Competing Perspectives on the Future of the Oostpolder

The political dynamics that enable and constrain the expansion plans for the Eemshaven in Groningen

Thesis MSc. International Development Studies

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Photo frontpage:
Drone photo - Eemshaven and Oostpolder
in collaboration with Martin Postmus

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Abstract

After decades of gas extraction and the need for climate change mitigation, The Province of Groningen and Municipality Het Hogeland want to expand the Eemshaven into the Oostpolder to create a green business park. With seed-potato farmers currently owning the land and citizens living near the Oostpolder, different social groups are facing property and land-use change. With many other actors involved, competing perspectives create different political dynamics around the dominant project of expansion. Therefore, this study investigates 'what political dynamics enable and constrain the dominant expansion plans for the Eemshaven in Groningen?'. This is done according to the six dimensions of the Resource Property Question of Alonso-Fradejas (2021), which research the different perspectives of property. Participant observations and secondary data were used, next to the semi-structured interviews with 15 participants to give an answer to the sub- and main questions.

The analysis showed that the government claims the property mainly due to economic objectives that must be met, and sees the property as public property whereby citizens are invited to participate in the design of the area. Farmers, citizens, and environmental organizations have other perspectives on the six dimensions. Although farmers see the property as private, some farmers change the political dynamic by accepting the financial compensation and leaving, which enables the expansion of the project. Environmental organizations, farmers, and citizens have in common that they claim the property by pushing for alternatives and compensation for the main project, such as investing in the villages and strict environmental terms and conditions. However, due to changing laws and trust issues, the perspective of some accommodators switch to being a challenger of the project.

This study concludes that the political dynamic with its competing perspectives of different social groups, enables the government to expand the Eemshaven as a "resource rush" behind climate change mitigation and sustainable transitions. Farmers, citizens, and environmental organizations only constrain the project by challenging and accommodating the question of property. However, due to a lack of procedural justice, accommodating and challenging the project is so far not constraining the dominant project. Creating acceptance is therefore far away, and not receiving any benefit of recognition is causing only more feelings of injustice, which is influenced the most by geographical and historical-institutional factors.

Acknowledgments

After my first year at Utrecht University for my pre-master Human Geography, I dived into the literature on the green energy transition. Different relations, influences and policies got my interest. With great excitement and the enthusiasm and expertise of my supervisor Alberto Alonso Fradejas, I started this journey. Therefore and first of all, I want to thank Alberto Alonso Fradejas for providing me with knowledge and feedback, expertise in fieldwork, and generous support and patience during these months of research and writing. In addition, I would also like to thank you for letting me use your theory, which is very relevant in today's world: the Resource Property Question.

I am also very grateful for the participants in this research. Besides learning about the cultural differences between the most-Northern part of Groningen and Utrecht, I enjoyed our open conversations very much and I am very thankful for your time and trust. Special thanks go to the board of the Diggelschip in Oudeschip, with your support and believe I got the data that was needed.

Lastly, I would like to mention my family and friends, for their editing help, unconditional moral support and belief in me, which gave me the motivation during this process when it was most needed.

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List of abbreviations

Eemshaven = Eems port

Oostpolder = Eastpolder (neigbouring to Eemshaven)

GSP = Groningen Seaports

NOVI = The National Environmental Vision (Nationale Omgevingsvisie)

RES = Regional Energy Strategy

Chapter 1

Introduction

On one side of the area it is peaceful and rural: farms, fields of crops, and sheep on the dike. Behind the dike large plumes of smoke rise into the air, this is the most Northern area of the Netherlands with both the East-polder (next: Oostpolder) and the Eemshaven in the Municipality Het Hogeland, Groningen. Next to the Oostpolder on the other side of the dike are the villages Heuvelderij, Koningsoord, Oudeschip, Nooitgedacht and Polen (see photo 2). Currently, the 600 hectares Oostpolder is used as agricultural land by seed potato farmers. In the northern clay areas of Friesland and Groningen, the cultivation of seed potatoes occupies an absolute top position with 8% of world exports of seed potatoes out of more or less 90 countries. This piece of arable land is therefore also one of the best in the Netherlands (Wiepkema, 2020). However, the land will change with the plan of the municipality 't Hogeland and the Province of Groningen by expanding the industry of the Eems port (next: Eemshaven) in the Oostpolder for the purpose of a green business park. Although citizens and farmers of the neighboring villages are not fully surprised by yet another announcement of area development projects, the disbelief and emotions are high after the last decades of land use change and its impact by national and regional economic interests.

Photo 1: Landscape from left to right; Eemshaven, Oostpolder with the construction of windmills, dike with sheep, houses behind the dike on the right side. *Source*: photo taken by the author, May 2022.

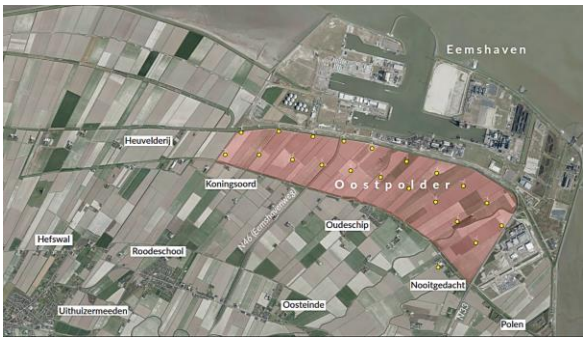


Photo 2: Area from top to bottom; Eemshaven, in red is the Oostpolder, dike, villages.
Source: Provincie Groningen, 2021

History

Municipality Het Hogeland is an old sea clay area in northern Groningen and has a rich history in changing land. Het Hogeland became a leading agricultural area early on, due to the light silt soils that were especially suitable for arable farming (Meijles, 2015). The sea breeze provides a good climate in which plant diseases thrive less than elsewhere (Haartsen & van Marrewijk, 2001). From the second half of the eighteenth century onward, grain prices increased. As a result, arable farming continued to expand. Along the coast new polders arose with dike villages like Koningsoord and Oudeschip. In 1841 the Oostpolder was drained (Knottnerus, n.d.). After the World War II, mechanization and scale increase in agriculture continued. The large farms turned into family farms and, in addition to wheat and sugar beets, seed potatoes were grown in particular.

In 1959, the report 'Threatened Existence' ('Bedreigd Bestaan') was published, which anticipated the expected depopulation of the area. In response, the Eemshaven was constructed between 1968 and 1973 as a new economic engine for the region (Knottnerus, n.d.). After a difficult start, the expected development only took place around the turn of the century. In 1997, a gas-fired power station was put into operation, and later on, in 2006 two coal-fired power stations were constructed and more than 130 wind turbines were built on the sea dike (Knottnerus, n.d.), which gave the area a more industrial character (Haartsen & van Marrewijk, 2001). With gas-fired power plants, coal-fired power plants, and wind turbines, this area is already generating a third of all Dutch energy (NWEA, 2019). Besides that, Google has set up a data center.

Economic globalization leads to upscaling of fisheries, tourism, and industrial activities, and thus to changing pressures on space and nature in the Wadden Sea region and North Groningen (Kabat, et al., 2012). Since 1959, the gas discovery in Groningen listed in European statistics as one of the richest regions on the continent. In reality, the average income dangles at the bottom of the Dutch rankings (Schouwman, 2014). But the main concern of the Groningers these days is: earthquakes. The area, northeast Groningen, has been affected by earthquakes since 1986. These are caused by gas extraction. The number and severity of the quakes have been increasing over the years. The heaviest one so far took place in Huizinge, 19km from the Eemshaven, in 2012.

Since then, northeast Groningen has been caught in a downward spiral of fear, uncertainty and unrest, and the number of reports of damage and people affected has only been risen ever since (Schouwman, 2014).

National and regional interest

Groningen is the energy province, and after peat and gas a new period of transition opens up for the Netherlands and Groningen. In line with the Paris Agreement (2015), the Dutch Climate Agreement (2019), and turning down the gas tap, the Netherlands is focussing on new economic interests and climate change mitigation by generating renewable energies. Groningen is the energy province and wants to continue to be. To generate alternatives for employment and to give space to renewable energy, the municipality het Hogeland and the Province of Groningen (2021a) respond to the increasing demand for large business plots from (green) companies wishing to establish themselves in North-East Groningen by expanding the Eemshaven in the Oostpolder. TenneT is currently building new 380 kV high-voltage connections, including new pylons, to bring the large amounts of energy that come ashore from the wind farms above Schiermonnikoog to the Eemshaven and many German companies such as the German RWE and others with foreign workers settle there. The full expansion has the aim to stimulate economic development and employment in Groningen and to make Groningen attractive to international companies in the energy, hydrogen, wind and automotive sectors (Gemeente Het Hogeland, 2021). However, due to a lot of previous damage, uncertainty, and unrest and little or no recognition in the form of compensation and communication, many citizens in Groningen and in this case specifically from the neighbouring villages[1] of the Oostpolder, have suspicions towards the national, provincial and regional government and new (green) area developments.

1.1 Problem statement and knowledge gap

Due to the expansion plans for the green business park (and other businesses) of Municipality Het Hogeland and Province of Groningen (2021) in the Oostpolder, the area and their citizens are facing land use changes and changes in property. After a positive market research, residents of the five villages were told on April 13, 2021, that the project of the expansion will begin. The so called 'masterplan', ensures via participation sessions that both farmers and residents without land can participate to the design phase of the expansion of the Eemshaven in the Oostpolder.

To create acceptance, engaging 'the public' at different stages in policy development using participatory and deliberative methods has become an accepted and legitimated practice (Cotton & Devine-Wright, 2010). Acceptability is often influenced by perceptions of fairness in the distribution of benefits and costs,

[1] Heuvelderij, Koningsoord, Oudeschip, Nooitgedacht and Polen

and the genuine quality of public participation in planning and permitting. (Ribe, et al., 2018). For governments, creating acceptance is also due to the opposition to renewables, using a NIMBY (not in my backyard) response, where individuals put narrow self-interest above societal priorities. However, the NIMBY phenomenon tells little about why someone does not want an e.g., commercial wind farm in his or her backyard (Bidwell, 2013). Therefore, Martin et al. (2013) and Walker (2010) argue that conflict is not always about just and unjust solutions or good or bad but different conceptions of justice. This shows that there are often considerable cultural differences between negotiating parties, including views of what constitutes just distribution or procedure.

It is known that the most chosen intervention to make it fairer are revenue-sharing arrangements, compensation schemes, or payments (Cotton & Devine-Wright, 2010; Helsloot & Helsloot, 2021). But such instruments are not only important for equitable distribution but must also address the problems as they are experienced. These financial arrangements could differ from each other due to the dominant politics and economic arrangements that sometimes suppress each other. Which is aligned with the often-overlooked feeling of injustice, that radical developments in the living environment cause (Cotton & Devine-Wright, 2010; Helsloot & Helsloot, 2021). This shows that although there have been research on important subjects such as participation (Cotton & Devine-Wright, 2010; Ribe, et al., 2018) and creating just (Martin et al., 2013; Walker, 2010), research is needed on these dominant politics and therefore the competing perspectives of different social groups on the question of property: *''who has the ability and power to harness what natural resources where, how, and for what purpose(s)''* (Alonso-Fradejas, 2021). This will show the political dynamic and its many layers of justice, that enable and constrain area developments for the green energy transition.

1.2 Development and scientific relevance

Academically this research adds to existing literature on land use change (Hannus & Sauer, 2021), theories on property (Alonso-Fradejas, 2021; Oberlack et al., 2016; Chilombo, Fisher & van der Horst, 2019) and justice (Ter Mors, Terwel, & Daamen, 2012, 2012; Hellersloot & Hellersloot, 2021). This research shows the wider spatial, social-ecological, and historical-institutional conditions and circumstances in which these concepts arise. Besides that, evidence for the perspectives of different stakeholders, supporters and challengers are often too general (Oya, 2013; Chilombo, Fisher & van der Horst, 2019). Procedural justice is often seen immediately during the process or project implementation. However, distributional justice is an impact which continues to impact in the very future but is not always immediately visible. Therefore,

researching perceptions of property that lead to current and future outcomes of area development adds to existing literature on the concepts of justice, property and land use change.

The social relevance of this research sheds light on the approach of the local, regional, and national energy transition strategies. In the past eras leaders have been creating arguments based on economic growth and increased energy consumption. However, this research is not about who is good or bad and only benefits and burdens, but it is about who is in, who is against and what changes the different perspectives. This research therefore can build upon to reduce or address conflict between stakeholders and balance the possibilities for achieving more consensual outcomes of (green) area developments and adds to producing evidence on procedural and distributional patterns which is simply establishing 'the facts' of the situation. Specifically, research on property and land use change for economic development and sustainability purposes are very relevant to the context of Groningen as an energy province. The history of the province is therefore a social factor that should not be missed.

1.3 Research questions

Main question: What political dynamics enable and constrain the dominant expansion plans for the Eemshaven in Groningen?

Sub-questions

1. What are the current and future expansion plans and processes for the Eemshaven in the Oostpolder?
2. How do supporters, challengers and accommodators see themselves as subjects of property regarding the Oostpolder?
3. How do supporters, challengers, and accommodators see the institutional form and enforcing authority of property?
4. How do supporters, challengers and accommodators see the policy structure of the property?
5. How do supporters, challengers and accommodators justify the property?

1.4 Structure of the thesis

In Chapter 1, the subject and problem statement of the research are introduced. This leads to an explanation of how this study adds to the literature. Chapter 2 reviews the most important literature and authors for this research, which also play a role in the discussion of this report. It also reveals a gap in the current literature that bridges to Chapter 3. This third chapter explains the concepts and theories used in this research. How, when and with whom this research is conducted, can be read in Chapter 4: the Methodology. The fifth chapter explains more about the national, provincial and regional context of the research topic. The competing perspectives on the expansion of the Oostpolder can be read in the next chapter, Chapter 6. Theories and concepts will be linked to the results in Chapter 7, the discussion. And lastly, this research ends with the conclusion in Chapter 8.

Chapter 2

Literature review

In this chapter it is explained which concepts are connected to each other when speaking of land-use change and property due to economic development and climate change mitigation.

2.1 Land-use change

Land acquisitions are not new, but compared to historical eras, today's land acquisitions are occurring in a more developed time with more democratic rights, both in practice and on paper, including those for civil society organizations and the free press (Chilombo, Fisher & van der Horst, 2019). However, the subject of land and how to use it in the social sphere has always been the source of conflict and legal or public problems (Movahedi, et al., 2021). One of the factors of land-use change is that it has an impact on employment, income and expenditure, household participation rate, and land prices. And thus, for many commercial, social, political, and environmental mechanisms, changes in land-use are closely interrelated (Hannus & Sauer, 2021), whereby the perceived imbalance of mostly local burdens versus mostly regional or national benefits tends to create feelings of inequity and unfairness within the local public (Ter Mors, Terwel, & Daamen, 2012). It, therefore, involves the question of property with power relations among individuals and groups regarding ‘’who has the ability and power to harness what natural resources where, how, and for what purpose(s)” (Alonso-Fradejas, 2021).

2.2 Property

These last questions are also seen in polarized debates on property and land acquisitions (Oberlack et al., 2016; Chilombo, Fisher & van der Horst, 2019). Actors that support land acquisitions see property as opportunities for rural development, job creation, knowledge transfer, and food security. On the other hand, actors oppose land acquisitions claiming community dislocation, more conflictual livelihood contexts, contested compensation, ecosystem degradation, and loss of community access to water, land, and forest resources that support their livelihoods and adverse labor transformation. The evidence for these effects, both favorable and negative, is mentioned as frequently spotty and anecdotal by Oya (2013) and Chilombo, Fisher & van der Horst (2019). Therefore, these authors argue that local detailed field-based research is necessary to get away from anecdotal claims. This will show the micro-processes of exclusion or inclusion that lead to varied interactions between producers, laborers, and larger capitalist companies that influence land-use change outcomes.

