

An analysis of the opportunities and challenges of Tiny House adoption in the northern Netherlands



Figure 0 : Tiny House Westpark from above

Colophon

Bachelor Thesis	Human Geography & Planning
Title	An analysis of the opportunities and challenges for Tiny House adoption in the northern Netherlands
Location	Groningen
Date	17 th of June 2022
Version	Final
Author	Hugo Bertrand S4080831
Contact	h.m.bertrand@student.rug.nl
University	University of Groningen Faculty of Spatial Sciences Landleven 1 9747 AD Groningen
Supervisor	Sarah Mawhorter, Assistant Professor of Housing
Number of pages	23 (excl. appendices)
Word count	7023 (excl. appendices and references)

Abstract

In the context of an ever-growing demand for housing, this research considers the challenges/opportunities faced by TH adopters in the northern Netherland. The aim is to establish what factors have the most significant impact on Tiny House initiatives, and to highlight what can be improved. The research distinguishes between the following three major factors, namely the role of the municipality, the importance of communities, as well as the impact of location. To answer the research questions qualitative research methods were used, relying on in-depth interviews with 5 different Tiny House initiatives in the northern Netherlands. Findings include that municipalities play a crucial role, being instrumental in accessing land and allowing for some flexibility relating to building code compliance. Moreover, communities are highly influential as well, due to increased bargaining power and the sharing of amenities. The location turns out to be less significant, as initiatives usually get assigned a plot of land by the local authorities.

Table of contents

Colophon.....	2
Abstract.....	3
1. Introduction.....	5
1.1. Background.....	5
1.2. Problem statement.....	5
1.3. Thesis structure	6
2. Theoretical framework.....	6
2.1. Literature review	6
2.2. Conceptual model	8
2.3. Expectations	9
3. Methodology.....	9
3.1. Data collection instrument	9
3.2. Ethical considerations	9
3.3. Overview of cases to be analysed	10
3.3.1. Description of selected cases	10
Tiny House Westpark, Groningen	10
Special “Woongebiet” at Hoendiep 150, Groningen	10
Tiny House Woldwijk, Ten Boer	10
Kleiner Wonen in Berltsum, Waadhoeke.....	11
Tiny House Techum, Leeuwarden	11
3.4. Data analysis scheme	11
4. Results.....	12
4.1. Individual Tiny House adoption	12
4.2. Process of finding land.....	12
4.3. Community enabling processes	14
4.3.1. Community values	14
4.3.2. Community application process.....	15
4.4. Role of the Municipality	16
4.5. Financial considerations.....	18
5. Discussion.....	20
6. Conclusion	21
References.....	22
Appendix A : Semi-structured interview guide	23
Appendix B : Interview consent form.....	24
Appendix C : Interview code tree	25

1. Introduction

1.1. Background

Housing availability counts among the most prominent issues affecting modern society. There seems to be a chronic mismatch between the demand for housing and the available stock (Wetzstein, 2017). Consequently, many people struggle to find a suitable accommodation, especially more vulnerable demographics such as young adults, recent migrants or seniors (Pendall, Theodos and Franks, 2012). Moreover, the global discourse around climate change, has led to many individuals to make sustainability one of their primary considerations, when looking to settle. Another trend that can currently be observed, is the reduction of household size, with single-member households becoming increasingly prominent (UN, 2019). Among others, these contextual factors highlight a need to reconsider traditional housing arrangements. This presents an opportunity for housing alternatives and especially tiny houses, the main subject of this paper. However, municipal regulations and planning practices can make it difficult to build housing. This applies even more to alternative or new forms of housing where practices still haven't been fully established. Moreover, understanding housing alternatives and its underlying dynamics is highly relevant to planners, as the discipline has recently put a high emphasis on shaping environments in a sustainable manor due to increased societal pressure. Furthermore, there is limited research on tiny houses and the challenges/opportunities in adopting such a lifestyle, which highlights the relevance of this research.

1.2. Problem statement

This research aims is to get a deeper insight into what factors may complicate/facilitate the implementation of tiny house initiatives in a northern Dutch setting. Identifying the source of such factors is relevant, to developing an understanding of how to navigate the alternative housing environment. These factors are often highly contextual in nature, for example depending on local policies, therefore it is important to compare across different initiatives. The modern Tiny House movement has its origins in the US and has only recently made it to Europe, where the regulatory landscape is very different, tending to be stricter due to deeper running considerations (Lofstedt and Vogel, 2001), and may therefore complicate implementation.

To this end, the following research question and sub-questions are proposed:

- What challenges/opportunities define the northern Dutch tiny house environment?
 - What role do local municipal authorities play in the planning process of TH initiatives?
 - How can the influence of communities on Tiny House initiatives be understood?
 - How does location, relating to a rural/urban setting, affect TH initiatives?

1.3. Thesis structure

The thesis is divided into 6 chapters with sub-chapters. Chapter 2 covers the theoretical framework and the conceptual model. Chapter 3 covers the methodology, including data collection, ethical consideration, and case selection. The analysis of the results is included in chapter 4. Chapter 5 includes the discussion. Lastly, Chapter 6 includes the conclusion and answers the research questions.

2. Theoretical framework

2.1. Literature review

Small dwellings have been around for most of human history, however the emergence of the housing concept of ‘Tiny Houses’ is relatively recent. The modern movement can be traced back to the US in the 1990s. It was seen as a viable alternative for middle-class people, who appreciated the affordability of this type of dwelling but did not want to be associated with the negative image of living in an unfixed structure in a trailer park (Shearer and Burton, 2019). Moreover, it was also perceived as a way to protest against the predominant restrictive zoning laws and building codes (Shearer and Burton, 2019). Large sub-urban houses had long become the norm in the US, but the necessity/usefulness of these was increasingly put in question (Shearer et al., 2018). Furthermore, consciousness about the ongoing climate crisis also triggered a desire in people to live in a more sustainable manner (Crawford and Stephan, 2020). Another factor contributing to the relevance of tiny houses is decreasing household-sizes, and the accompanying increased demand for smaller dwellings (UN, 2019). Most importantly though, Shearer et al. (2018) found the affordability of tiny houses when compared to traditional houses was the largest driving factor recently.

