village meeting where these issues have been and will be presented and discussed. This, in turn, will support and enhance community engagement and mobilisation.

5.2 Monitoring

The provisions for monitoring the process of strategy implementation lie in the broad engagement of people in Torup, via common meetings, as mentioned above. On a more daily basis, Torup Ting will monitor and evaluate the concrete steps on a continuous basis. The strategy is foreseen to be undertaken as a continuous process to be continuously evaluated and, possibly, adjusted. In this process, Torup Ting will be responsible for the monitoring of the strategy. Continuous stakeholder engagement and involvement will be ensured through regular contacts to/from e.g. Halsnæs Municipality, and other relevant authorities and organisations such as the above-mentioned Halsnæs Supply.

VI. STAKEHOLDER ENGAGEMENT IN STRATEGY DEVELOPMENT

6.1 Stakeholder engagement in needs assessment

Torup Ting and Torup Fonden have formulated the needs assessment, based on years of experience with local development.

6.2 Stakeholder engagement in strategy development

Similarly, Torup Ting and Torup Fonden have identified priorities/objectives of the strategy, along with potential actions, based on the needs assessment.

6.3 Key channels of communication and awareness raising among citizens

Inhabitants are informed about and involved in strategy development via open, common Torup Ting village meetings, and via the above-mentioned Sub-groups, Småting. This serves as an inner anchor in relation to aligning strategies and local needs. Press releases, local radio, local TV, posters play an important supportive role in raising the awareness. Social media, including Facebook is

used as a matter of routine. Invitations to key representatives of Halsnæs Kommune are invited to the events/meetings/gatherings. Halsnæs Kommune along with Halsnæs Supply will be involved successively, both in terms of partnering, and in terms of raising common and public awareness.

6.4 Planned actions to mobilise stakeholders

Local people and stakeholders are mobilised in terms of actions through open, common Torup Ting village meetings; through the establishment of Småting (sub groups); through local media (local/regional newspapers, local radio, and local TV), along with social media, including Facebook [Alle os i Torup]; and through personal contacts in Torup's everyday life. The municipality, Halsnæs Kommune, on the initiative of Torup as mentioned above, has expressed a re-newed interest in developing and supporting local democracy. In these terms, the Smart Rural 21 project is timely, as it supports such linkages and developments between stakeholders, in this case Torup Ting and Halsnæs Kommune.