2.3 Economic development and Climate change mitigation

Importantly, the impact of the new wave of land deals can only be fully evaluated when the deals are seen in the context of the larger political and economic projects of which they are a part (Chilombo, Fisher & van der Horst, 2019). Hunsberger et al. (2017) show that previous studies research climate change policies and land grabbing separately. However, the authors argue about the consequences of land-based climate change mitigation policies and land acquisitions that it has for rural people. It is argued that these situations enable or constraints livelihoods and potentially cause both procedural and distributive conflicts, ''because any attempt to reduce greenhouse gas emissions is likely to be endorsed or experienced differently by different social classes and groups'' (Hunsberger et al., 2017). Both Schlosberg (2013) and Hunsberger et al. (2017) add that elites have invoked the discourse of the 'green economy' to facilitate agro-industrial projects at the expense of rural populations and that market-based conservation measures have diverted attention from their political implications by using socially acceptable market language. This showed a connection between the manipulation of nature and people for economic gain. Therefore, Klinsky et al. (2017) and Nightingale et al. (2020), concluded that it is important to recognize how the issues of climate change and social justice are framed and the power relations they reflect.

2.3.1 Neoliberalism

Carley & Konisky (2020) highlight the gaps and framing that still exist in terms of the inequalities associated with the energy transition policies such as the Green New Deal: who exactly is on the front lines, and how does everyone get a chance to be a stakeholder in decision-making processes, and how can effective programs be designed? Therefore, global policy innovations often sustain a market-based neoliberal political-economic framework. Pearson & Foxon (2012) argue that less state involvement, but a liberalized energy market could have an impact on the low carbon transition of the government. Martinez-Allier et al. (2016) add that environmental justice conflicts mainly come from companies in the fossil fuels sector (e.g. Royal Dutch Shell, Chevron Corporation, Exxon Mobil Corporation); the mining sector (e.g. BHP Billiton, Barrick Gold Corporation), or agro-industries (e.g. Monsanto Corporation). However, the arguments of Hirsh & Jones (2014) show that leaders sometimes create arguments about past eras of economic growth and increased energy consumption. The low-carbon transition is often seen as an economic transformation or the so-called third industrial revolution. But the outcome of this transition in the 21st century is still unknown, and replacing the systems for economic growth as a ''technological fix'' did not always turn out great because of the energy infrastructure that took years to

build, the high cost, the operation, and the international competitiveness (Hirsh & Jones, 2014). And often forgotten; it has taken decades for the benefits to reach the population (Pearson & Foxon, 2012).

2.4 Justice

The transition to lower-carbon energy sources will inevitably lead to the emergence and, in many cases, the persistence of pre-existing groups of winners and losers (Carley & Konisky, 2020). The winners are those who will benefit from cleaner energy sources, reduced emissions from fossil fuel removal, and the employment and innovation opportunities associated with this transition. Those who will lose out are those who will bear the burden or lack access to the opportunities. This addresses 'justice', which is about politics and the power to speak of and manifest values that are not only economic. Justice 'to whom' is inclusive among others in terms of different gender, ages, culture, and the rights of future generations (Alonso-Fradejas, 2021). Therefore, distributive justice is an important theory. This theory entails the distribution of benefits and burdens among different population groups (Carley & Konisky, 2020; Martin, Mcguire & Sullican, 2013). It aims to ensure that some population groups do not receive a disproportionate share of the burden or are denied access to benefits. Martinez-Alier et al. (2016) conclude after reviewing environmental justice cases from *EJatlas*, that ecological distributional conflicts are largely linked to growth and changes in social structures, which go together with economic growth. Other causes are further associated in the article of Martinez-Alier et al. (2016), for example population density, land and water scarcity, or with institutional dimensions of different enterprises, ownership regimes, financial speculation in resources, or the presence of indigenous peoples. These conflicts are also associated with international regulatory instruments used by state or legal institutions to address several social justice resource conflicts by fit-for-purpose and one-size-fits-all instruments (Franco, Young Park & Herre, 2017). However, the Franco, Young Park & Herre (2017) argue that in this way, every new activity could damage old conflicts or create new ones, because climate change mitigation initiatives and land grabbing impulses overlap, intersect, and interact, due to institutionally (policies and land claims) and community dynamics. This therefore involves recognition justice, which requires an understanding of historical and ongoing inequalities and prescribes efforts to reconcile these inequalities (Carley & Konisky, 2020). However, the limitations of professionalized procedures for participation and deliberation (Chilvers, 2009) show that it is important to protect local knowledge against the top-down imposition of ways of knowing.

Therefore, procedural justice is closely related to recognition justice and distributional justice. The former is about how decisions are made, who is involved in these processes, and about the principles that we use

to make normative claims about just or unjust procedures (Martin, Mcguire, & Sullivan, 2013; Carley & Konisky, 2020). Procedural issues often appear in conservation policy documents as commitments to the participation of local communities, and to obtain their informed consent (Martin, Mcguire, & Sullivan, 2013). According to Carley & Konisky (2020), a study on wind turbine siting in the USA found that when citizens that live near the turbines believe that the planning process was fair, they are more likely to perceive positive benefits of the turbines, and vice versa.

What stands out after reviewing the above-mentioned scholars, is that much is still to be learned when land acquisitions, property and justice are researched in their full spectrum. This full spectrum includes spatial, social-ecological, and historical-institutional factors. How do these burdens or (lack of) opportunities affect other aspects of one's life, as well as communities at large? Which actors are involved and how different social groups see the different forms of property?

Chapter 3

Theoretical and conceptual

This chapter elaborates further on the relevant theoretical concepts and debates, which are environmental justice and the resource property question. The given conceptual framework will clarify the theories and guide the research.

3.1 Environmental Justice

Justice has been seen in a traditional liberal frame with a focus on the individualist. Climate change has pushed environmental justice to more broad considerations of both environment and justice, individual and community level (Mohai et al., 2009). However, many scholars have been implementing and framing the theory of 'environmental justice' in different ways (Scholsberg, 2013; Mohai et al., 2019; Klinsky et al., 2017). Originally, in the earliest academic reflections on environmental justice, scholars focused on the existence of inequalities in the distribution of environmental damage. Due to the theory of climate justice, the frame of environmental justice changed, which is worth clarifying. Climate justice focuses among others on the application of existing social rights to the problem of climate change, vulnerabilities, and the very functioning and resilience of communities (Schlosberg, 2013). With more research on the community level and communities of color and poor being more exposed to vulnerabilities of climate change than richer and whiter communities - the reality and experience of this inequity prompted many environmental justice organizations (Schlosberg & Collins, 2014). Environmental justice as 'environment' only as 'the outside' or only as of the initial issues of toxins and dumps, therefore began to change to the conception of environment as 'where we live, work and play'. Forms of transportation, access to the countryside and green space, land use and smart growth policy, water quality and distribution, energy development and jobs, brownfields refurbishment, and food justice (Mohai et al., 2019; Schlosberg, 2013). Inequity as in social justice was the key theme in all these frames. However, Klinsky et al. (2017) highlight the warns of the huge attention on equity. One of the arguments is that an inherent trade-off between climate change and equity prevents the emphasis on the latter at the expense of the former. But the scholars (Scholsberg & Collins, 2014; Mohai et al., 2019; Klinsky et al., 2017) all argue eventually that analyses of justice, and its flipside injustice, are central to the intersection of climate change and human well-being, and political systems at all levels. Without the inclusion of equity in the analysis of policy decisions, the true consequences of trade-offs for various individuals and groups cannot even be determined.

Nonetheless, the environmental justice movement has never been exclusively concerned with equity; environmental justice has also always focused on how injustice is constructed, and why those already exposed to other forms of disadvantage are also exposed to environmental harm (recognition justice) (Schlosberg & Collins, 2014). In addition, demands for participation and procedural justice have always been present in the movement's discourse and analysis, as exclusion from decision-making has enabled unequal distribution and illustrates the broader context of injustice in vulnerable communities (Schlosberg & Collins, 2014). According to Mohai et al. (2009), generalized social injustices are manifested in environmental conditions, which makes it important to research a more in-depth spectrum. Environmental justice goes beyond simply describing and documenting injustice to an in-depth analysis of the underlying reasons for that injustice (Schlosberg, 2013).

3.1.1 Conceptual model

The foundation of the environmental and climate justice movement are social justice, democratic accountability and participation, and ecological sustainability. However, the diverse history of the social movement that has evolved the concept has not always been clear for either academics or policymakers. The discourses of justice and various experiences of perspectives of injustice show how the concept of climate and environmental justice is used and understood in practice.

In this research environmental justice is seen as related to the procedural, distributional and recognition outcomes of climate change mitigation and land grab impulses that overlap, intersect and interact. This will show the wider spatial, social-ecological, and historical-institutional conditions and circumstances in which they arise (see figure 1). In this research: a well-functioning environment is seen as necessary for any form of justice – environmental, climate, or social. In this way, environmental justice in this research adds to local detailed field-based research, which goes beyond anecdotal claims and framing justice. The theory will be used for answering the main-question in the conclusion: 'What political dynamics enable and constrain the dominant expansion plans for the Eemshaven in Groningen?'.

Conceptual model

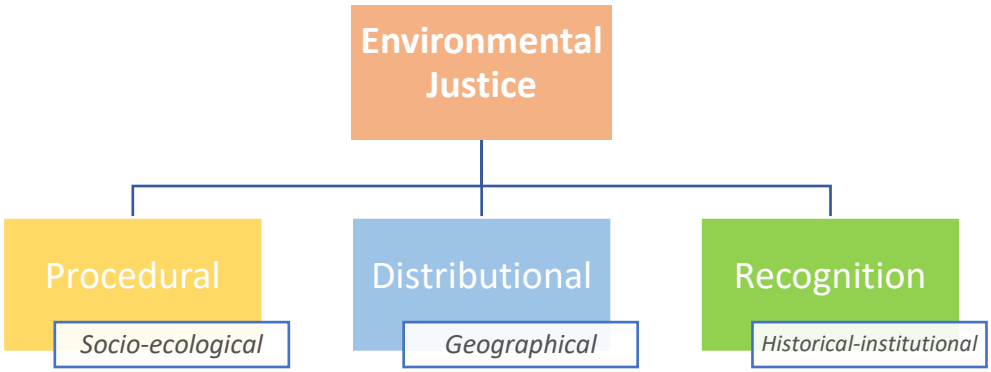


Figure 1: Environmental justice. Figure created by author.

3.2 Resource property question

In line with the aim of applying environmental justice and its components of procedural, distributional and recognition justice in this research, the resource property question adds in the following way: *''There is a need for more empirically-grounded and geographically- and historically situated research on resource governance dynamics and politics behind climate stewardship and transitions to sustainability that focus on one or various of the six core dimensions of a property rights regime as proposed here''* (Alonso-Fradejas, 2021).

The aim of the resource property question is to discuss whether, how, and the extent to which the resource rush behind mainstream climate stewardship and sustainability transitions shapes the contemporary resource property question. The resource property question asks, who has the ability and power to harness what natural resources where, how, and for what purpose(s). This is a highly political question involving power relations among individuals and groups and with manifold and crucial socioecological implications, which adds to research the wider spatial, social-ecological, and historical-institutional conditions and circumstances in which they arise (Alonso-Fradejas, 2021). It sheds light on different individuals and groups and their perspectives on the expansion of the Eemshaven in the Oostpolder, whereby the property relations are researched by six dimensions (figure 2) within the sub-questions to ultimately answer the main question of this research.

3.2.1 Conceptual model

In this research the *object* of property is the agricultural land of the farmers in the Oostpolder ('what' is the agricultural land), '*whose*' property is claimed by the Municipality 't Hogeland and the Province of Groningen, '*which*' use a specific *institutional form* of property (e.g. preferential rights law), 'by *whom*' regarding where the *authority*, as in State Council (Dutch state) and the Province of Groningen, enforce property rights in the property regime, which relies on an enabling *policy structure* (e.g. Dutch Climate Agreement; Regional Energy Strategy), on the grounds of an ideologically and/or morally accepted *justification*, to mitigate climate change.

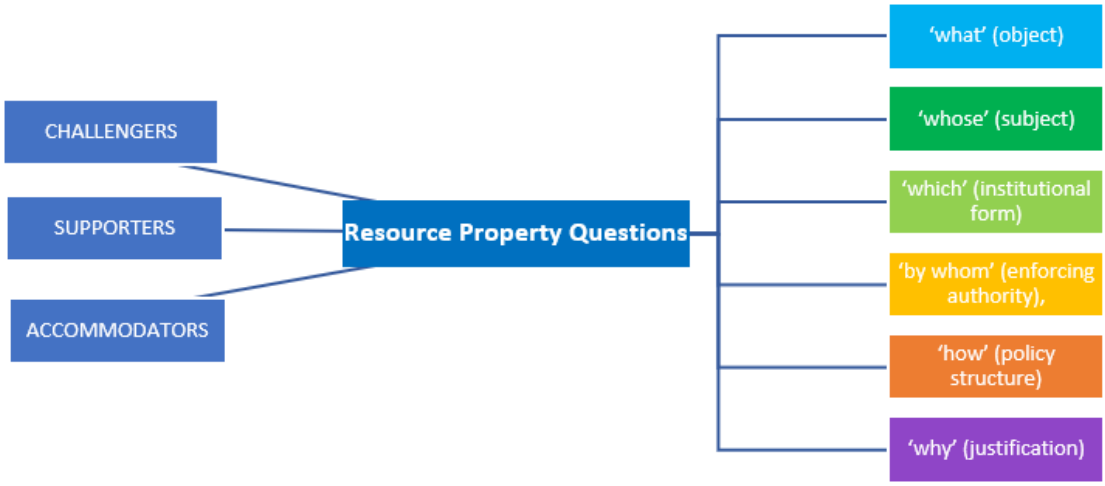


Figure 2: Resource Property Question by Alonso-Fradejas, (2021) - Figure created by author, 2022

3.2.1.1 Actors

The characters behind the changes in the resource property regime can be divided into three groups. *Supporters* are mentioned as the ones who actively promote the current directions of agro-environmental change. *Challengers* express their dissatisfaction in resistance, and fight for an alternative project. And *accommodators* represent those who are trying to adapt to their changing circumstances.

Chapter 4

Methodology

In this chapter, the research methodology discusses and explains the data collection and analyses used in this research. Qualitative data is used to investigate the political dynamics that enable and constrain the dominant expansion plans for the Eemshaven in Groningen. This is done via primary data collection with fieldwork in the villages Heuvelderij, Koningsoord, Oudeschip, Nooitgedacht and Polen. This chapter will explain the following: the approach, methods used and selected participants, analyzing process, and the justification.

4.1 Approach

The case in the Oostpolder includes different actors and interests, such as farmers, residents, businesses in the Eemshaven, the government, and environmental organizations. Investigating the political dynamic that enables and constrains the expansion of the Eemshaven is, therefore, a highly political case among all actors. To understand how people see the current and future circumstances of the Oostpolder, qualitative data is used for this research. This includes interviews, participant observations, and secondary research by analyzing policy documents.

4.1.1 Choice of case

The case of land use change as in the expansion of the Eemshaven in the Oostpolder is chosen because of, first, the history of Groningen as an energy province and therefore the many issues and questions of justice faced by the citizens of Groningen (see Chapter 1 – Introduction). Secondly, the Oostpolder has many competing perspectives on the expansion of the Eemshaven, namely, the government needing to react to future economic scenarios, the farmers and one of the best agricultural land, citizens dealing with government decisions, and the potential impact on both humans and nature, of which the last is influenced by several interest groups.

4.1.2 Target Audience

For this research, the target group consists of citizens, farmers, government representatives, environmental organizations, and village interest groups. The selected participants are thoroughly explained in the following paragraph 4.2.2.

4.2 Methods of data collection

This paragraph will systematically view the methods and techniques used for this research.

4.2.1 Participant observation

First, it is described where, how, and when the observation is conducted.