In addition to highlighting the motivations for adopting a TH lifestyle, it is also important to outline the drawbacks of adopting this lifestyle. As with any alternative lifestyle, until it does not become the norm, most people will not find themselves appealed by the concept. The size of tiny houses, for instance, would be deemed too small for most people, as there is in general more desire to settle in a large house (Hamilton and Richard, 2009). Furthermore, one can assume that tiny houses do not retain as much value over time as traditional houses, and as such, might not be perceived as a risky asset by interested parties (Keable, 2017). Another aspect to be noted, tiny houses are suboptimal for certain household configurations. For instance, large families might find sharing such a limited space to be suffocating and inhibiting privacy and personal space (Anson, 2014)

Next up, it is important to set a technical definition for what will be considered as a tiny house (TH) in the scope of this research. Generally speaking, there is no precise consensus definition to delineate what exactly constitutes a tiny house, many sources define them differently. However, the most commonly used definitions in academic literature, which will also be applied in this research, assume the following when talking about tiny houses:

- Stand-alone structure of fewer than 37 m² (Mutter, 2013; Keable, 2017; ICC 2018)
- Intended for long-term residential purposes (Carras, 2019)
- Most commonly built on trailer beds, but possibility of permanent types (Keable, 2017)

Furthermore, it is important to understand the role municipalities play. TH initiatives as stated above, are a fairly new phenomenon, and therefore regulations relating to associated projects often fall within a grey area, with limited preceding cases to set an example. Given the lack of precedent for TH initiatives, a higher degree of flexibility by public authorities facilitates such developments. Seeing as most TH initiatives are structured from the bottom-up, municipal authorities should focus on acting as an enabler, as opposed to taking an active and steering role, that would undermine the communities initiative (Buitelaar et al., 2014). Moreover, Gielen et al (2010) argue that flexible non-linear planning on the behalf of the public authorities, giving more space to initiatives, maximizes the capture of public value of a development, which further highlights the importance of such planning practices. In the Netherlands these spatial planning practices are characterized by a subsidiarity principle where general decisions are taken on a national level, then relegated to the provincial level, then finalized and applied by the municipalities according to their zoning plans (housing, industry, offices, shops, recreation,...)(Vermeulen and Rouwendal, 2007).

Besides the municipalities, TH initiatives are characterized by a tendency to cluster together in communities, so-called TH villages. This allows the involved to tackle issues collectively. The villages often rely on systems of shared beliefs, such as putting a high value on sustainability and/or self-sufficiency, as highlighted by Ford et al. (2017). Inhabitants get assigned a small plot in the “village” to place their tinies on. Common amenities are also usually present, such as community halls or shared gardens. Living in such a situation requires some degree of cooperation and decision-making, to this end most villages have put some type of decision-making system in place, most commonly democratically based. Voting is also crucial for the process of admission into a community, to make sure that new tenants match the philosophy of the village.

As with any development, TH initiatives are also heavily affected by land availability and its ensuing land prices. The construction of the Tiny Houses may be relatively affordable when compared to traditional houses. However, TH initiatives are equally affected by land prices, so this figures among the most important considerations for prospective buyers (Keable, 2017). The proximity to urban centres, with a higher density of amenities, is a key influence behind the higher valuation of urban space. This accessibility Value for rural areas is much lower, therefore its mean land prices as well (Brigham, 1965). One way to alleviate the pressure on urban land would be for municipalities to embrace the idea of accessory dwelling units, added to existing plots (Geffner, 2018). Tiny Houses could serve this purpose and help to increase the housing stock in cities.

2.2. Conceptual model

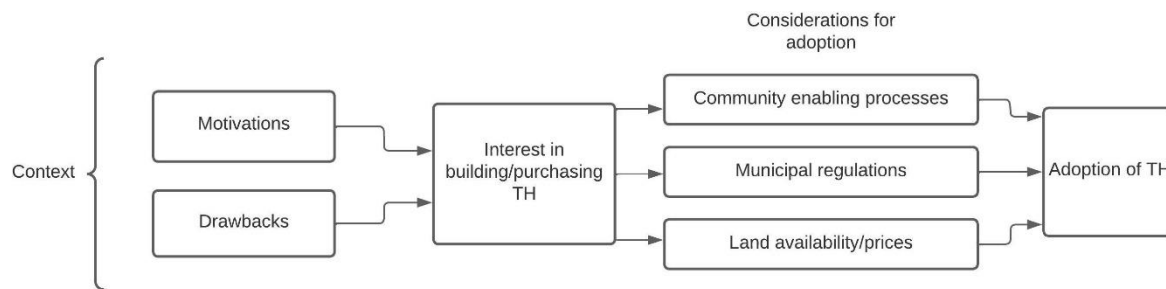


Figure 1: Conceptual model

The above conceptual model (fig.1) is proposed as a contextual process, prospective interested people must go through in their quest of acquiring/settling in a TH. The beginning of the process is marked by general considerations, where motivations and drawbacks are distinguished. Motivations are understood as non-mutually exclusive factors, such as a desire for increased sustainability, a downsizing of needed housing-capacity, as well as the appeal of the relatively affordable TH model, among others. Drawbacks include, worries that the dwelling might be too small but also elements like real estate value retention. This eventually culminates in an expressed desire to build/purchase a TH. At this stage, more intensive consideration needs to be given to barriers complicating adoption. Here, three types are distinguished. Community enabling processes are understood as the social/communal barriers. Included among these are elements such as the admission into pre-existing Tiny House communities, but also negative perceptions of local communities and conflicts that may arise from that. Municipal regulations are seen as another important consideration, as they can make or break Tiny House initiatives. Municipalities here can take the role of an enabler/facilitator but also as an inhibitor/deterrent. The degree to which policies are enforced and exceptions made is determined by the position of the Municipality. Furthermore, the proposed location is also crucial to consider relating to land prices/availability, Settling in an urban or rural context respectively, comes with its own set of challenges/opportunities. The extent of these considerations combined, determines the difficulty of adopting a tiny house lifestyle, and informs prospective interested parties about its feasibility in their context. The same process applies independently of context, so prospective TH buyers make these considerations independent of location they choose to settle. The 3 categories of considerations include the elements outlined in the problem statement and discussed in the literature review.

2.3. Expectations

I expect that the TH environment in the Netherlands is going to present several serious challenges. This would mainly be attributed to the fact that the TH movement in the Netherlands is quite recent, and has not gained mainstream traction yet. Community-wise, there are only a limited number of pre-existing projects, which might make it harder to implement the lifestyle change. Say for instance compared with the US, where the TH industry is much more established, it might be hard finding specialized professional services, such as builders. When it comes to legal factors, given the limited amount of precedent within the Netherlands, it might take a lot of time and negotiations with local authorities to get a project approved and running. The highly regulatory and standardized nature of housing and planning, materializing itself in rows of semi-detached houses, contrasts strongly with the idea of TH communities. A further hypothesis is that finding available land in the Netherlands is very challenging, as urban areas are laid out with density in mind and agricultural areas are extensively used, making for very limited land availability, which in turn could impact costs considerably.

3. Methodology

3.1. Data collection instrument

In order to answer the questions raised above, this paper relies predominantly on qualitative research methods. A number of TH initiatives/cases in the Netherlands, spanning different contexts, were selected, in order to be able to draw a generalisable conclusion. Once the initiatives to be approached were clear, they were approached with an interview request. Following a positive response, I conducted a semi-structured interview, which allowed for increased flexibility during the dialogues. Interviews were done in person, or remotely through the use software like Zoom. The interviews began with general questions, before moving on to specific questions relating to the planning process, difficulties encountered, community perception as well as questions on the economic considerations. Since this is a qualitative analysis, the quality of the data depends on the quality of the answers given by the respondents. That being said, with the use of a semi-structured interview guide all relevant themes were covered in the interviews, which should provide a standard of quality.

3.2. Ethical considerations

The highest standard of ethical considerations is used throughout this research, especially relating to the gestion of personal information given by interviewees. All participants were thoroughly informed about the purpose and extent of their participation. Participants were asked to sign a consent form (see Appendix B) stating that participation is purely voluntary, that they agreed to the interview being recorded, and that the data derived from it is to be used in this research. Furthermore, the use of data was subjected to standard EU and RUG policies. Individual names were changed for placeholders, so as to withhold any personal ties. The names of the initiatives as a whole however are openly disclosed

and discussed. Data is stored on the university cloud. Moreover, the participants, if desired, will be sent the resulting research paper.

3.3. Overview of cases to be analysed

Given that the proposed thesis is a comparative case study of tiny house initiatives in the northern Netherlands, a relatively diverse selection of cases was made. The analysis is based predominantly on qualitative research methods. To this extent, it would be interesting to study initiatives in varying contexts, for instance, ranking differently on urban/rural scale. The selection process involved looking up all the initiatives present in the Northern Netherlands, focussing on the provinces of Friesland and Groningen. Once a list was established, all the initiatives were approached, using publicly available contact information, and an interview request was extended. In total, 9 initiatives in the Northern Netherlands were identified and approached, out of which half responded.

3.3.1. Description of selected cases

Tiny House Westpark, Groningen

This community is located on the western edge of the municipality of Groningen. The community only materialized recently in 2020. It is made up of around 30 plots of around 50 sqm with various types of Tiny Houses occupying them. Houses vary in quality and type, values ranging from 5.000 Euros to upwards of 100.000 Euros. The initiative got a 10 year lease on the property by the municipality, as it located upon mildly contaminated soil. After the completion of the 10 year lease, the initiatives rights to the land are up for re-evaluation.

Special “Woongebiet” at Hoendiep 150, Groningen

This community is located on the western edge of the municipality of Groningen as well, close to Tiny House Westpark. It is made up of around 15 dwellings, on plots of varying sizes. There is a variety of dwellings, ranging from caravans, to traditional Tiny Houses, with various types of alternative dwelling types in between. The initiative celebrated its 20 anniversary in 2021, making it quite established. This community is classified as a special “Woongebiet” , i.e. living area, by the municipality. It is fully owned by the municipality, who rents the plots and provides utilities to the tenants.

Tiny House Woldwijk, Ten Boer

This community is located in Ten Boer, a small village to the northeast of Groningen, that recently got integrated into the Groningen Municipality. This initiative is part of a larger project called “Landjegoed”. The whole project counts around 40 alternative dwellings, 12 of those being located in the Tiny House part. The project has a strong focus on communal living and sustainability. The initiative got its start in 2017, when I got approved by an indebted city council and was awarded a

10-year lease on the land. After the 10 years, the project rights to use the land will be up for re-evaluation.

Kleiner Wonen in Berltsum, Waadhoeke

This project is located in the small rural village of Berltsum in Western Friesland. Currently, it still has not entered the construction phase, but all the plans have recently been approved by the city council. Once completed, it should contain 12 housing units. The idea for the project came up in 2018 and was envisaged as a way to provide better and more affordable quality housing for the elderly in the community.