Community and timeframe

The fieldwork data was conducted in four weeks divided between March 2022 and May 2022 in the villages of Heuvelderij, Koningsoord, Oudeschip, Nooitgedacht, and Polen. Participant observation was first needed to create a network and observe the current situation in the Oostpolder and villages. The role of a researcher within this community was as a passive observer. In the first month, the observation was mainly focused on observing the area and gaining access to the farmers and residents.

Access to the residents

At the end of March 2022, there was an information session in the community center (see photo 5, paragraph 6.1). In this way, the first physical information about the current situation and project was conducted. However, many emotions and misunderstandings from the residents about the project were already visible. Therefore, more time and patience were needed to access the residents. The right participants were not selected at once. After e-mailing other actors and campsites in the area, cycling many times through the area, and posting my research in the local newspaper of the five villages (Appendix 12), I got in contact with various people which led to the right participants from the villages Koningsoord, Oudeschip, and Polen.

Access to the farmers

To get in contact with the farmers, I called some journalists from Agrio (agrarian platform for news) and RTVNoord (News website of Groningen). They have been writing articles about the situation in the Oostpolder. In this way, I hoped to gain access to the group of farmers and get information about who the farmers are and if they are the owners of the arable land. Although the journalist gave me the contact details of some previously interviewed farmers, the farmers themselves never answered my calls or emails. By doing fieldwork, I changed my approach. During fieldwork, I approached the farmers respectfully by getting familiar with the area and approaching them on the road. However, after speaking to one farmer, I soon ran into the following obstacle: the agricultural season started in April. In addition, the Province of Groningen and the Municipality of Het Hogeland also began, after a silence of information, with the procedure of the farmers. This caused a lot of unrest in the villages, while it was high season for

the farmers. In reaction to that, Agricultural and Horticulture Organization LTO advised the farmers not to talk about the situation, neither with fellow residents nor with 'strangers'. I still tried to reach out to farmers by announcing my research and contact details with a flyer door-to-door. After not receiving any communication in return, I tried accessing them via the community center board and by going door-to-door and having a conversation. However, because of the agricultural season, it was bustling in the fields and I received no response at the door. This was the moment for me to choose, out of respect for the situation of the farmers, to obtain information through residents without land. The farmers' data is collected by interviewing friends and neighbors of the farmers. In table 1 it becomes clear which interviewee is linked to a farmer.

4.2.2 Interviews

The second method describes where, how and when the interviews were conducted.

Selected participants

After weeks of trying to create a network, I selected the participants (see: table 1). The third column 'linked to' mentions when a participant is a spokesperson for an organization or in contact with a farmer. In this way, both data from the government and interest groups and residents with and without land were conducted and analyzed.

In total, 15 participants took part in this research. Of which one project manager for the government's expansion plan; one policy officer of an environmental organization; one project manager linked to the expansion project in the interest of the residents; 11 residents without land; and one farmer. In table 1 the research participants are outlined in detail.

Table 1: Research participants

Interview	Participant	Linked to	Gender	Location	Resident since	Age	Relevance
Interview 1	Project manager of the expansion Eemshaven	Province of Groningen and Municipality Het Hogeland	Female	-	-	-	Organizes the participation sessions and has the aim to succeed in the project
Interview 2	Policy officer for spatial planning	Nature and Environmental Federation Groningen (N&M)	Male	-	-	-	N&M is an interest group within the project and gives advice to the government on nature and biodiversity
Interview 3	Bed & Breakfast/ hotel owner	Farmer with a young family in Oudeschip	Female	Oudeschip	More than 40 years	50+	Has witnessed the development of the area and has also ceded land in the past
Interview 4	Boardmember Community Center Oudeschip	Meeting the family members of farmers in the community center neighboring farmers	Male	Oudeschip	Born and raised in Oudeschip	50+	Has been very active for the area and village since 2012
Interview 5	Boardmember Community Center Oudeschip	Meeting the family members of farmers in the community center and having neighboring farmers	Female	Oudeschip	More than 45 years	50+	The resident is highly involved with the neighborhood and its residents.
Interview 6	Bed & breakfast owner	-	Male	Polen	Two years	30+	The previous owner of this house lost a case

							to the State court because of risen decibels. This male participant is the new owner of the house.
Interview 7	Farmer	-	Male	Koningsoord	Unknown	60+	This farmer was interviewed on the street, next to his land.
Interview 8	Resident	-	Female	Oudeschip	One and a half years	50+	Active participation in the area
Interview 9	Project manager	Groninger Dorpen (interest group for residents)	Female	-	-	-	Groninger Dorpen is in the interest of the residents and helps them in the various procedures.
Interview 10	Resident	-	Female	Oudeschip	Around 15 years	30-40 years	Has a family with young children
Interview 11	Resident	-	Male	Oudeschip	Around 15 years	30-40 years	Has a family with young children
Interview 12	Resident	-	Male	Oudeschip	More than 25 years	50+	Has a business located to the house and previously participated during the sessions for the windmills in the Oostpolder
Interview 13	Resident	-	Female	Oudeschip	More than 20 years	50+	Lives very close to the windmills and construction area
Interview 14	Resident	-	Male	Oudeschip	Less than five years	18-30 years	Has not lived here very long yet
Interview 15	Resident	-	Female	Koningsoord	More than 40 years	60+	Has lived in Koningsoord for a long time

In-depth semi-structured interviews

In-depth interviews have been used as a one-on-one method of data collection. This method aims to gain detailed insight into the participants' perspectives on the research problem (Hennink, Hutter, & Bailey, 2020). In this case, the problem statement and dynamic were not clear at once. Therefore, the interview guide was less structured: a semi-structured interview guide. The guide used the same structure: introduction, opening, key, and closing questions. However, the guide was adjusted when needed because of the different actors involved (Appendix 8).

Conducting the interviews

The Interviews were conducted by making a personal appointment with the participant, except for the interview outdoors with the farmer. The interviews are done face-to-face, except for interview 1 and interview 2. These two are conducted online via a video call. Interviews 1 to 5 has been recorded audiovisually. However, after these interviews, some interviewees wanted to show me the area and some invited me to their home. Therefore the other interviews (6 to 15) were recorded by note-taking. All participants signed the consent form and received a copy (Appendix 10).

4.2.3 Secondary data

Besides semi-structured interviews, I also analyzed the following policy documents which also can be found in the references list:

Author	**Document**	**Publication year**
BügelHajema Advisors	Spatial Quality Framework Oostpolder (Master plan)	2022
Dutch National Government	National Climate Agreement	2019
Groningen Seaport	Eemshaven/delfzijl business location policy	2016
Ministry of Economic Affairs and Climate	Climate report 2021-2030	2020
Municipality Het Hogeland and Province of Groningen	Concept of the Green-Blue zone in the Oostpolder	2022
Municipality Het Hogeland and Province of Groningen	EIR and project decision	2022

Municipality Het Hogeland and Province of Groningen	Results Oostpolder participation sessions	2022
Municipality Het Hogeland and Province of Groningen	Planning expansion of the Eemshaven	2022
Municipality Het Hogeland	Online video announcement of the expansion of the Eemshaven	2021
Municipality Het Hogeland	Council proposal	2021
Province of Groningen	Structure vision Eemsmond-Delfzijl	2017
Provincie Groningen, Gemeenten het Hogeland en Eemsdelta en Groningen Seaports	Evaluation Structure vision Eemsmond-Delfzijl	2021
Regional Energy Strategy Groningen	Regional Energy Strategy Groningen	2020

4.3 Methods of analysis

This paragraph shows how the data is processed and analyzed.

Thematic analysis

The data is thematically analyzed for this research to discover people's views, knowledge, opinions, and experiences (Hennink, Hutter, & Bailey, 2020). The approach to thematic analysis was both inductive and deductive. This means that data determined the themes (inductive) and preconceived themes based on existing knowledge (deductive).

Transcribing

All the interviews with audio conducted are transcribed and when notes have been used, this is written out.

Coding

Secondly, the data is coded. This is first done in the transcription. After that, in Excel, the text fragments are put down with the codes. Every code describes the expression of the specific text. To generate themes, patterns are identified and super-codes are created. Super-codes are codes that summarize the theme. After making the codes more useful and accurate, the list of themes was used to generate the code trees

(Appendix 7). The code trees have been categorized into groups of actors. This is chosen because the sub-questions are answered according to dividing the actors' perspectives into the Resource Property Questions (Alonso-Fradejas, 2021).

4.4 Operationalisation of the concepts

As mentioned in chapter 2.2, several forms of justice are connected to 'Environmental Justice.' These theories will be used to answer the main question. In chapter 3, the Resource Property Question (Alonso-Fradejas, 2021) is explained, which is used as a method of analysis and answers the sub-questions. Therefore, the concepts of justice and the resource property question are operationalized.

Research question	**Concept**	**Definition**
What political dynamics enable and constrain the dominant expansion plans for the Eemshaven in Groningen?	Distributive Justice	The distribution of benefits and burdens (Carley & Konisky, 2020)
	Procedural justice	How decisions are made, who is involved in the process (Martin, Mcguire, & Sullivan, 2013)
	Recognition Justice	An understanding of historical and ongoing inequalities (Carley & Konisky, 2020)
How do supporters, challengers and accommodators see themselves as subjects of property regarding the Oostpolder?	Actors as a subject of property	Who can claim property rights
How do supporters, challengers, and accommodators see the institutional form and enforcing authority of property?	The institutional form of property	The form of property includes open-access property, common private property and individual private property
	The authority to enforce property rights	Whom, state or non-state actor has the authority to enforce property rights or change sanctions.

How do supporters, challengers and accommodators see the policy structure of the property?	Property rights regime's policy structure	Specific mechanisms by which property relations are governed
How do supporters, challengers and accommodators justify the property?	Justification of property	The ideological and moral justification of property (rights)
	Supporters	The ones who actively promote the current directions of the land use change of the Oostpolder
	Accommodators	The ones who are trying to adapt to the changing circumstances
	Challengers	The ones who express their disaffection with the project and fight for an alternative

4.4 Justification

Due to the sensitivity of the topic and the many perspectives of the research problem, it was important to start with observations. This made it more explicit what interests are involved and with which actors. In this way, the selected participants better fit the research. Secondly, choosing semi-structured interviews was significant for being open to new insights. This is especially important in a politically sensitive problem setting, where it is not immediately clear what actors' view of the expansion project is.

Methodology

Because residents were more reticent at the beginning of the study, a survey was also attempted (Appendix 11). It quickly became apparent that this did not fit the target audience and the purpose of the study. Despite the anonymity of a survey, the impersonal approach causes it to lack trust and share information. This was solved by engaging with residents at the door and in the area, which allowed me to make a selection of the participants.

Limitations

At the beginning of the study, the problem statement and focus of the study were not immediately clear. Therefore, the choice was to first go on fieldwork and use semi-structured interviews. However, it is a limitation that the interviews are geared towards questioning the social, economic and environmental

impact and are not explicitly aligned with the sub-questions. On the other hand, saturation did occur in the data and is consistent with answering the sub- and central questions.

Farmers

The fact that the farmers did not personally participate in the study is a shortcoming for the data. However, this was solved by speaking to relatives. An important factor in a small community as in my research area, is trust and respect. Therefore, it was also very important to respectfully remove the farmers from the study after several attempts.

Positionality as a researcher

Despite the topic's sensitivity, as a researcher, I had to deal with many personal stories of residents. Stories of mental health problems and the experience of not being taken seriously by the government. This occasionally shifted my position as a researcher, as emotional stories touched me. However, it is essential to remain neutral in using and analyzing the information.

In addition, I also experienced the other side as a researcher in the area. Because residents heard that I was not from Groningen, it was necessary to clarify my intentions. Cultural differences were therefore experienced. Through careful listening and genuine interest, the final data was collected from a variety of participants.

Chapter 5

National, Regional and Local Context

This chapter explains the national and regional objectives and ambitions and how this translates to the local level.

5.1 The National Context

5.1.1 The Dutch climate agreement and the Regional Energy Strategy

In mid-2019, the Dutch government published the Climate Accord: the Dutch elaboration of the 2015 international climate agreements of Paris to limit global warming to 1.5 degrees Celsius (Klimaatakkoord, 2019). The principal goal of the Dutch Climate Agreement is the reduction of greenhouse gas emissions. This establishes in law a step-by-step reduction of greenhouse gasses to mitigate climate change, with a reduction target of -55% CO2 by 2030 and climate neutrality by 2050 (Rijksoverheid, 2022). By 2030, the ambition is scaling up electricity production from renewable sources to 84 TWh. More than half of that will come from offshore wind farms (49 TWh). In addition to offshore wind energy, both large-scale and small-scale production of electricity on land from renewable sources are important. This will create the remaining 35 TWh which is calculated to come from mainly onshore wind and solar sources (Klimaatakkoord, 2019).

However, the public authorities will leave the initiatives for sustainable electricity production to the market. The market in this case is a collective term for all types of initiators: from project developers to energy cooperatives (Klimaatakkoord, 2019). The accord makes clear that it must be made attractive for initiators to set up projects. In order to prevent uncertainty for the investment in any form or a lack of enthusiasm, the Regional Energy Strategies (RES) are created. The RES will guide the decision-making process of municipalities and provinces on how to meet targets for onshore renewable electricity generation by 2030. This concerns the spatial planning aspects that form the basis for the quality control in the environmental policy at provincial and municipal level. Besides that, municipalities, provinces and water authorities use the RES to involve social parties and local residents in local planning and to increase support (Ministry of Economic Affairs and Climate, 2020). In addition, the new coalition agreement of Rutte IV (2022 -) states that the supply of renewable energy sources will receive even more attention towards 2030, by focusing on additional offshore wind, rooftop solar, geothermal, ‘’green’’ gas, aqua thermal, the production and import of hydrogen, increasing the space for carbon capture storage (CCS) and a strong focus on making homes more sustainable through insulation, a hybrid water pump, and

district-level sustainable heat networks (Rijksoverheid, 2022). One example in the Eemshaven is: NortH2 which is a collaboration of Gasunie working with Equinor, Groningen Seaports, RWE and Shell. Together they are investigating the feasibility of the large-scale production, storage and transport of green hydrogen.

5.2 The Regional Context

5.2.1 The Regional Energy Strategy

The shared ambition in the RES Groningen (2021) is that the returns from the energy transition will generate positive returns for Groningen. The RES 1.0 of July 2021 is the energy strategy of Groningen which is based on existing policies and established ambitions. The energy strategy was created by various stakeholders from the Groningen region.[2] Besides that, individual organizations have gone through a participatory process with residents and stakeholders to create the RES 1.0 (Interview Councillor Westerkwartier and chairman RES Groningen, 2022). Accordingly, most of the Groningen RES 1.0 plans for generating electricity through wind and solar power are already implemented or planned.

5.2.2 Local ownership and participation

Within the RES Groningen (2021), local ownership, support and a fair distribution of benefits and burdens for new renewable energy projects is important. In the RES context, it has therefore been agreed that the local environment is always involved and benefits from renewable energy projects. After the adoption of the first version of the RES (2021-2023), it will be monitored whether the local environment benefits from renewable energy projects. It is interesting to note in the RES Groningen, that it emphasizes that the State has an important role to play in facilitating a few important issues. These include support and fair distribution of burdens and benefits, affordability and feasibility of the transition, grid capacity and sufficient resources for proper task performance.

5.2.3 Spatial exploration by category

In the presentation of the Regional Strategy for Space (2020), the various project scales in Groningen were examined in line with the decision-making process.

[2] In the Groningen region, the Province of Groningen, the water boards Hunze en Aa's and Noorderzijlvest and ten municipalities work together. The ten municipalities are: Eemsdelta, Groningen, Het Hogeland, Midden Groningen, Oldambt, Pekela, Stadskanaal, Veendam, Westerkwartier and Westerwolde (Regionale Energie Strategie Groningen, 2021).