Tiny House Techum, Leeuwarden

This project is located on the southern edge of the municipality of Leeuwarden. The project started in 2017 and as of 2022 is almost fully realized. There are 10 plots of land with houses of max 40 m² or 150 m³. Most of them were built on traditional foundations. The initiative was spearheaded by the local government, who see it as an experiment in alternative housing. Therefore the land is leased to the tenants for an undisclosed amount of time.

3.4. Data analysis scheme

Once the data collection is done, the interviews are then transcribed and codified using a coding tree (see Appendix C), to highlight reoccurring answers, with help of Atlas.ti software. The cases listed hereabove will be the subject of a thematic comparative analysis. The factors named in the sub-questions and discussed in the theoretical framework (see figure 1), namely community influence, policy landscapes as well as the impact of their location will be considered for each of the cases. This will be achieved mostly through the analysis of the interview results, policies ,and context-relevant literature. Once the cases are thoroughly studied and listed, they will be compared using the categories outlined, to answer the aforementioned research question and draw conclusions.

4. Results

4.1. Individual Tiny House adoption

Before starting the data collection process, it was supposed that a large part of tiny house initiatives would be individual ones. Usually realized by a single person or a couple with strong motivations. Setting out individually would entail many hard steps, which respondents confirmed. Firstly, finding land for an individual project, in the already densely settled and regulated Netherlands is extremely hard. There is little room available in cities for individual projects and the countryside is extensively utilized and regulated for agricultural purposes. Even if one manages to find a piece of land, it often comes with strings attached, such as particular regulations. For instance, a contractor having rights to develop it. When asked how feasible individual adaption is within the Dutch context one of the respondents replied the following :

“And we were like, oh, that's easy. We'll just buy a plot of land. And then we built something for ourselves. But then we noticed that, if you buy a plot of land, there is already most of the time [...] a contractor on the spot of land”

Another respondent added when asked about their prior experience once having found an available piece of land, that this had also already been targeted by a project developer who could outbid them considerably. This highlights that space is a highly contested commodity in the Netherlands, and oftentimes inaccessible for people aiming to lead an alternative, affordable lifestyle. These personal accounts are exemplary for the situation as an independent TH adopter and highlight the need for interested people to come together in specialized communities, otherwise referred to as TH villages. As a project, with several of people involved, the bargaining power with local authorities is much improved, and stronger cases for land utilization can be made.

4.2. Process of finding land

Now that it's been established that individual tiny house adoption within the Netherlands is extremely challenging, especially relating to finding suitable land, it is important to determine how the different communities succeeded. One thing all of the interviewed initiatives have in common, is that they were attributed their land, through a process of pleas and negotiations with the local authorities. The plots the initiatives were awarded in the end have one commonality, which is that they all exist on what was previously seen as unusable land, from a traditional planning/zoning perspective. The reasons the different plots were unused vary though. Respondents from TH Westpark were assigned a piece of land on the outskirts of Groningen that was contaminated with waste products from construction and

had the designation of a park, therefore the municipality could not further a major development on the site. In the case of Hoendiep 150, members of a previously dissolved squat pressured multiple parties within the municipality, which assigned them a plot where “there was nothing here except this forest over there, for the rest it was just a meadow” as indicated by the interviewees. The representative for the initiative in Berltsum said the following about the awarded land :

“There was a school there before actually, and we got a new school in the village. So it kind of became a park, with a lot of rubbish, and it wasn't the most pleasant place in the village.”

Along similar lines, TH Techum was assigned to a piece of unproductive land on the outskirts of a residential neighbourhood in Leeuwarden. Finally, TH Woldwijk benefitted from a particular situation where the old municipality of Ten Boer was planning a big development on the land in question but “then a financial crisis (2008) came and they didn't have the money the financial support. And then, they had a lot of debts”, which resulted in the municipality abandoning the planned development and being open to the TH initiative to at least guarantee some returns.

The examples above demonstrate that Tiny House initiatives are at the very least seen by municipalities as good placeholders on otherwise unproductive land in the studied municipalities. Although it should be noted that in the case of Tiny House Westpark and Tiny House Woldwijk, they are only temporary placeholders, having been awarded 10-year leases on the land they occupy. After these 10 years, the initiatives' right to the land, will be up for re-evaluation, which can be a source of stress for inhabitants. This can be stressful because it puts pressure on the communities to live up to the government's expectations, relating to building standards for instance. Interviewees at both the affected communities indicated this uncertainty was a major drawback. At Westpark the representative commented the following when asked about the 10-year lease situation :

“We hope and we kind of expect that we can stay longer than the 10 years. But it depends on how we behave. Like if the municipalities around are happy with us and also what the political wind is at the time”.

That being noted, there is a fear among the initiatives that among the high demand for land, the municipality might find a more worthwhile use for the land, such as the construction of apartments, which would result in their lease not being renewed.

However, overall enthusiasm for this type of project is growing in the public eye, as suggested by the interviewee at Westpark: “[...] But I do feel lot changing now, there's a lot of developments going on and we get a lot of emails from other municipalities as well”. This emerging public interest should lead to an overall improvement of the situation in the coming years and move Tiny Houses out of the grey zone they occupy now, once there are enough precedents.

4.3. Community enabling processes

4.3.1. Community values

Communities play a central role in Tiny House living in the Netherlands as established, especially when it comes to accessing land, therefore it is important to understand their characteristics. The interviews highlighted that the communities are usually based on shared ideals/beliefs, to which every member is asked to adhere . One of the recurring ideals is that buildings have to be owner-occupied, and cannot, for instance, be rented out as vacation homes or sold for profit. All of the approached initiatives explicitly stipulated in their clauses that it is forbidden to rent out houses and make a profit from them.