Scale and decision-making

What stands out is that the scale forms the basis of the decision-making process. Small village windmills and rooftop solar at a farmyard and small hamlets are the XS scale; a village mill
and a solar field (of max 5ha) in and around villages are seen as the S-scale; a number of larger
turbines (max 3MW) and solar parks (50 ha) near an urban area are the L-scale; and mega turbines (>5MW) and large solar parks (100 ha and larger) in the concentration areas of industrial estates or logistics complexes are the XL scale. These scales are generated to create clarity and to underline control, ownership and management (Regionale Energie Strategie Groningen, 2020). The project of the Oostpolder in the Eemshaven is categorized in the XL-scale.

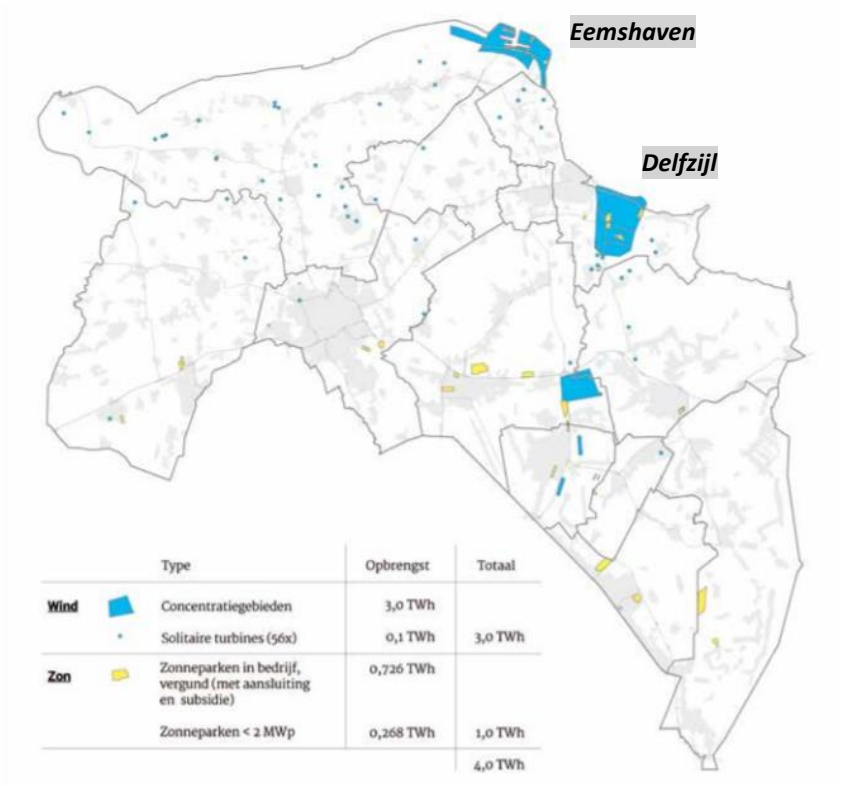
XS scale projects can be carried out by agricultural entrepreneurs and occupiers; S by residents (collectives) and energy cooperatives and - L and XL projects will be carried out by energy companies and other developing parties, of which residents are involved by financial participation. It stands out that L and XL- scale projects include less control and ownership of residents. Besides that, the L-scale projects are also decided by the municipalities, but the province imposes spatial preconditions for the location, size and integration. And in the case of the location and design of the XL energy landscape projects, municipalities, the province and the national government act jointly (Regionale Energie Strategie Groningen, 2020). This shows the regional context of the spatial and decision-making process for L and XL-scale projects in among others the Oostpolder and Eemshaven.

5.3 The Local Context

5.3.1 Existing wind and solar farms

The locations of the existing and already licensed larger wind (blue areas, figure 3) and solar farms (yellow areas, figure 3), are mainly focused in the same area in Groningen. Most of them are near the high-voltage grid and power stations, near large energy-bearing industries, data centers, and so on. Delfzijl and Eemshaven, both on the upper borders of Groningen (blue area, figure 3), are used as big areas for wind parks in between villages and business parks.

Figure 3: Map showing existing and licensed wind and solar farms.



Source: Werkboek Ruimte RES Groningen (2020)

5.3.2 Expansion of the Eemshaven in the Oostpolder

Several local governments agree on expanding the Eemshaven to the Oostpolder, an area of 600 hectares (photo 4). This should make Groningen attractive to international companies in the energy, hydrogen and automotive sectors, among others. Green hydrogen is seen as an important replacement for fossil fuels especially in the industrial and transportation sectors and therefore contributes to the energy transition. The granting of the environmental permit by the province fits in with the aim of making the north, and specifically Eemshaven*, 'a European hotspot for the production of hydrogen'* (NRC, 2021). However, it is speculated that all power from the existing wind farms in the area will be used for the industry. The electrolyzer is estimated to require about the same amount of electricity annually as several tens of thousands of households. This raises questions about the benefits and burdens for the surrounding villages near Eemshaven.

Photo 3: Behind the village 'Oudeschip', the Eemshaven will be expanded.

Source: Mario Miskovic of RTV North (2021a)

Photo 4: Eemshaven will expand in the red colored area in the Oostpolder.

Source: Groningen Seaports via RTV North (2021)

Chapter 6

The six dimensions to a property rights regime

In this chapter the six sub-questions of this research will be answered according to the six dimensions of the resource property question.

6.1 Current and future expansion plans and processes in the Oostpolder

Introduction

The current and future plans and processes for the expansion of Eemshaven have come about due to several factors by the government (Het Hogeland & Provincie Groningen, 2022b): 1) Lack of development space for large companies. 2) Market potential specifically for Eemshaven due to bigger plots. 3) Declining employment in the province of Groningen in the energy sector (such as natural gas extraction). 4) Groningen as an energy province and the sustainable socket of the Netherlands. 5) Strengthening the regional economy. However, important objectives of the government create current and future plans for the Oostpolder. But there are more competing interests at play. Besides the state, other supportive, accommodating, and challenging actors have their influence. The following chapter will be divided into 'supporters,' 'accommodators,' and 'challengers' (see 3.2.1.1) (Alonso-Fradejas, 2021).

Supporters

The national and regional governments are categorized as supporters of the dominant project (according to the resource property question of Alberto Alonso-Fradejas, 2021), as well as Groningen Seaport. These three actors see the property of land for business park purposes with green innovations and industry.

Process - National Government

For the State, the National Environmental Vision (environmental as in area) (further mentioned as NOVI) (2022) is important and works together with the RES. In this policy, the State prefers large-scale clustering of renewable energy production by wind turbines, possibly in combination with solar fields nearby (see also figure 3 in paragraph 5.3.1). Besides, it is mentioned that this must be explicitly weighed against themes such as landscape characteristics, national security, nature, cultural heritage, water and soil, and social and administrative support.

Process – Regional Government

On the 13th of April 2021, it was agreed by the decision of the Provincial States of Groningen, with 36 votes in favor and six votes against, to approve the start and completion of the planning phase for the expansion

of Eemshaven to include the Oostpolder as an additional industrial estate. Before that, from 2019 on, the municipality of Het Hogeland and the Province of Groningen mapped out which new developments had potential. The province and municipality emphasize that research by STEC Group and Buck Consultants shows that the location is auspicious (Gemeente Het Hogeland, 2021). The current plans are formed because Groningen is the energy province of the Netherlands. And so, the region wants to respond to the new economy of sustainable energy. New land is needed to achieve the goals around employment and the ambition as an energy province (Gemeente Het Hogeland, 2021). Therefore, 600 hectares of potato farmland, owned by 15 farmers, will be bought for these developments. For this purpose, an investment of 9.5 million is available to purchase land at the indicated location of the Oostpolder by the Municipality Het Hogeland and the Province of Groningen (2021) (Appendix 1). To prevent the possibility of land speculation, the provincial states agreed in advance to secrecy regarding the exploration (Provincie Groningen, 2021) (Appendix 1; Appendix 7: Codes 6 – Process).

According to the agreement, the decision of the expansion is based on a few documents (appendix 1):

- Structural Vision Eemsmond-Delfzijl (*structuurvisie*)
- Spatial Vision Province of Groningen 2016-2020 (*Omgevingsvisie Provincie Groningen 2016-2020)*
- Spatial Regulation Province of Groningen 2016-2020 (*Omgevingsverordening Provincie Groningen 2016-2020*)

Structural Vision

The document 'Structural Vision Eemsmond-Delfzijl' (*structuurvisie Eemsmond-Delfzijl*) (Provincie Groningen, 2017) has been evaluated in the Consultative Board meeting of 18 February 2021 between the Province of Groningen, the municipalities of Het Hogeland and Eemsdelta and Groningen Seaports (further mentioned as: GSP). In this evaluation, new developments are also written down (Provincie Groningen, Gemeenten het Hogeland en Eemsdelta en Groningen Seaports, 2021). It is already mentioned that the role of the region as the energy hub of the Netherlands has grown considerably. ''Initiatives around hydrogen, its combination with the landing of electricity generated by offshore wind farms and the use of hydrogen for industry, transport, and heating require a rethink of the infrastructure and the required use of space. The aim is for the region to play a major role in the hydrogen economy at the North-West European level in the future'' (Provincie Groningen et al., 2021). This document was published on February 18th, 2021, one month before the announcement of the expansion project in the Oostpolder.

The evaluation of the vision (2021) mentions that GSP has adjusted its settlement policy based on the cooperation of GSP with municipalities and the province of Groningen. This is to prevent parties from trying to bring businesses into the area independently of each other. Fifteen new projects are implemented in collaboration between 2017 and February 2021 (see Figure 4 below – Appendix 2). The current Eemshaven industrial park (without the Oostpolder) has been expanded, including wind energy. And Google is expanding, located in the southeast of the Eemshaven. In addition, what already has been realized in this period is 1) a rail line from the town of Roodeschool to Eemshaven, providing a single connection from the city of Groningen; and 2) a helicopter port. What stands out in reviewing the document is that the wind park in the Oostpolder is mentioned as a wind project and not as agricultural land. Another wind farm will be realized west of Eemshaven (next to the Oostpolder). Lastly, the 380-kilovolt high-voltage connection is under construction. The latter is the heaviest and largest high-voltage line in the Netherlands and Belgium.

Future expansion plans

For the area of the Oostpolder, to expand the Eemshaven, potential companies are from the hydrogen, batteries, data centers, wind energy, automotive and innovative sectors. According to the province of Groningen and the municipality of Het Hogeland, this expansion will create jobs, which is an essential aim for strengthening the regional economy according to the government. Both low and high-skilled people and temporary employment for the construction of the businesses are mentioned (Appendix 7 – Codes 4: employment; Interview 1: Project manager Province of Groningen). One of the innovative sectors is the hydrogen market. The project manager of the Province of Groningen and the Municipality of Het Hogeland says:

> *''That [hydrogen] process is technically not developed now and not yet efficient, but in the next ten years it is going to take off and that is a procedure you want here'' (Appendix 7: Codes 12 - Environment).*

Besides that, both GSP and the government mention the positive economic effects and the contribution to sustainability (Het Hogeland & Provincie Groningen; Groningen Seaports, 2021). But the project manager of Het Hogeland and the Province of Groningen currently do not know which (green) companies will buy the land and settle there (Appendix 7: codes 3- expansion plan). Notable is that Groningen Seaports mentioned the expansion and the positive economic developments on the 13th of April, 2021, the same day the Province of Groningen announced it to the citizens of the five affected villages.

Residential function

By strengthening the economy due to employment, the preservation and strengthening of the quality of life in the villages will be ensured (appendix 7: Codes 4 – Employment). As a result, the authorities expect an increase in the number of inhabitants. This ensures the preservation of schools, stores, churches, and catering establishments (Het Hogeland & Provincie Groningen, 2022b). However, the villages and communities within this project (Nooitgedacht, Koningsoord, Oudeschip, Heuvelderij, Polen) currently do not have a school, stores, churches, or catering facilities.

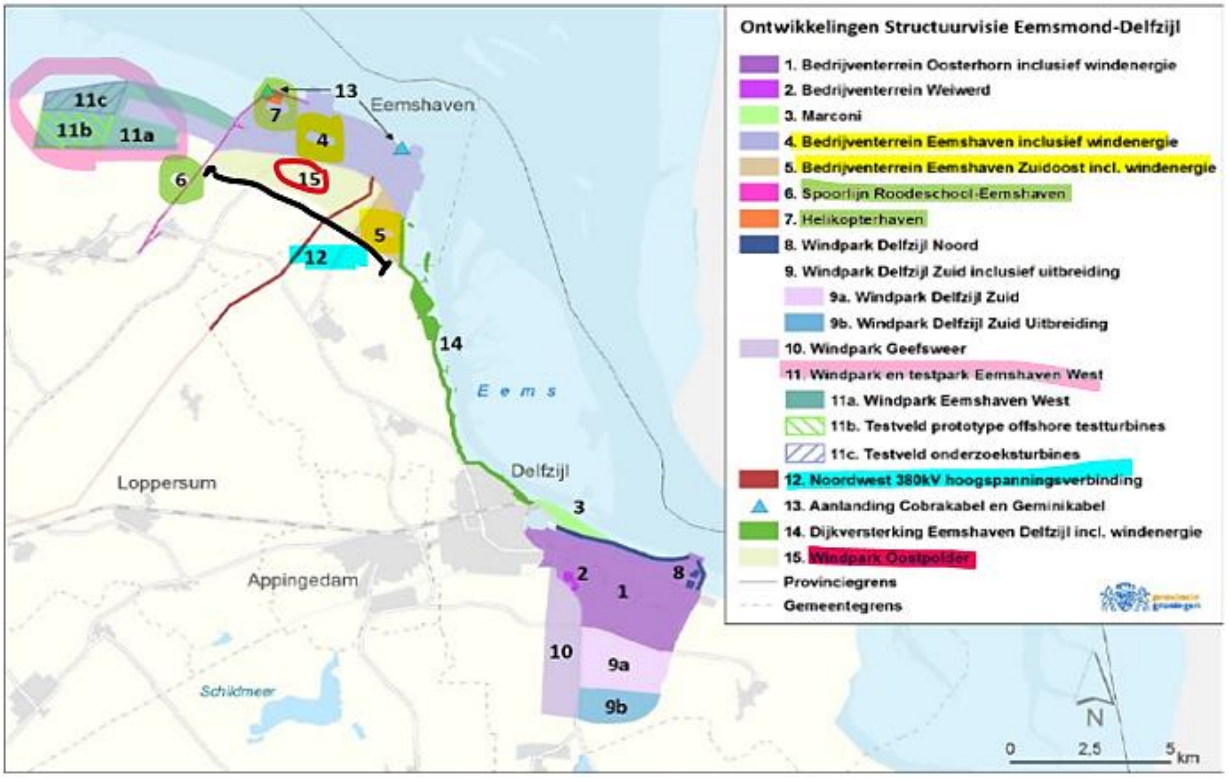


Figure 4: The 15 projects of the 'Structural Vision Eemsmond-Delfzijl' (Province of Groningen, 2021)

Instruction in English	
Black line = *included villages in the research for the expansion*	11 = Wind park Eemshaven West
4 + 5 = Eemshaven inclusive wind park	12 = High voltage
6 = Rail line	15 = Oostpolder with windturbines
7 = Helicopter port	

Table 2: Instructions in English for figure 4. It is translated by the author.

Accommodators

Environmental organizations perceive the dominant project as a business park with space for nature and biodiversity and in the interest of the energy transition. They are therefore against industries such as data centers.

Environmental terms and conditions

The involved authorities have indicated that the residential function of the surrounding five villages should be preserved (Het Hogeland & Provincie Groningen, 2022b). According to the plans, new businesses must comply with legal environmental standards, such as noise, safety, and air quality. This also adds to the standpoint of the environmental organizations and how the property is perceived. For the villages, therefore, a buffer zone will be built. As a result, 400 hectares will be used for businesses and 200 hectares for the so-called 'green-blue zone,' which will add to leisure for residents and biodiversity.

Future expansion plans

Besides the current plans in and around the area of the Oostpolder, such as the new rail line for goods and people and the helicopter port (see figure 4), the states, the municipalities, and Groningen Seaports (2021) wish to double the road of the N33. This is next to the new rail line, through the Oostpolder, and in between the villages Oudeschip and Koningsoord.

Datacenter

In June (2022), the State Government created a new law surrounding the ban on hyper-scale data centers after the protest around the data center in Zeewolde (RTVNoord, 2022). However, two areas are exempted from the prohibition against allowing hyper-scale data centers in a development plan. One of the two areas is the municipality of Het Hogeland in the province of Groningen. According to the State Government: ''These areas are located on the edge of the Netherlands where sufficient space exists. There are already hyper-scale data centers here, and the location near landing sites for renewable energy (wind at sea) means sufficient green power is available'' (Rijksoverheid, 2022). The mentioning of using enough green energy to run the data centers is notable. Besides that, data centers were also mentioned in three interviews, of which two citizens mentioned them as 'negative for the future of the area' (Appendix 7: Codes 3 – expansion plan).

Green power cable

Tennet, a company providing electricity, is constructing a cable from/ to Denmark and the sea (off-shore wind energy) with landfall at Eemshaven (Tennet, 2019). This cable will go through both the Wadden Sea

and the Oostpolder. The government is therefore reporting that the layout of the Oostpolder and especially the green-blue zone must take this cable into account (Gemeente Het Hogeland, 2021a).

Challengers

Farmers and citizens see the dominant project and property differently than the government. Farmers and citizens see it both as agricultural land. However, citizens (as challengers) also see the farmland as part of nature and their environment for leisure. The farmers see their property also as space for wind energy. However, the supporters, the government and industry, push for other objectives for the property.

Current expansion plans - Farmers

Current plans for the Oostpolder area involve 600 hectares. The owners of the land are 15 seed potato farmers. They own one of the best agricultural lands in the Netherlands due to its location and thus export worldwide (Appendix 7: *Codes 1 – Farmers).* They are also the owners, in cooperation with 'Waddenwind' and 'Innogy,' of the wind farm of 20 wind turbines (number 15 in figure 4 – Oostpolder with wind turbines). The area of the Oostpolder is connected to the Eemshaven on the north side and stops on the west side by the rail line, the dike on the south side, and the N33 road on the east side (Het Hogeland & Provincie Groningen, 2022b). The developments in the Oostpolder will be wind inclusive. Therefore the current executed wind park in the Oostpolder will be maintained.

Councilor of the Municipality of Het Hogeland Eltjo Dijkhuis mentioned in the first meeting on the 14th of April, 2021, that the decision was made to sacrifice one of the best agricultural lands for the expansion of the Eemshaven because of the following points: as mentioned before, creating employment and regional economic growth; but also the consideration of interests to face international competition around land and bringing in companies for the energy transition (Gemeente Het Hogeland, 2021a).

Process

For all farmers, the Preferential Rights Act (wetvoorkeursrecht) has been on their agricultural land since the 13th of April, 2021. When the farmer wants to sell the land, they must first sell it to the government. It is not possible anymore to invest in your farm or agricultural land or sell or exchange pieces of it, which is typical for farmers because of changes in investments. For the 'challengers,' this has an impact.

> *''Yes the farmers do feel that they have been pushed into a corner now.''*
> *(Appendix 7: Codes 1 – farmers: Respondent 4)*

Citizens

Citizens of the five villages, Heuvelderij, Koningsoord, Oudeschip, Nooitgedacht, and Polen, see land as agricultural land essential for nature and leisure.

Process and planning

For the Province of Groningen and the Municipality of Het Hogeland, collaboration is essential (Gemeente Het Hogeland & Provincie Groningen, 2022d). Residents were asked for their input in various ways to develop the spatial plans and associated regulations. There are discussion panels on what the industrial estate will look like and how the green-blue buffer zone between the Oostpolder and the villages will be laid out. The last session is about the compensation and guarantee scheme. From 2021 through May 2022, work on the master plan has been ongoing (photo 5) (Appendix 5: Planning).

Photo 5: Information session – March 26, 2022 taken by author.

Conclusion

On the question: ‘’What are the current and future expansion plans for the Eemshaven and Oostpolder?’’, it becomes at first clear that the national and regional government and Groningen Seaport see the property as a business park with aligning plans and projects which are focused on (regional) economic growth and job creation. Processes to complete this are among others the participation sessions with citizens and the Municipality Preferential Rights Act on the agricultural land of the farmers. Secondly, environmental organizations (accommodators) see the dominant project as business park but with strict environmental terms and conditions, such as excluding data centers. Lastly, challengers of the dominant project (expanding the Eemshaven in the Oostpolder) see the property both as agricultural land. The citizens also see the property as part of nature and their environment.

6.2 The supporters, challengers, and accommodators as the subject of the property

Introduction

To answer the sub-question: 'How do supporters, challengers, and accommodators see themselves as subjects of property regarding the Oostpolder? ', the following chapter will divide the actors into the categories of 'challengers,' 'supporters,' 'accommodators' (Alonso-Fradejas, 2021). This will show each actor's perspective on who can claim property rights.

Supporters

Governmental actors and farmers are actors that are supporters of the dominant project and see themselves as the subject of the property regarding the Oostpolder in the following way:

The governmental agencies

Both national and regional governments see themselves as the property subject and thus have the right to claim the property due to the objective of making Groningen the energy province, the international competitiveness of green energy and technology, and creating regional employment. However, if it will generate and bring employment is so far unknown.

Groningen Seaport

In 2016, the Groningen Seaport's business location policy already spoke of the ambition for Eemshaven and Delfzijl to be among "the most sustainable port and industry in Europe" by 2030. ''By positioning the companies cleverly, energy, water, and other substances can be used as efficiently as possible and reused to the maximum. Focusing on synergy through clustering and closing cycles - also known as cradle to cradle at area level - is the guiding principle of the location policy'' (Groningen Seaports, 2016). This is in line with the current project of expanding the Eemshaven (also managed by Groningen Seaports) in the Oostpolder as a sustainable business park (Appendix 7: Codes 3 – Expansion plan; Codes 12 – Environment). Due to the government claiming the Oostpolder, Groningen Seaport can use the property of land to reach their objectives.

Farmers

Although farmers see themselves as owners of the land and claim the property rights, some farmers are leaving or selling the land voluntarily. Respondents mention this because they can use the money or it is time to stop because of retirement age (Appendix 7: Codes 1 – farmers).

''Couple of farmers also indicated, that some of them also want to sell and that they are happy with a sum of money and then leave''. (Appendix 7: Codes 1 – farmers: Respondent 11)

Accommodators

Environmental organizations, citizens, and farmers are actors who argue to be the subject of the property regarding the Oostpolder in the following way:

Environmental organizations

Environmental organizations are interested in creating more space for nature, biodiversity, and energy transition. They see themselves as the subject of the property by creating rules for the area. One of their main points of interest is the migration of birds and bats. These ecological organizations are firmly against the impact of windmills on birds, although it is part of the national energy transition. The new North-West 380 kV high-voltage connection between Eemshaven and Vierverlaten also affects the landscape and causes more bird casualties (Interview 2). Regarding the wind turbines, a standstill obligation has been imposed on the province of Groningen (Appendix 7: Codes 12 – Environment). In addition, it is mandatory for the 21 windmills in the Oostpolder to monitor the mortality of birds by the windmills. The Province of Groningen imposed this in the contract (RTVNoord, 2022). The attention to the Wadden Sea, next to the Eemshaven, is also a point of interest. According to 'Nature and Environmental Federation' (Natuur en Milieufederatie) and 'Ecology and Economy in Balance' (Ecologie en Economie in Balans), this makes it sometimes hard to take a position. Because the energy transition is on one side very important to them, on the other side, you lose nature for industry and other infrastructure.

''In that sense, it is sometimes difficult for our position, because we have a constituency that is very specifically focused on nature and we have a somewhat broader function, also in terms of the environment. So we also think it is important that the energy transition continues to become more sustainable. The Eemshaven plays a role in this as well''.
(Appendix 7: Codes 12 – Environment: respondent 2).

Farmers

Besides owning the land currently, the farmers also have a share in the wind turbines on their property, which they hold as a company. The farmers get compensation for their agricultural land by buying out the land. In the situation of no voluntary departure, conversations will be held between the farmers, the Province of Groningen, and the municipality of Het Hogeland. The farmers can also suggest how they want to put their land to use (Appendix 7: Codes 1 – Farmers).

Citizens

Citizens see themselves as the property subject by pushing for liveability for the villages by, among others, local investment, housing, and leisure possibilities. Besides that, citizens also claim the property by financial compensation from the area developments and by participating in the sessions with the municipality.

> *''The government is also always about money, so the government will probably have the most power. Then you'd better participate a little and get the most out of it. ''*
> *(Appendix 7: Codes 2 – citizens: Respondent 13)*

However, nothing is mentioned anymore about a compensation scheme, buyout scheme, or guarantee scheme, unless the fact that it was assured 1.5 years ago during the announcement in April 2021.

Challengers

The influences mentioned above of other parties on the property rights change the circumstances of, in this case, the residents.

Citizens

Due to changing circumstances, not getting the financial compensation that is agreed on and other (health) issues (Appendix 7 – Codes 1-: Social factors), citizens also move from accommodators of the dominant project to challengers. This shows that certain influential voices may be unresponsive to helping secure the right of communities and individuals. This also has its impact on the participation sessions, where many citizens do not participate anymore (Appendix 7: Codes 7 – Participation).

Besides that, one of the trust issues of the residents (without land) is the participation which failed in the previous years between citizens, government agencies, the farmers, and energy corporations for the wind park in the Oostpolder. According to Structure Vision, 2017-2021 (Provincie Groningen, 2021), the wind park policy ensures that residents get a share in the wind farm through financial returns. However, this ultimately did not happen in this way. One respondent said he had participated at least four times during the meetings about the windmills. This was to discuss getting two windmills for the villages and a share in the property rights. The rest is owned by the farmers of the land in the Oostpolder. Ultimately this did not succeed, and the province and municipality indicated to the farmers that there was no point in continuing the meetings (Appendix 7: Codes 9 – Windmills).

Environmental organizations

In 2020, it turned out that the Nitrogen Reduction Bill, 'putting nature first,' had not worked. It turned out that the balance between nature and business had shifted too much toward economic development. The Province of Groningen (2021) experiences these problems and describes the following solutions:

1. External balancing refers to acquiring emission allowances from other emission sources to balance accounts.
2. An "umbrella permit" - The Eemsdelta will reduce its CO2 emissions substantially in the coming years because of the transition from fossil fuels to sustainable energy. This will also lead to a substantial NOX reduction. Possibilities are being sought to benefit the development of the Eemshaven partly or entirely from this reduction.

It is also mentioned that this could lead to potential health impacts on humans and the protected area of the Wadden Sea (Provincie Groningen, Gemeenten het Hogeland en Eemsdelta en Groningen Seaports, 2021).

Farmers

The farmers unwilling to sell their property voluntarily see themselves as landowners of land that others cannot claim. Challengers are mainly the farmers who have the entire family involved in farming on the Oostpolder, have an international exporting business, and multiple generations and future generations (children) to come as a farmer (Appendix 7: Codes 1 – farmers). However, due to other influences from the government authorities, farmers will be forced to sell their land after failed negotiations through land expropriation through the courts.

Conclusion

Supporters see themselves as supporters of the leading project and thus claim the property mainly due to objectives that must be met. Both governmental institutions and businesses focus on (economic) goals to claim the property—secondly, farmers who voluntarily leave claim the property but are happy to sell it for financial compensation.

Accommodators have in common that they claim the property by setting rules for the main project. However, the influences of others show that the perspective of accommodators can switch to challengers and create people being against the dominant project without trying to negotiate.

6.3 The institutional form and enforcing authority of the resource property

Introduction

This chapter will answer the following sub-question: 'How do supporters, challengers, and accommodators see the institutional form and enforcing authority of property?'. Answering this question will show the different institutional forms of property and how the other actors see this. Forms of property are open access, state property, common private property, and individual private property (Alonso-Fradejas, 2021). Secondly, besides the institutional form, the authority to enforce property rights (state or non-state actors) will be discussed in the view of the actors. The actors will be divided into three categories: 'supporters', 'challengers', and 'accommodators'.

Supporters

The regional government, Groningen Seaport, and environmental organizations all see the property as public state property. However, the regional government have a different approach to other actors which will be explained below.

Regional Government and citizens

The regional government, municipality het Hogeland, and the Province of Groningen see the property as state property. As state property, the governments approach the project in collaboration with the residents by participation.

The residents of the five villages were invited for several participation sessions from the beginning of 2021 until May 2022. Within these sessions, residents could contribute to the design of the green-blue zone in the Oostpolder and provide ideas about biodiversity. The green-blue area is 200 hectares of the total 600 hectares, which will be used for nature, leisure, and biodiversity in front of the 400 hectares of industry (see Photo 6). According to the Province of Groningen and the Municipality Het Hogeland, the businesses should contribute positively to biodiversity with green roofs and walls (Appendix 7: Codes 3 – Expansion plan). Besides, it is essential that there is a less hardened surface than in regular industry areas. This is especially important for climate adaptation and because of water management problems in the Netherlands. Another factor is that it can contribute residents to the area's liveability and keep the function of nature and recreation.

Photo 6 – Concept green-blue zone inspiration (Gemeente Het Hogeland & Provincie Groningen, 2022c)

Regional Government and farmers

The regional government, municipality het Hogeland, and the Province of Groningen see and approach the land for farmers as common private property. The government's process is to give the farmers the option of how they want to deploy the land. The farmers could keep the land and rent it out. However, according to the project manager, this is a complicated process (Appendix 7: Codes 3 – Expansion: Interview 1). Besides that, as mentioned before, it is impossible for all the farmers to expand their land or sell it to anyone else. This is due to the Municipal Preferential Rights Act, which obliges owners to first offer a parcel of land on which a preferential right has been established to the government (the municipality, province, or central government) when selling it. This law allows governments to get a better position – and therefore more grip - on the land market (Ministry of Internal and Kingdom Affairs, 1981). Ultimately, farmers will be forced to sell the land to the government as there are no options for creating a living without the possibility of investing or expanding (Appendix 7: Codes 1 – Farmers).

Environmental organizations

Environmental organizations see the institutional form as state property which they support because the government can enforce strict ecological terms and conditions before it will become the private property of companies who buy plots.

> *''And that they also expect the companies that settle there, to make a certain positive contribution. That's also a bit of ecology and economy.'' (Appendix 7: Codes 12 – Environment: Respondent 2).*

The project manager of the Province of Groningen and Municipality The Hogeland adds that ''companies purchasing plots will have to comply with environmental requirements. Companies will likely need to have a small environmental footprint'' (Appendix 7: Codes 12 – Environment: Respondent 1). In the interest of the environmental organizations, these conditions support the energy transition. But whether the companies need to use renewable energy has not yet been formulated. Therefore, it is not certain if companies will use the wind energy from the windmills on the Oostpolder or off-shore. According to the project manager, it is speculation from the media that industries use all the wind energy (Appendix 7: Codes 12). Besides that, the green-blue zone is important for environmental organizations, which adds to water management and biodiversity. However, the exact location is not yet on paper for the green-blue zone, which makes it hard for citizens to believe that it will be created as a horizontal line between the villages and the industry (Appendix 7 - Codes 5: government).

Groningen Seaport

Groningen Seaport sees the property as state property, which will become private when the government is selling it to, among others, Groningen Seaport. However, it is not known if Groningen Seaport is already an owner of the land in collaboration with the state since the expansion of the Eemshaven is also in the interest of Groningen Seaport. The authority to enforce rights is seen as for the state, because Groningen Seaport also has public functions and belongs to the category of public institutions (Government Organizations, 2019).

Challengers

The residents and farmers who challenge the main project see the property as not a business park but differ in institutional form.