As established in the literature review, sustainability figures among the most important motivations for prospective tiny house buyers, this also extends to the communities. This can entail being energy self-sufficient, not relying on non-renewable resources, using sound sustainably sourced materials in construction, growing food on-site, using alternative methods to handle waste, etc. Kleiner Wonen in Berltsum commented this on the subject:

“When we started we said we wanted it to be green, neutral when it comes to energy. So all those kinds of subjects are part of the plan these days”

Tied in with sustainability is community participation, which is highly valued in the studied initiatives. This can take on various forms, such as helping a fellow neighbour out with construction, participating in community events, and involvement in communal expansion, but also just interacting with your neighbours. One respondent noted on the subject:

“We were interested in[...] the community lifestyle and a bit more like sharing with each other. And for example, here (current flat), we don't even know our neighbors. [...] There we can

borrow it from each other. And, everybody, when somebody's sick, somebody comes over and asks if he wants some groceries. So it's really social”

Another central element to the philosophy of these communities was found to be affordability. An interviewee highlighted: “It should be affordable for the people who cannot afford that much”. Most people living in this type of arrangement cannot be described as affluent, and therefore don't have a lot of money to spend. So, when it comes to doing communal projects, such as investing in a new sewage line, for example, people are more likely to go with minimal, cheap solutions. This usually entails the use of simple materials as well as labouring by the community members. Another aspect, which came up, is that constructing houses that are considerably more expensive/valuable, on project land, can result in some conflicts, as highlighted by the following comments by two of the respondents from Hoendiep 150:

“It's supposed to be a place for people with little money. And now you put a house there with maybe, I don't know, 50, 60 thousands worth of wood and stuff in there. “

4.3.2. Community application process

For all of the studied TH initiatives it should be noted that there is surplus demand for plots. This could be tied to the general housing shortage in the Netherlands but also to a growing interest in this alternative way of living. So interested people usually get assigned to a waiting list, which can be a frustrating, as well as off-putting, experience when looking to settle, as suggested by a respondent:

“All the places we found were like, you're welcome to drop by, but there's a waiting list of at least a hundred people. And we were not willing to wait for years to get a spot just wanted to live somewhere.”

So, this surplus demand creates the need for a selection process, to work down the list of 100s of applicants to find the best suitors. This process varies between initiatives, but usually includes elements like writing a motivation letter, submitting building plans, providing financial details, but also multiple rounds of interviews and votes, to see if the applicants match the selection criteria and community philosophy. The following quotes cover the subjective experiences of some of the different respondents had with this process.

The respondent at Westpark, also acting as coordinator, had this to say on the subject:

“[...] we tried, during the interviews, like we need [...] people that, are willing to get their hands dirty, do some work and also nice social people and diverse group of people. And I think worked out pretty well.”

Respondents at Hoendiep 150, mentioned the following about their application process :

“Well we had to get approved by the community, that we were allowed to live here. And this happened during corona times, so this made the situation a bit weird and awkward, even weirder than usual. We were in a big spread out circle of chairs and the people weren't asking us many questions, we were feeling like cattle. Then we had to be funny in a way, present ourselves, as people, we are nice people, we want to live here. It was really terrible, I don't know how we made it. “

The people at Tiny House Woldwijk indicated the following when asked about the application process:

“To be honest, I don't know [...] why they picked us. I think they were checking a bit like, how big you're are on sustainability. So the plans and the motivation letter that you handed in. We also had to tell them a bit about our financial plan and about our building plan. So they also want to check out if it was really yeah.[...]. Reasonable plan [...]. So that's what they checked. And also the community if you were willing to participate in community, of course [...].”

It is clear from the responses that the selection processes can be quite complex and stressful. The odds of being admitted are very slim and depend a lot on how the current tenants perceive you and how well you match the community values. Therefore this is indeed one of the major hurdles to Tiny House living and can be acknowledged as one of the major barriers to adoption.

4.4. Role of the Municipality

As previously established, municipalities play a central role in finding and getting the rights to land in the Dutch context. Besides that, the role the municipality plays depends a lot on the initiative in question. For instance, for the initiatives on 10-year leases, namely Tiny House Woldwijk and Westpark, the local government plays more the role of an enabler, imposing some simple rules and guidelines but overall giving the residents a lot of flexibility, as the following comment by Tiny House Westpark confirms: “We had a lot of freedom building how we wanted, if we would stick to the base rules”. For the special “Woongebiet” at Hoendiep 150 and TH Techum, which both pay rent directly to

the municipality, the public authorities are much more involved, taking up a more controlling role. Checking regularly on the state of the community and being very strict on permits, as indicated by the interviewee at Hoendiep:

“Like I said, you have to have a permit for building[...], every time you have to ask permits, but it costs money [...]. And then they come here cause they want, they also fly around and make photos.”

Moreover, it should be added that once the community had gone through the selection process and settled on a suitable candidate, the candidate themselves don't have to interact much with the municipality as indicated by the following statement from an interviewee at Woldwijk:

“There was not a lot of bureaucracy only that we had to be picked [...].”

Furthermore, it is important to keep in mind that the attitude municipal authorities adopt towards these initiatives depends considerably on the current political climate of the context in question. Most of the projects studied were only approved because some parties fought for their interest. The following comment by Tiny House Westpark serves as a good example of this:

“It was quite a hassle back then cause the municipality just simply said we don't have space for that. All space is used. We like the initiative, but it's not gonna happen, but they kept on pushing and they looked into all the rules and regulations. And at certain point they found some, council members on their side. And they started working on it as well. And that's when it all started rolling. Like as soon as it reaches the politics.”

This goes both ways, however, as depending on the make-up of the municipal council, “ there could be a moment, where they deem this too expensive and what we do here uninteresting”, as hinted by an interviewee from Hoendiep. This suggests that there is a certain level of volatility to be expected in how the municipality acts towards these initiatives, based on what party has the political majority on the city council.

Independently of the exact role municipality plays, all initiatives indicated had to follow some basic requirements and demands set up by the municipality. These are usually quite basic and involve elements like a connection to the sewage system, size restrictions, and construction safety. One respondent indicated the following about the subject:

“There were some [...] demands the municipality made. Like this is the, the max size of the house. This is kind of the ideas you should strive toward living on a park, biodiversity., ecosystems, sustainable building, stuff like that. And of course the demand for sewer system”

But apart from the basic demands and requirements, through multiple interviews, it became clear that the initiatives are given a fair amount of flexibility and that controls are rare if they happen at all. Once the initial documentation is handed in and approved, respondents indicated that there was “hardly any checking on the rules”. A respondent from TH Woldwijk even admitted to not really checking for compliance with the building codes himself, which goes to show that municipalities are not very strict on those. Similarly, at TH Techum some residents are openly challenging regulations, by, for instance, constructing unapproved porches or annexes to their houses, which the coordinator indicated the municipality was aware of but unwilling to enforce. The coordinator at TH Techum gave the following reasoning for it :

“So this is sort of a gray area, will we enforce it, or is it acceptable? Uh, we don't have guidelines for that. So we just sort of see how it goes, because first it's still an experiment [...] . It has to go badly wrong, before we will enforce”

Another comparable situation also arose at TH Woldwijk, where the community was experiencing issues with the contents of their septic tank leaking into the ground. Following this, the municipality was pushing the initiative to connect to the main sewage line but ended up compromising and tolerating the inhabitants composting human waste, even though it's technically illegal country-wide. So it is interesting to note that municipalities are willing to turn a blind eye to some national regulations and make some exceptions. Therefore, adherence to building codes and regulations cannot be seen as one of the major barriers to TH adoption in the Netherlands.

4.5. Financial considerations

Throughout almost all the interviews, the overall cost of constructing a TH did not arise as a prevalent issue. Except for Kleiner Wonen in Berltsum, where finished houses are up for sale, people living at the other TH initiatives had to pay relatively small amounts of rent, mostly for utilities, numbering around 200 Euros. Some mentioned that they had to pay some amount for the communal infrastructure, be it upfront in a single payment or as part of their monthly payments. That being said prices for TH can vary considerably, depending on how much you are willing to invest in construction. The respondent from Tiny House Westpark had the following to say on that:

“The cost for the houses. It really differs. Like we build this one for 20,000. There is some houses made by professional builders that are like 80000, 90,000. But there's also some houses that for 10, 15,000 max”

Following this thought, it makes sense to consider financing options for TH. Accessing mortgages for TH is extremely challenging, as banks have very high standards to ensure their investment is worthwhile and durable. This translated into banks being very strict about the materials used in construction and demanding a plethora of certificates for elements such as sustainability. Furthermore, banks don't recognize TH as houses if they are on trailers, instead designating them as personal properties, for which personal loans can be requested, but these usually come with much higher interest rates when compared to mortgages. As a consequence, the resulting builds usually are limited by one's own assets, as well as money borrowed from friends and family. The following statement from one of the respondents confirms this:

“Most people don't really have the option to go expensive because you can't get much loans for it. It's really just the money you have or loan from friends. You can't get a, what's the word, hypotheek?”

TH Techum and Kleiner Wonen in Berltsum however, with help of municipal representation, as well as TH on solid foundations and following the building codes very strictly, managed to negotiate mortgages with local banks.

TH are an “atypical” financial asset, that historically doesn't appreciate much in value when compared to traditional houses. When confronted with this, the interviewees didn't express that it worries them a lot. The interviewee from Westpark put it like this:

“I don't really, really care about the value. We build it in the way that we can remove it after 10 years again. And if it falls apart after 10 years, then it was worth it as well.”

Most of the interviewees felt similarly when asked about this, stating that they weren't interested in making money from the house appreciating over time. Instead, the plan was generally to live as long as possible in their “affordably” constructed house, saving on rent while doing so. This allows the residents to create savings, which combined with the eventual sale of their TH down the line, could allow them to relocate elsewhere or at the very least guarantee financial security.

Concerning taxation of TH, given the very recent rise in popularity of the movement and the lack of precedent, authorities are unsure about how to tax them. This can lead to issues, as was the case at TH Westpark, where similar houses were valued very differently by different public officials, which resulted in some residents feeling unfairly taxed and protesting. At TH Woldwijk the respondent said that the tax authorities openly admitted to not being sure how to treat them. Questions like if the TH owners can be considered traditional “homeowners” also pose issues. These types of issues should get solved as more TH communities are established and a precedent is set, however.

A good example of this is the situation with insurance, which was previously notoriously hard to access for TH in the Netherlands. A respondent indicated that when she started informing herself about insurance possibilities at the beginning of the construction process in 2019, she couldn't find a suitable insurer, but that when she recently checked again, a specialized insurer for TH was available.

5. Discussion

The results from this research, looking into the barriers to TH adoption, don't differ drastically from the expectations. Among the confirmed expectations, the limited precedent is indeed a large issue as authorities don't always know how to treat TH and their residents. Negotiations with municipalities are also highly determining for initiatives to achieve their ambitions. The limited availability of land also figured among the most common issues as expected. There are two surprising findings to be considered, however. Firstly, the degree to which municipalities are willing to bend the building codes/requirements is much greater than expected. Secondly, the importance of organizing a community was highlighted, as it turns out Tiny House adoption by oneself is nigh impossible in the Netherlands.

Furthermore, it is interesting to note the role of TH in the Netherlands, mostly as temporary placeholders on otherwise unusable/unattractive land for other types of developments. This might present an area for considerable growth of the movement if organized on a national scale.