Citizens

Citizens see the property as state property, however with other uses than the business park. Due to participation sessions of the government, they can participate in conceptualizing the design. But due to trust issues with the government, residents do not change the challenging perspectives regarding the property.

> *''I think because there are so many failures from the municipality and the government, so they [other citizens] don't trust it anymore. And let it go. Because the province says 'you have a say...'. Well they listen and it just stops there. You don't see it actually being used. Only some drawings, but whether it's going to be realized what was discussed at those evenings is such a big doubt. It remains very difficult …'' (Appendix 7: Codes 7 – Participation: Respondent 5).*

Citizens, who are challengers of the main project, see themselves as those who can change the property regime as non-state actor, however as said, they have little trust in the process.

Farmers

Farmers see the institutional form as the Oostpolder that remains as individual private property. They also see themselves as the non-state actors who can enforce property rights and change sanctions by, among others, interest groups. Farmers who are challengers of the main project do not want to accept the compensation, because by selling the land it will become state property. This is also the same with the participation sessions, where farmers are also invited but do not participate. Farmers are advised by the Land and Horticulture Organization (the Dutch LTO) not to speak to externals such as media, researchers, and the government about the situation and their land (Appendix 7 – Codes 1: farmers). With interest groups, farmers are trying to change sanctions, which are non-state actors to enforce authority.

> *''They [the government] are destroying a lot of family businesses.'' (appendix 7: Codes 1 – Farmers: Respondent 3)*

Accommodators

Residents try to get the best out of it as public property via participation, farmers want excellent compensation for their individual private property, and environmental organizations accommodate the property as state property. These accommodators are pushing for communal resource ownership since this will create the most successful outcome.

Citizens

As mentioned before, residents can participate in the process of the project. Although they attend the participation meetings under protest, residents as accommodators see the property as public and participate in influencing the property from becoming only a business park. This also includes the importance of investment in the villages, which could create liveability in the way residents would like to see it. Besides, they enforce property rights by pushing for compensation, housing guarantees, and creating public property like leisure areas.

However, participation is an ambitious concept that depends highly on the practice of the method used and the implementation process (Jolivet & Heiskanen, 2010). It is known that participation is important for acceptance. However, it still does not always succeed, which is also the case with the participation session between the villages and communities and the involved government agencies. Besides the Municipality Het Hogeland itself, the other 11 residents participating in this research are not positive

about the participation sessions of the project. Citizens often lack trust in the process and government and do not believe their voice will be used (Appendix 7: Codes 7 – Participation). This is also strengthened by the fact that not much is put on paper, and many sessions repeat the same information.

Accommodators are also mainly focused on getting the villages on paper during the participation sessions (appendix 7: Codes 6 – Process). Currently, they are not, which is perceived as not investing outside the Oostpolder (Appendix 4 – Results table sessions). Recently the master plan was published. However, the villages are still not written down (BügelHajema Adviseurs, 2022). Therefore, many residents are no longer participating in the participation sessions and have become challengers to the main project.

Farmers

Accommodating farmers still see their property as individual private property, however they try to accept or negotiate the best compensation terms possible. Besides that, the farmers own the windmills on the Oostpolder. Therefore it is unknown if some farmers will create common private property due to the wind turbines on the land.

Conclusion

To briefly conclude this chapter: supporters of the main project as in government and environmental organizations both see the institutional form as public property, whereas this is in the government's interest to create a business park. For environmental organizations it is important that the business park is also aligned with environmental terms and conditions for the energy transition, water management, and biodiversity. These three interests are also in the government's interest, which are executed in the interest of the residents (enforcing authority is the state).

However, citizens, both challengers and accommodators, also see the property as public property and expect to have a specific influence as a non-state actor. This is now created by the government via participation. Due to unsuccessful sessions, trust issues, and villages not on paper, residents move between being an accommodator or a challenger for the main project.

Lastly, the institutional form of the property is for farmers' individual private property. However, accommodating farmers are willing to change how they see the institutional form of property as public when they sell their land to the government and accept the best compensation. On the other hand, challengers get influence and enforce authority via interest groups of farmers.

6.4 The resource property policy structure

Introduction

The fourth sub-question, 'How do supporters, challengers, and accommodators see the policy structure of the property?' explains the specific mechanisms through which property relations are governed, both policy and regulations. And how this is perceived by the actors, divided into 'supporters,' 'challengers,' and 'accommodators.'

Supporters

Regional Government

As a result of the projects implemented between 2017-2021 (figure 4), area-specific environmental policies were changed and established, which are now being implemented. In the procedure, the cumulative noise impact is mentioned. This defines the limits of the available environmental space.

According to the project's authorities, there is too little environmental use space. Environmental use space is about the possibilities that nature and the environment offer society without compromising future uses. From the economic perspective, the Province of Groningen and Municipality Het Hogeland (2021) argue that temporarily more environmental space is needed to develop a circular economy and green raw materials. This is done by using reduced CO2 and NOx as extra available amounts for new industrial activities. This could have a potential impact on the health of citizens. The structure vision report (2021) mentions possibilities such as buying out or compensating residents.

One of the areas is mentioned; for four houses near the Eemshaven, the limit values for noise are increased (Provincie Groningen, Gemeenten het Hogeland en Eemsdelta en Groningen Seaports, 2021). The interviews also mention this (Appendix 7: Codes 9 – Windmills). A respondent mentioned one of the previous owners of the four houses:

> *''The previous owner appealed in 2020 because the decibels of the windmills would go up. She lost it from the court, therefore she decided to move away of the area'' (Appendix 7: Codes 9 – Windmills: Respondent 9)*

The environmental standards and rules from the structure vision are incorporated into the policy. This assessment framework for environmental permits is used in licensing businesses for the Oostpolder.

Challengers

Citizens, farmers, and environmental organizations are experiencing changing policy structures for the property. This is a factor where certain actors are challenging the main project due to changing policy structures.

Citizens

The Masterplan, in which citizens participated, also notes that the environmental barrier is not fully used in the area (BügelHajema Adviseurs, 2022). The Masterplan has been public since June 1, 2022, and until July 12, 2022, responses can be given online. All reactions will be bundled in a document. This is the so-called 'Reaction Memorandum.' This memorandum must be completed and adopted by the Provincial Executive at the end of September 2022. Together with the Spatial Quality Framework Oostpolder, the Reaction Memorandum will then be sent to the Provincial States for decision-making (Provincie Groningen & Het Hogeland, 2022g). The factors of noise and health are important for residents who are challenging the main project.

Noise

According to the law, the maximum decibel of a wind farm is 47 dB in the Netherlands. This already occurred in the period between 2017-2021. After this, it was determined by municipalities in the Province of Groningen that a noise level higher than 47 dB caused by more than one wind farm is permissible up to 65 dB (Provincie Groningen, 2021).

As said, for four houses southeast of the Eemshaven, a higher limit value than the permissible noise level on the house was necessary from 2017 to date. As mentioned at 5.4 - 'supporters,' this was challenged by a resident who lost the case at the Council of States. So four houses potentially experience higher noise levels than 65 dB due to the windmills and traffic noise of the project operations (BügelHajema Adviseurs, 2022; Appendix 7: Codes 10 – Social Factors).

According to the Province of Groningen and Municipality Het Hogeland (2021), the Eemshaven-Oostpolder and Eemshaven-West wind parks are higher than 65 dB as a guideline. (Appendix 7: Codes 9 – windmills/ codes 10 – social factors). This brings a feeling of injustice to the people of the area. This is also mentioned by three respondents (out of 11 residents) that some of them live way closer to the windmills than others. The closest distance from a resident's home to a wind turbine is 500 meters. The process of determining the maximum 65 dB for the Oostpolder wind farm is currently being defined differently. According to The Dutch Wind Energy Association (2022), the average noise barrier usually is

in the Netherlands 47dB. However, the average noise level for the day, evening, and night periods is calculated over an entire year. The noise is therefore constantly experienced as too high. Occasionally during the year, the wind turbines are shut down to lower the average for the year. One of the residents said during an interview for this study:

> *''That line [maximum dB] they drew last year is already too much. It is measured on average every year. So then they shut down some windmills every now and then to get the average down. ''*
> *(Appendix 7: codes 10 – Social Factors: respondent 5)*

Health

Mental health and stress are one of the most clearly defined health impacts by participants who are citizens. This stems from the uncertainty and lack of clarity about the plans, the noise from the current construction work and wind turbines, and the future plans and years of construction work (Appendix: Codes 10 – Social Factors).

> *''Day and night there is work traffic and construction on the wind park. This already happened in 2020, and then a letter fell on the doormat with the announcement of the expansion in 2021. I am afraid that I will be in the middle of construction again for years with the expansion of the Eemshaven in the Oostpolder''*
> *(Appendix 7: Codes 10 – Social factors: Respondent 13).*

Besides, there are concerns about air quality, smell pollution, and other health effects *(Appendix 7: codes 10 – Social Factors)*. The Province of Groningen and Municipality Het Hogeland (2021) mentioned in the structure vision report that it is indicated that several measured pollutants, such as a number of heavy metals, which are in the category of substances of grave concern, are above the regional level. However, they do not currently lead to standards being exceeded. However, nothing is mentioned about health issues in the master plan to expand the Eemshaven (BügelHajema Adviseurs, 2022).

Compensation

In line with the health issues mentioned above, challenging residents also note the unknown about the villages and their houses and the absence of compensation. Six out of 13 citizens indicate experiencing anxiety and mental health issues regarding whether their home will be less valuable and the question if they need to move. In addition, 5 out of 13 residents indicated that it is unknown what and if you will get any compensation for the current and future nuisances and a buy-out possibility for the houses (Appendix 7: Codes 10 – Social Factors). Economically this could impact the respondents who cannot move or get another mortgage to carry.

''Subsidy/compensation lists are also unclear. For example, not everyone from my street is indicated as suffering from the wind turbines' cast shadow. This makes it unequal. On the other hand, there is such a list, but nothing further is known about compensation. So far, I never received anything.''
(Appendix 7: Codes 11 – Economic Factors: Respondent 13).

In response to the civil society organization 'Dorpsbelangen,' the Province has hired a consulting firm to work out a safety net scheme for owners of homes and real estate after the many questions and concerns. In the period between June 2022 and October 2022, this will be investigated. The safety net should provide a safeguard when residents want to sell their property. Nothing is known about compensation or adjusting rules and policies for other nuisances mentioned before, such as noise from construction work, the wind turbines, their shadow, and other nuisances.

Farmers

As mentioned in 6.2 - Regional Government and farmers, the Preferential Rights Act keeps farmers from developing their land and property.

Environmental organizations

As said in chapter 5.4 (Supporters: regional government), from the economic perspective Province and businesses (2021) feel that regulations of the 'environmental use area' law hinder the development of circular projects. To get industry around circular and green raw materials off the ground and to be able to compete with petrochemicals, it is believed that (temporarily) more environmental space is needed. The development of bio-based and circular chemistry requires innovative solutions whereby it is not always clear in advance that requirements can be met. It is argued that the space created by the reduction of CO2 and NOx from the companies should be made available for new industrial activities (Provincie Groningen, Gemeenten het Hogeland en Eemsdelta en Groningen Seaports, 2021).

However, there is no room in the Netherlands for more air pollution and the Eemshaven area is already close to the limits of the Clean Air Agreement (Rijksoverheid, 2020). The current standards were established in consultation with the business community. But innovative new activities should not lead to more environmental pressure: decoupling of economic activities and environmental damage. Nature and Environment Federation (N&M Groningen) also advocates for researching and possibly standardizing emissions of hazardous substances to water and air (such as nickel, SiC fibers, and hydrogen fluorides) that were not adequately identified in 2016. They argue that this is needed because the ambition is to

become a circular economy. However, the hazardous substances can have its impact (TNO, 2020).

> *''They [government] indicate that the existing Eemshaven still has certain environmental space in terms of noise. There is a certain permit for that and they are not making full use of it yet. So they also want to use that'' (Appendix 7: Codes 6 – Process: respondent 2)*

Accommodators

Environmental organizations

Within the project design, environmental organizations are included with their advice (BügelHajema Adviseurs, 2022). This advice mentions the importance of climate change mitigation and terms and conditions for when businesses buy the plots. The limits on pollution and emissions (5.4 -Challengers: Environmental Organizations) are therefore also constraining the industrial park.

Secondly, according to the Nature and Environment Federation and the Province of Groningen, the national government needs to pay more attention to the preservation of the UNESCO World Heritage Site the Wadden Sea (BügelHajema Adviseurs, 2022). However, what is striking is that the advice of the Province of Groningen briefly mentions that adjusting the rules in the interest of the economy is not easy because of the impact on both humans and the protected Wadden Sea area. This shows the interest in economic growth over environmental standards that impact humans and nature.

Conclusion

The proponents are in control of changing policy structures. In this case, governments adjust policies in the interests of the economy. Among other things, adjusting the environmental use of CO2 and NOx, and the noise barrier for the industrial area. Due to the changing policy structures, earlier accommodating parties, such as environmental organisations and citizens, are now turning into challengers. For citizens, this is because they do not get clarity on the compensation for current and future nuisance.

6.5 The justifications of the property

Introduction

In this last chapter, the question of how supporters, challengers, and accommodators justify the property will refer to the ideological and moral justifications behind the property of the Oostpolder (Alonso-Fradejas, 2021).

Supporters

National Government

For the National Government (2022), it is crucial to cluster large-scale renewable energy. Therefore using the Oostpolder as property is justified by the need for land and the transition toward renewable energy and meeting the environmental targets.

Regional Government

The regional government, the Province of Groningen, and the Municipality Het Hogeland justify the use of property in two ways. First, Groningen is the energy region and wants to keep that role. Due to previous and current employment in the energy sector, the transition to green energy must replace the rollback of the gas sector. Therefore, new employment opportunities are one of the government's justifications for using the property in the Oostpolder.

Secondly, Groningen relied on the economy of the energy transition previously and in the future on the green energy transition. The property will be sold to companies to keep a stable regional economy. In line with that, by clustering several sectors, the provincial government wishes to become the energy hub for among others hydrogen in the Netherlands and Europe. As mentioned in 6.4 (Supporters: regional government), environmental standards will be adjusted to do so.

Groningen Seaport

The justification of Groningen Seaport is mainly based on the aim of being the most sustainable port and industry in Europe in 2030. However, this still does not justify why the extra property is needed. The justification is also based on the high demand for plots for industries such as data centers.

Challengers

Citizens and farmers who challenge the main project see the justification differently. For both, this also has to do with the few alternatives, which do not justify the use of the property for these actors.

Citizens

Two respondents mention that they will experience economic hindrance from the expansion of Eemshaven if they cannot continue to live at their current location. This is because the company is linked to the location and home. Currently, no alternatives are offered by the governments. Besides that, as mentioned in 6.4 – compensation, citizens are not guaranteed or compensated in any way, although there are also experienced health issues. This results in citizens who still challenge the main project, see the property still as nature and their environment and therefore justify that the land should be used for agriculture and nature instead of industry.

Farmers

Farmers justify the use of the property as agricultural land for several reasons: 1) many generations of farmers own the land; 2) There is land scarcity In the Netherlands, making it difficult to continue farming in another location; 3) farmers are economically dependent on their property for their business and exporting the crops nationally and internationally (Appendix 7 – Codes 1: farmers).

Accommodators

Citizens, farmers, and environmental organizations accommodate particular standpoints to justify the use of the property.

Citizens

The residents categorized as accommodators see the justification for the property primarily as creating liveability and local developments for the villages and within the project in the Oostpolder. They perceive the justification of the area in this way because they are the residents of the area. However, almost all residents mention the importance of green energy in the future, although they do not want this in the Oostpolder (Appendix 7 – Codes 12: environment). Besides that, certain circumstances also change how others see the justification:

Bed & Breakfast owners

Two individual respondents own a Bed & Breakfast (B&B) in one of the five villages next to the Oostpolder. In general, they are not supporting the plans to expand the Eemshaven. This is because the industry is not attractive to their tourist guest. However, both respondents indicate that despite this, they also have many workers (from the Eemshaven) in their accommodation. Especially in the winter, this brings income, when tourists mostly stay away from the area. They both argue that this could increase in the upcoming

years (Appendix 7 – Codes 11: Economic factors). Therefore the B&B owners justify the property differently than other residents.

Farmers

Farmers willing or trying to accept other possibilities see the property's justification as both important for creating food and continuing farming, but also in the sense of the importance of creating more green energy. Therefore, the farmers on their land also initiated the wind park.

Environmental organizations

Environmental organizations justify the property rights by the current problems on scarce land and water management due to industry. Therefore, as accommodators, land should not only function as an industry or for data centers but also create pros for the green energy transition and biodiversity.

Water and droughts

The freshwater demand (for agriculture, residents, businesses, and nature) in 2050 will be double the freshwater demand in 2014 (Ministry of Economic Affairs, 2014). Due to the heat, evaporation will be higher, and the disappearance of glaciers will reduce the water supply via the Rhine. Water management must be adapted to ensure sufficient water is available for every function throughout the year.

So far, according to the Province of Groningen (2022), freshwater supplies have hardly been considered in new developments in Eemshaven and Delfzijl. However, due to the drought in recent years, awareness of the importance of freshwater supplies is slowly growing. For example, the availability of clean and sufficient water is a necessary precondition and starting point for the siting of companies in Eemshaven. Although drinking water is still used for data centers, a pipeline is currently being built to extract water from the Eems Canal (Gemeente Het hogeland & Provincie Groningen, 2022d).

Conclusion

Supporters justify the property by clustering of large-scale renewable energy and keeping Groningen as the energy province for economic stability and growth. Farmers that challenge the project, justify the property by several personal reasons in the sense of losing the business, the farm and the importance of fertile soil. Citizens justify the property for the sake of creating liveability, local development and recognition of nuisance (through e.g. compensation).

Chapter 7

Discussion of findings

After the results of the research, in this chapter, all six dimensions of the Resource Property Question (Alonso-Fradejas, 2021) are brought together, where we delve deeper into the meaning, importance, and relevance of the results and thus perspectives of every target group.

The research problem focused on land use change and changing property relations, whereas the government is the frontrunner for these changes with the aim of economic development and sustainable purposes.

Introduction

Briefly, the results indicate besides competing perspectives on the resource property question, the following new insight into the relationship between project scale and the dynamic of ownership. The national authorities are leaving the initiatives for sustainable electricity production to the market, with the RES for support and facilitating. Carley & Konisky (2020) already highlighted the gap of who exactly is on the front lines and how everyone gets a chance to be a stakeholder. With a market-based political-economic framework, this should be most effective. However, this research demonstrates that buyers of the land are still unknown and that the current discussions on environmental terms and conditions for both the energy transition and the area are not fixed on paper. According to Pearson & Foxon (2012), less state involvement could lead to more conflicts since these come mainly from big companies in the energy (fossil fuel) sector. However, many of these companies are switching from fossil fuel to 'green' energy such as Shell and Groningen Seaports for example for green hydrogen in the Eemshaven.

The effectiveness of the current state involvement can be questioned as well. For the RES Groningen (2021), local ownership and fair distribution of benefits and burdens with energy projects are important. However, to underline control, ownership, and management, the scale of the expansion project (XL-scale) is created. This means, despite other wishes, less control, and ownership for residents. In the case of the design phase, municipalities, the province and the national government will act jointly. For example, identifying the location of data centers with the possible use of available green power (Rijksoverheid, 2022). These results have an impact on the changing competing perspectives of challengers and accommodators since the results of this project show less local control and ownership.

The six dimensions of the property relations

In the results, every dimension has been discussed according to the perspectives of supporters, accommodators, and challengers of the main project. In the following paragraphs, all important dimensions are brought together for every group of actors, which shows the dynamic.

Government and Groningen Seaport

Supporters of the dominant project are the regional government, the Province of Groningen and Municipality Het Hogeland, and businesses such as Groningen Seaport. They see the property as a business park and do not change their perspectives over time. The current expansion plans and processes are mainly focused on (regional) economic development, market potential, and giving space to large companies. By that, the government has the objectives of making Groningen the energy province, creating international competitiveness in green energy and technology, and creating regional employment. Of which the last much is still unknown.

It stands out that the objective of the expansion for climate change mitigation is often not mentioned. The data, therefore, acknowledges the polarized debates on land use change (Oberlack et al., 2016; Chilombo, Fisher & van der Horst, 2019), whereas actors that support land acquisitions see property as opportunities for rural development and job creation. However, these results also demonstrate that previous area development around Eemshaven had the same objectives. It continues to be a one-size-fits-all approach, which is built on objectives that are mainly leading to economic growth for the government and aligns with Franco, Young Park & Herre (2017) that this approach could damage old conflicts or create new ones because it can be seen that different factors overlap, interact and interact. The aim of strengthening the economy to also ensure the preservation of facilities although they are not existing in the villages sheds light on the government objectives. Leaders more often create arguments about economic transformation and especially with the low-carbon transition (Hirsh & Jones, 2014; Pearson & Foxon, 2012), but what is forgotten here is the benefits that will not reach the population at once.

For governmental institutions, the property is perceived as state property by adjusting laws and controlling the process of participation. Besides the Municipal Preferential Rights Act on the property, one of the laws is adjusting the environmental use space, by compensating among others CO2, which is needed for economic interests. It is specifically mentioned that the current maximum environmental use space hinders the development of circular projects. This is all justified, not specifically to mitigate climate change, but to keep Groningen as the energy province and to cluster large-scale renewable energy to create a new economy for the next energy transition.

Farmers

Farmers can be categorized into different groups. Voluntarily leaving farmers are supporters who are just like accommodators getting financial compensation. They still see the property as agricultural land and as individual private property, although the Municipal Preferential Rights Act is one of the processes that keep all of them from investing. This law and the compensation push some farmers to become a supporter of the dominant project by leaving and some farmers become challengers or accommodate for the best compensation possible. This has to do with several factors, but having a family or a big business is one of the main arguments to keep challenging the expansion. With interest groups, farmers are trying to change sanctions, which are non-state actors to enforce authority.

Citizens

The data of accommodators contribute to a clearer understanding and evidence of the impact on livelihoods when land use and property change occur. Situations of contested compensation and the potential loss of community access to land for citizens and for farmers to their resources are causing conflictual livelihoods. Citizens are both accommodators and challengers of the project. They see it as part of agriculture, nature, and their environment for leisure. By participating, accommodators see themselves as the subject of the property by having a say and trying to influence the outcomes, although previous projects did not ensure that residents got a share in the property rights.

One of the current aims is to create livability and investments in the villages. However, this is still not considered in the investment plans. Besides, they enforce property rights by pushing for compensation, housing guarantees, and creating public properties like leisure areas. But citizens change from accommodators of the dominant project to challengers due to changing circumstances. The information about the villages and what will happen with their house is not clear. This is also due to the fact that the villages are not even on the map of the master plan. This is causing stress and other health issues. Besides that, compensation is guaranteed for many issues such as noise, shade from the windmills, and others. However, no information about the compensation is clear or received, although it was agreed on. These results built on existing evidence of Hannus & Sauer (2021), who argue that many commercial, social, political, and environmental mechanisms are closely interrelated when land-use change occurs and cause a feeling of inequity and unfairness (Ter Mors, Terwel, & Daamen, 2012). This is already the case with citizens who always have been challengers of the project, and are having among others trust issues due to previous projects such as the wind park of which the villages ultimately did not get any share. Besides, the local governments agreeing on secrecy regarding the exploration caused major trust issues. This shows

historical and ongoing inequalities (Carley & Konisky, 2020), which involves recognition justice. This also has negative implications for the current participation in the expansion project.

Environmental organizations

Environmental organizations see the dominant project as a business park for the sake of the energy transition. According to government institutions and policies, the environmental terms and conditions for new businesses must comply with legal environmental standards such as noise, safety, and air quality. This is also in line with the aim of environmental organization for the property. However, the government has been adjusting many policies. Besides that, the terms and conditions are different for agricultural land and for the industry. Therefore a higher noise barrier is needed for industry. Adjusting the policy structure could change the perspective of the accommodators, both environmental organizations and citizens. One of the policies that stand out the most, is the choice of the governmental institutions to adjust the environmental space by the reduction of emissions somewhere else. Although it has been reported that in 2020, the balance between nature and business had shifted too much toward economic development in the area, new adjustments will be executed with potential impact on health and the protected Wadden Sea.

Lastly, climate change mitigation via among others hydrogen factories is only mentioned when speaking of the aim of 'becoming the most sustainable socket''. This is already seen in terms of the data centers, which is likely something that environmental organizations will switch to being challengers of the project because they are against data centers. However, it is known from national and regional governments that the interest and space are offered for data centers in the Eemshaven and Oostpolder. The importance to enforce strict ecological terms and conditions is therefore also not yet determined.

Reflections

This research has contributed to new insights into competing perspectives on property and land use change. Although the results do not differ majorly from previous research, the importance of this research is that all factors of spatial, social-ecological, and historical-institutional conditions and circumstances come together in one case and show the influence on the perspectives of different social groups and individuals. This creates the political dynamic that enables or constrains area developments and their acceptance by society.

In relation to the field of Development Studies, these results add to the power structure that is still visible in our system. When the aim is to give control and ownership to citizens, ultimately economic growth has more power than citizens, climate change mitigation, and property relations.

Theoretical reflections

The main theoretical ideas and understandings were from the Resource property question and the concepts of justice. The main reason for this is that this shows the competing perspectives and therefore might be useful for implementation in other Dutch contexts of area planning. The thesis attempts to explain the power relations, conflict and many perspectives. This is tried as neutral as possible.

Alberto Alonso- Fradejas has made a big contribution by the theory of the Resource property question, which include the many important dimensions of property, and also gave me the direction to find the concepts of justice in the data. In practice the main difficulties were putting the many layers of both justice and property into a structure in the thesis. Different connections and similarities are plausible, and interesting to research.

Methodological reflections

The main method in this thesis are semi-structured interviews and secondary data of policies and literature. Many sources were accessible from the authorities and local newspapers. This gave an overall view of the case. However fieldwork was needed to get a detailed view of the different perspectives and dynamic. The chosen methods were ultimately effective by answering the research questions. However, as said in the theoretical reflection, putting the many perspectives into a structure was often difficult. This was already the case during fieldwork. Due to the missing structure of the research, the methods could have been more aligned with the theories to give more guidance and get a better structure while doing research.

Chapter 8

Conclusion

This research aimed to identify the political dynamics that enable and constrain the dominant expansion plans of the regional government for the Eemshaven in the Oostpolder. In this last chapter, the concept of environmental justice is used to answer the main question: 'What political dynamics enable and constrain the dominant expansion plans for the Eemshaven in Groningen?'. This concept is related to the procedural, distributional, and recognition outcomes of the green business park and using agricultural land that overlap, intersect and interact. This shows the political dynamics with spatial, social-ecological, and historical-institutional conditions and circumstances in which they enable or constrain the dominant expansion project.

Procedural justice

Although, the provincial and local government give space to citizens and farmers to participate in the design of the Oostpolder, and environmental organizations are asked for advice, the government authorities still own the process of participation and outcomes due to changing the laws and make their decisions mainly in the interest of economic growth. Besides that the economic objectives are very clear and aim to mitigate climate change is less mentioned, environmental organizations enable the expansion due to the importance of the energy transition. Also farmers who voluntarily leave and accept the financial compensation, enable the expansion.

The constrains come from farmers who are not voluntarily leaving. This changes the dynamic, whereas citizens also accommodate for alternatives and benefits for the villages and citizens. The fact that this group continues to challenge or accommodate the project is an important factor within procedural justice. Procedures of participation, no investments in the villages and changing the laws shows exclusion from decision-making which enables unequal distribution and shows the injustice in a vulnerable community.

Distributional justice

Closely related is distributional justice, however for every individual it is different. The aim of distributional justice is to ensure that the population group do not receive disproportionate share of the burden or denied access to benefits. However, it can be concluded that the aim of economic growth and the size of the project, give the authorities the power to make decisions and unequally share the burdens.

The clearest effect of the procedural justice is already seen in distributional justice, whereas individual citizens receive a disproportionate share of the burden of the current and future expansion plans by facing

health effects and by denied access to benefits such as compensation and no investments in the villages. Especially, citizens living near the dike are having more nuisance of the current windmills and are living in the increased decibel zone.

Recognition justice

Instruments used by state or legal institutions, such as the mentioned adjustment of the laws and the approach of the participation sessions, are causing conflicts. Besides that emotional damage is not taken into account, which is an important factor after decades of changing land-use and physical and emotional damage from the earthquakes. Old conflicts and new ones are causing more trust-issues and less acceptance of the project by both farmers and citizens.

Conclusion

A well-functioning environment is seen as necessary for any form of justice – environmental, climate, or social. The competing perspectives in this research show the political dynamic, without coherent forms of justice. This enables for the government to expand the Eemshaven as a "resource rush" behind climate change mitigation and sustainable transitions. Farmers, citizens and environmental organizations only constrain the project by challenging and accommodating the question of property. However due to a lack of procedural justice accommodating and challenging the project is so far not changing the dominant project. Creating acceptance is therefore far away, and not receiving any benefit of recognition is causing only more feelings of injustice . The importance of geographical and historical-institutional influence can't be stressed enough. With returning conflicts and no fair distribution of compensation in whatever form, will not change the results of participation and procedures.

Recommendations

Based on these conclusions, planners and area developers for regional planning should consider mapping the different dynamics. This can be done at the perspectives of different social groups, according to the one to six dimensions of the resource property question. With these different perspectives on property, the important factors of socio-ecological, geographical and historical-institutional will arise. This shows the dynamics which enable or constrain the dominant project, and supports the process towards acceptance of the project among the different actors.

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Appendix

Appendix 1

provincie groningen

besluit

Vastgesteld met hoofdelijke stemming: 36 stemmen voor en 6 stemmen tegen. 34 / 2021
2021-034174

PROVINCIALE STATEN van Groningen:

Gelezen de voordracht van gedeputeerde staten van 13 april 2021, 2021-034157, PPM.

Gelet op

- Structuurvisie Eemsmond-Delfzijl
- Omgevingsvisie Provincie Groningen 2016-2020
- Omgevingsverordening Provincie Groningen 2016-2020
- Voor zover de Structuurvisie afwijkt van de Omgevingsvisie, heeft - voor wat betreft het plangebied van de Structuurvisie, waarin deze ontwikkeling is voorzien - het bepaalde in de Structuurvisie voorrang
- Artikel 167 lid 4 Provinciewet
- De door provinciale staten op 21 april 2021 bekrachtigde geheimhouding op twee bijlagen bij de voordracht:
  - Metafoor, memo normatieve doorrekening Oostpolder, versie 1.4. met dagtekening 5 februari 2021;
  - EY REAS, Provincie Groningen Rapportage van feitelijke bevindingen ontwikkeling Oostpolder met dagtekening 16 maart 2021.

BESLUITEN:

1. In te stemmen met het starten en doorlopen van de fase van planvorming voor de uitbreiding van Eemshaven met als dit als aanvullend industrieterrein in te richten met het in de voordracht voorgestelde plangebied (Oostpolder).
2. Kennis te nemen van de door GS afgesloten samenwerkingsovereenkomst tussen de gemeente Het Hogeland en de provincie die geldig is voor de planvormingsfase voor de uitbreiding van het industrieterrein Eemshaven.
3. Vast te stellen dat provinciale staten in staat zijn gesteld wensen en bedenkingen te uiten;
4. In te stemmen met het beschikbaar stellen van een investeringskrediet van € 9,5 miljoen voor de aankoop van gronden in het plangebied als deze worden aangeboden.
5. In te stemmen met de voorfinanciering van de risicodekking voor de afwaardering van de gronden ad € 5,5 miljoen (verschil verkrijgingsprijs en taxatiewaarde) uit de bestemmingsreserve Compensatie dividend Essent.
6. In te stemmen met het beschikbaar stellen van € 1,5 miljoen voor de planvormingsfase vanuit de algemene middelen.
7. In te stemmen met de 5e Wijziging van de Begroting 2021.