A factor that proved less influential than set out in the framework is location, relating to rural/urban settings. Before analysing the results, it was expected that it is much easier to adopt a TH in a rural setting. Initiatives in both contexts didn't vary considerably.

About the overall research approach, the qualitative approach resulted in deep insights, but the small sample size together with the highly contextual nature of the topic, might not lead to the most generalizable results. Moreover, during the data collection process, dynamics around the financing of the house became a more important factor than expected. This would figure more prominently in the framework if the research would be repeated.

6. Conclusion

In conclusion, the northern Dutch TH environment is faced with a number of challenges, but also presents a lot of room for growth. Local municipal authorities are highly important for Tiny House adoption. They are the main source of land made available to initiatives. Moreover, they act as enablers for the most part, not actively steering the projects, but assisting the initiatives through provision of services and through enforcing building regulations very loosely. The political context is also key, as a favourable council will make implementation of TH considerably easier. The influence of communities on TH initiatives however, cannot be understated. Organising a community is really important to get bargaining power with the local authorities, and overall simply the process considerably, relating to building and sharing basic amenities. Location turns out to be less significant of a factor than initially expected, partially due to the fact that initiatives usually get assigned to an unused piece of land, to act as temporary placeholders.

As to how applicable this research is to other contexts, it should be relevant to most of the Netherlands. Municipalities all over the country should be able to follow similar patterns of action. The financing in the Northern Netherlands might be slightly cheaper than in the more densely settled areas such as the Randstad. Community principles overserved in the northern Netherlands should also be relevant elsewhere.

With that being said, it is important to consider the limitations of this research. The sample size of 5 initiatives in the northern Netherlands is small and the scope of the research could be expanded to the national level. Moreover, all interviewees had already succeed in their TH adoption to varying degrees, which might skew the results. Although finding people who failed in their TH would be challenging, it might offer deeper insights into the barriers of TH adoption.

For future research on this topic, a general qualitative analysis, with a large sample size, covering all the elements touched upon in this research, could be interesting, and provide a better general overview of the situation regarding these barriers to adoption nationwide. Furthermore, looking deeper into the extent to which local authorities are willing to bend the rules, as well if there are any correlations between this and political party associations, could prove very insightful.

The insights gained from this research highlight important factors for prospective TH adopters as well as planning authorities to consider. It shows that there is general lack of precedent when it comes to these initiatives, something public authorities should aim to change. Areas to focus on include, the use of TH as temporary placeholders and the importance of allowing for some flexibility, especially with alternative housing arrangements like this.

References

- Anson, A., 2014. "The World is my Backyard": Romanticization, Thoreauvian Rhetoric, and Constructive Confrontation in the Tiny House Movement. From Sustainable to Resilient Cities: Global Concerns and Urban Efforts, pp.289-313.
- Brigham, E., 1965. The Determinants of Residential Land Values. *Land Economics*, 41(4), p.325.
- Buitelaar, E., Galle, M. and Sorel, N., 2014. Chapter 12: The public planning of private planning: an analysis of controlled spontaneity in the Netherlands.
- Carras, M., 2019. 'Tiny house, big impact?' : an investigation into the 'rise' of the Tiny Home Lifestyle (THL) in the United States. St Andrews Research Repository,.
- Crawford, R. and Stephan, A., 2020. Tiny house, tiny footprint? The potential for tiny houses to reduce residential greenhouse gas emissions. *IOP Conference Series: Earth and Environmental Science*, 588(2), p.022073.
- Ford, J. and Gomez-Lanier, L., 2017. Are Tiny Homes Here to Stay? A Review of Literature on the Tiny House Movement. *Family and Consumer Sciences Research Journal*, 45(4), pp.394-405.
- Geffner, T., 2018. Towards a Smaller Housing Paradigm: A Literature Review of Accessory Dwelling Units and Micro Studios.
- Hamilton, C. and Richard, D., 2009. *Affluenza*. Sydney: Allen & Unwin Pty Ltd.
- Huisman, C. and Mulder, C., 2020. Insecure tenure in Amsterdam: who rents with a temporary lease, and why? A baseline from 2015. *Housing Studies*, pp.1-27.
- United Nations, Department of Economic and Social Affairs, Population Division ,2019., Patterns and trends in household size and composition: Evidence from a United Nations dataset. (ST/ESA/SER.A/433).
- Mutter, A., 2013. *Growing Tiny Houses: Motivations and Opportunities for Expansion Through Niche Markets*. Lund University
- Keable, E. 2017., *Building on the Tiny House Movement: A Viable Solution to Meet Affordable Housing Needs*. *Journal of law & public policy*. Volume 11. Issue 2
- Lofstedt, R. and Vogel, D., 2001. The Changing Character of Regulation: A Comparison of Europe and the United States. *Risk Analysis*, 21(3), pp.399-416.
- Pendall, R., Theodos, B. and Franks, K., 2012. Vulnerable people, precarious housing, and regional resilience: an exploratory analysis. *Housing Policy Debate*, 22(2), pp.271-296.
- Ruiters, J., 2020. *Tiny Houses as a Solution for Urban Planning Issues: A Qualitative Study on Dutch Tiny House Initiatives and their Potential Function in Tackling Urban Planning Issues*. - Student Theses Faculty Spatial Sciences. [online] Frw.studenttheses.ub.rug.nl. Available at: <<https://frw.studenttheses.ub.rug.nl/3362/>> [Accessed 17 February 2022].
- Shearer, H. and Burton, P., 2018. Towards a Typology of Tiny Houses. *Housing, Theory and Society*, 36(3), pp.298-318.
- Vermeulen, W. and Rouwendal, J., 2007. Housing Supply and Land Use Regulation in the Netherlands. *SSRN Electronic Journal*,.
- Wetzstein, S., 2017. The global urban housing affordability crisis. *Urban Studies*, 54(14), pp.3159-3177.

Appendix A : Semi-structured interview guide

General questions

What is your role in this project?

How did the project idea come about?

Why did you choose to build on this location?

In your opinion, what are some of the major drawbacks of tiny house adoption?

In your opinion, what are some of the major advantages of tiny house adoption?

Policy questions

Can you walk me through the timeline of the formal planning process?

To what extent were public authorities i.e. the municipality involved?

Did you have to meet any project wide requirements? (sewage, power, ...)

How strict is the building code for individual units

Are there any unresolved issues?

Do you think the process could be easily replicated elsewhere in the Netherlands

Social questions

Who are your neighbours?

Did you run into any issues with existing surrounding communities or land-uses?

Was it challenging to get a community going?

In your opinion, how feasible is individual tiny house implementation?

How do people in your life react to TH initiatives and movement?

Location/financial questions

What is the average cost of setting up here?

Were there any major unforeseen expenses?

Are building's owner occupied, and if so why is that a preference?

How do you think the real estate value will evolve over time?

What is your situation with insurance?

Appendix B : Interview consent form

I, signed below, agree to participate in the research project led by Hugo Bertrand from the Rijksuniversiteit Groningen. The purpose of this document is to specify the terms of my participation in the project through being interviewed.

1. I have been given sufficient information about the research project. The purpose and the extent of my participation as an interviewee in this project has been explained to me and is clear.
2. My participation as a interviewee in this project is voluntary. There is no explicit or implicit coercion whatsoever to participate.
3. Participation involves being interviewed by Hugo Bertrand, within the context of his bachelor project. The interview will last approximately 20 minutes. I allow the researcher to take written notes during the interview. I also may allow the audio recording of the interview and its further transcription.
4. I have the right to not answer any questions. If I feel uncomfortable during the interview session, I have the right to withdraw from the interview.
5. I have been given the explicit guarantees that, if I wish so, the researcher will not identify me by name in any of the reports, using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure.
6. I understand that all subsequent use of data and records will be subjected to standard data use policies of the RUG and EU.
7. I have read and understood the points and statements of this form. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study
8. I have been given a copy of this consent form co-signed by the interviewer

Participant's signature Date

Researcher's signature Date

Appendix C : Interview code tree

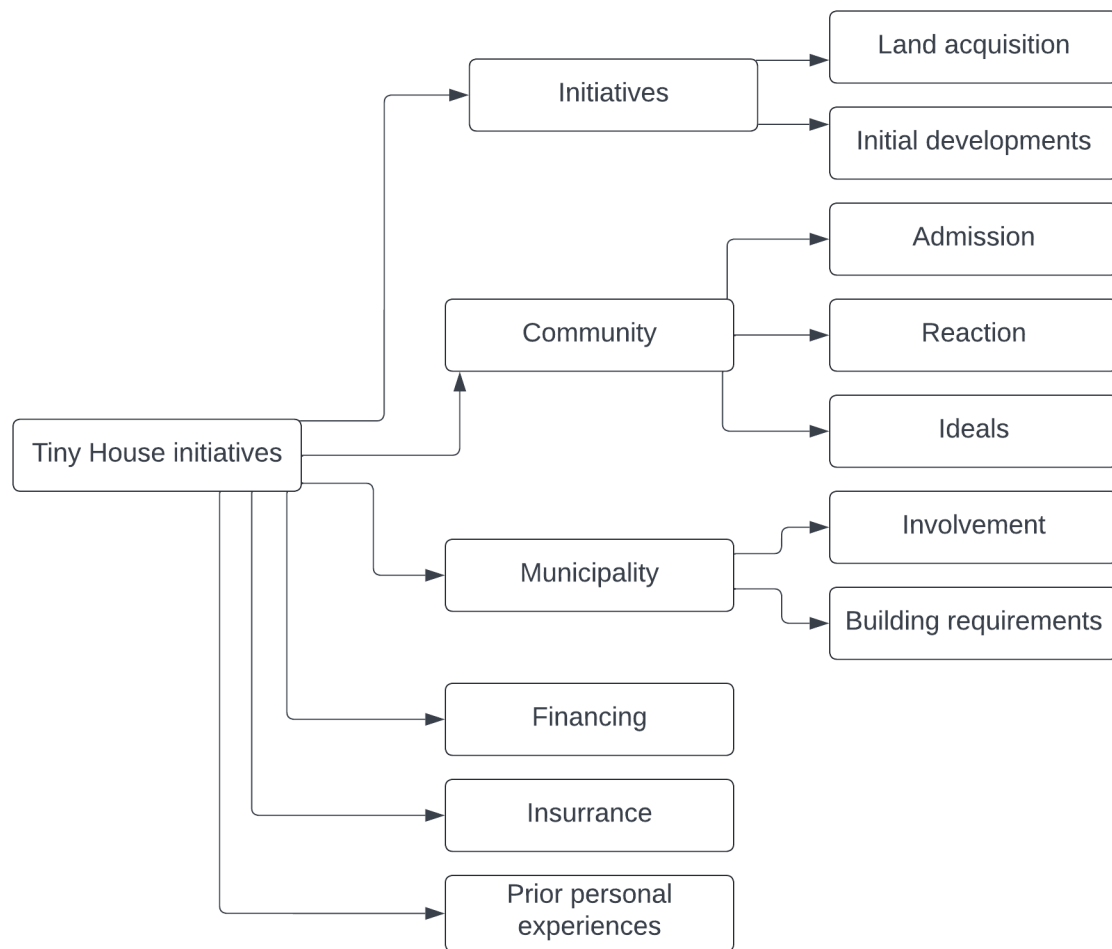


Figure 2 : Interview code tree