Groningen, 30 juni 2021

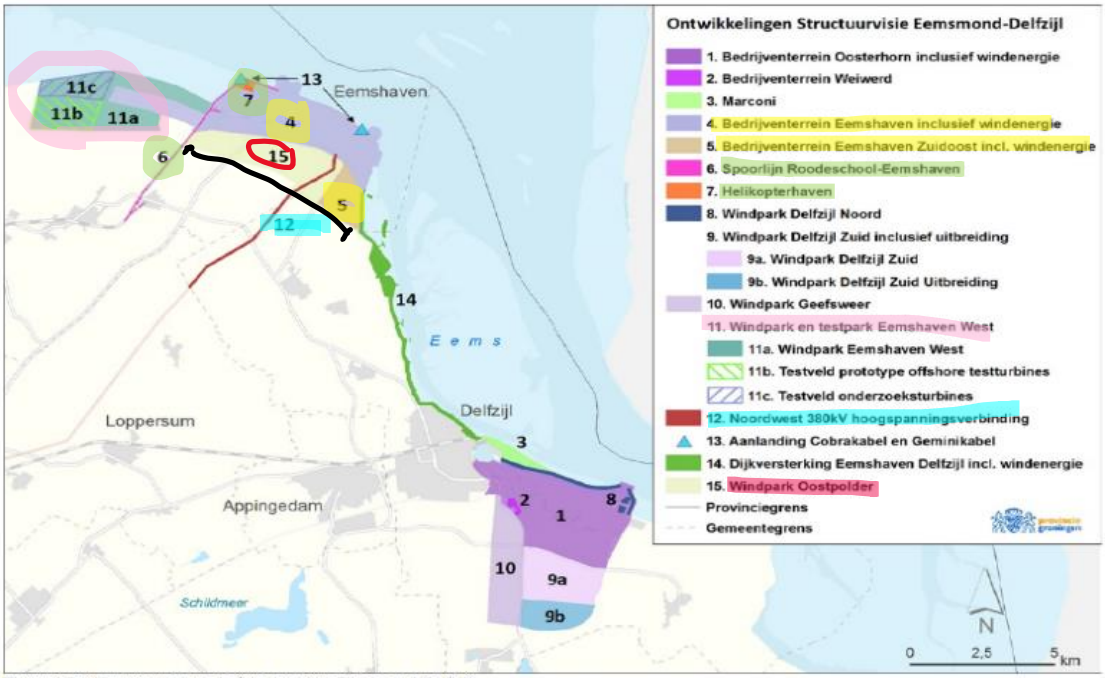
provinciale staten voornoemd:

, voorzitter

, griffier

Appendix 2.

(Provincie Groningen, Gemeenten het Hogeland en Eemsdelta en Groningen Seaports, 2021)



Figuur 1 De 15 projecten van de Structuurvisie Eemsmond-Delfzijl

Tabel 1 Stand van zaken 15 projecten.

	project	Stand van zaken
1	Bedrijventerrein Oosterhorn inclusief Windenergie	Het plan is in 2017 vastgesteld. Door de Raad van State vernietigd vanwege het vervallen van de PAS. De vernietiging raakt de omgevingsvergunning voor het windpark niet, omdat deze destijds een aparte procedure heeft doorlopen los van het bestemmingsplan. Het windpark is vergund en men is bezig met de bouw. Bouw windpark is in voorbereiding. De gemeente zal de turbines straks weer in het bestemmingsplan opnemen.
2	Bedrijventerrein Weiwerd	Bestemmingsplan eind 2015 vastgesteld. Verder geen ontwikkelingen.
3	Marconi	Bijna uitgevoerd.
4	Bedrijventerrein Eemshaven inclusief windenergie	Het bestemmingsplan voor de Eemshaven bevindt zich nog in de voorontwerpfase. In het plan is ook rekening gehouden met de bestaande en vergunde windturbines zijn apart vermeld op de verbeelding met veiligheidszones. .
5	Bedrijventerrein Eemshaven Zuid Oost inclusief windenergie	gerealiseerd inclusief windenergie. Google is nu bezig met uitbreiding.
6	Spoorlijn Roodeschool-Eemshaven	gerealiseerd
7	Helikopterhaven	gerealiseerd
8	Windpark Delfzijl Noord	gerealiseerd
9	Windpark Delfzijl Zuid inclusief uitbreiding	Vergunning en bestemmingsplan voor het windpark Delfzijl-Zuid-Uitbreiding zijn verleend/vastgesteld, maar nog niet onherroepelijk. Er loopt beroep bij de Raad van State. Wet natuurbeheer-vergunning en -ontheffing zijn onherroepelijk
10	Windpark Geefsweer	Is vergund en men is nu bezig met de bouw
11 a,b,c	Windpark en testpark Eemshaven West	Voor het windpark Eemshaven-West is nog geen inpassingsplan. De planvorming is in juli 2020 gestart met ter inzage leggen van de Notitie Reikwijdte en Detailniveau (NRD). https://www.provinciegroningen.nl/beleid-en-documenten/documentenzoeker/klimaat-en-energie/windparken/windpark-eemshaven-west/ In de NRD is onderscheid gemaakt in een eerste fase (westelijk deel Eemshaven-West) en een tweede fase (oostelijk deel Eemshaven-West). Het westelijk deel was oorspronkelijk bestemd voor een testveld en wordt nu ingezet als reguliere locatie voor windenergie. In de brief van GS aan PS is deze keuze toegelicht. https://ris2.ibabs.eu/Agenda/Details/ProvincieGroningen/6196b3d5-cecb-4a79-bac4-b6c3e517fdf3 Gezien de omvang van de eerste fase (minder dan 100 MW) is niet het Rijk maar de provincie het bevoegd gezag voor het inpassingsplan. Het provinciaal inpassingsplan heeft vooralsnog alleen betrekking op het westelijke deel.
12	Noordwest 380 kV hoogspanningsverbinding	Plan en vergunningen onherroepelijk. Plan is in uitvoering
13	Aanlanding Cobra- en Geminikabel	gerealiseerd
14	Dijkversterking Eemshaven Delfzijl inclusief winenergie	Het windpark (drie turbines) is vergund en in aanbouw. Dijkverzwaring is in zijn geheel uitgevoerd. Werkzaamheden aan de dijkverbetering zijn in 2017-2020 uitgevoerd. Er zijn voorzieningen voor vogels, mosselen, planten en dieren en er is een fietspad aangelegd. Tevens is een dubbel dijkgebied aangelegd voor de veiligheid én voor natuur, landbouw en recreatie. PS hebben op 11 november 2020 voor dit gebied een inpassingsplan "Dubbele Dijk" vastgesteld. Dit plan is een partiële herziening van het plan "Dijkverbetering Eemshaven-Delfzijl" uit 2016 en maakt mogelijk dat er bedrijfsgebouwen en bouwwerken (bijvoorbeeld kweekbakken, bassins en tunnelkassen) kunnen worden gerealiseerd.
15	Windpark Oostpolder	Windpark is vergund en men is nu bezig met de bouw

Instruction in English

4 + 5 = Eemshaven inclusive wind park

6 = Rail line

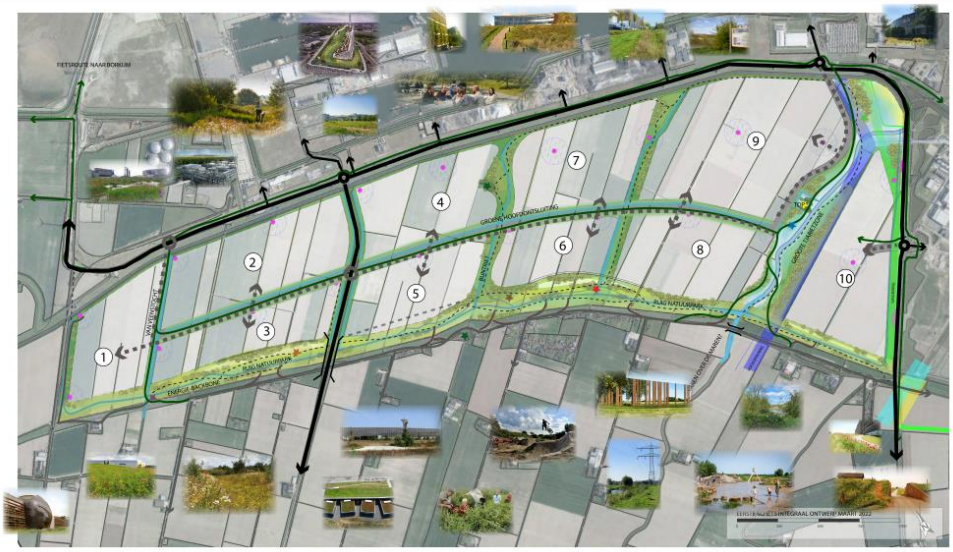
7 = Helicopter port

11 = Wind park Eemshaven West

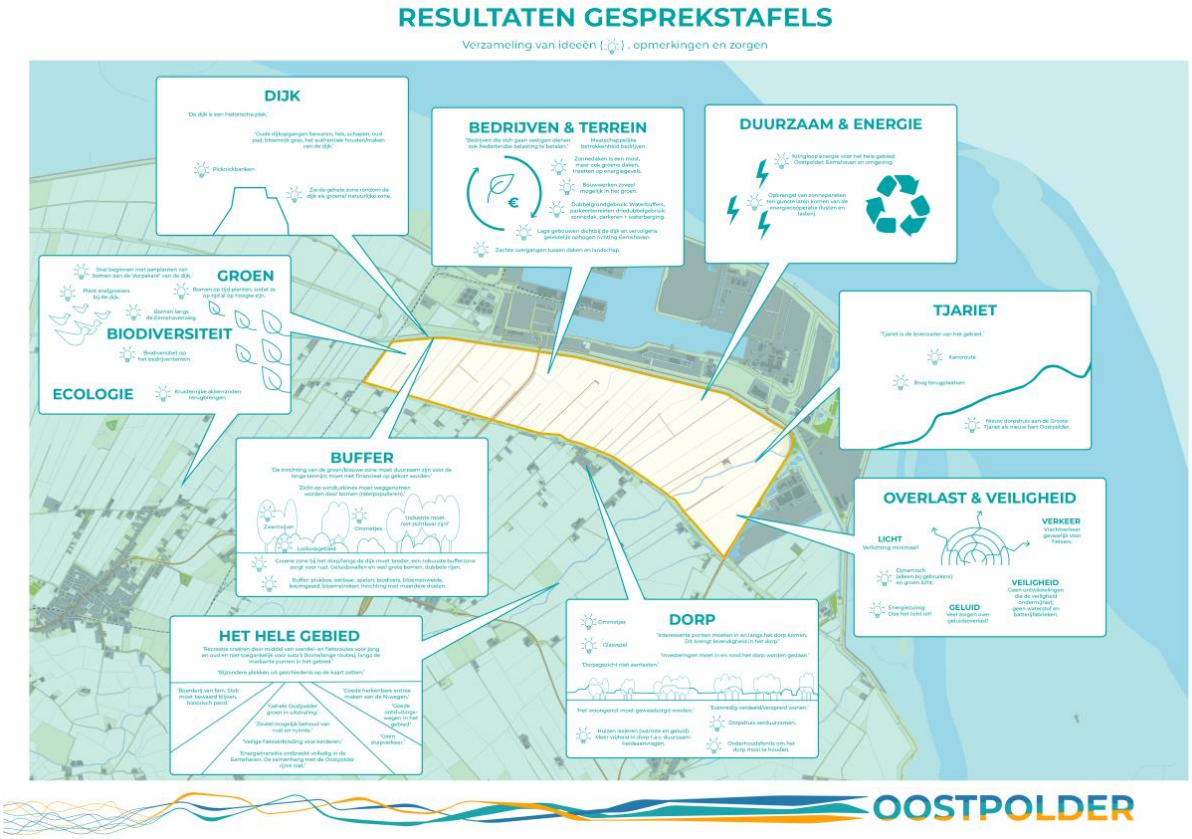
12 = Highvoltage

15 = Oostpolder with windturbines

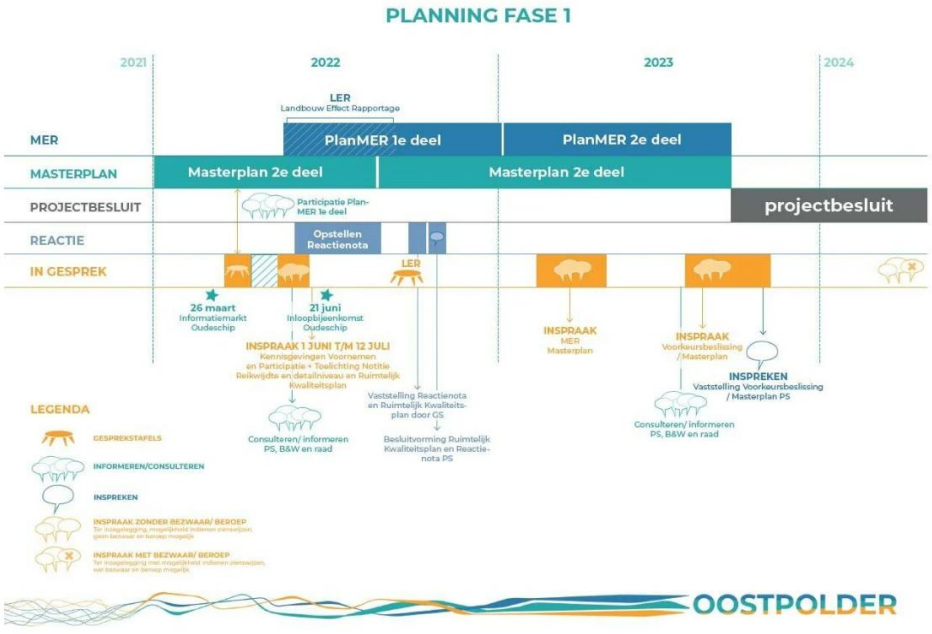
Appendix 3 – Concept green-blue zone (Gemeente Het Hogeland & Provincie Groningen, 2022c)



Appendix 4 – Results tablesessions (Gemeente Het Hogeland & Provincie Groningen, 2022d)



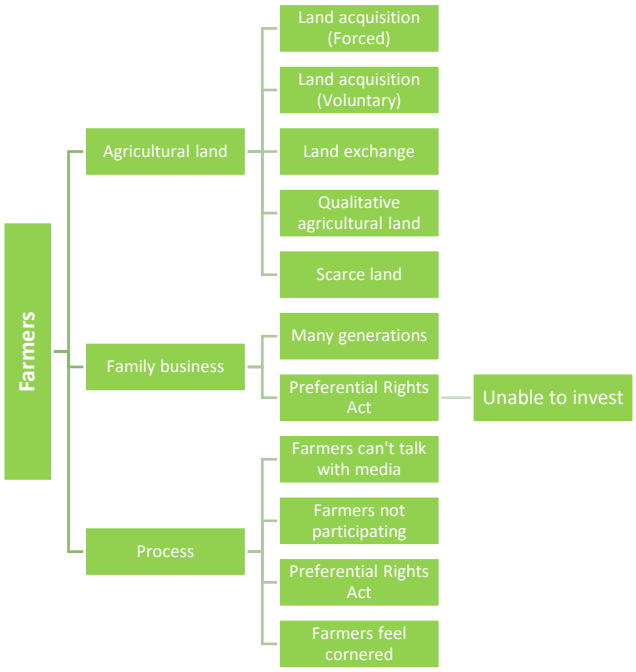
Appendix 5: Planning (Gemeente Het hogeland & Provincie Groningen, 2022d)



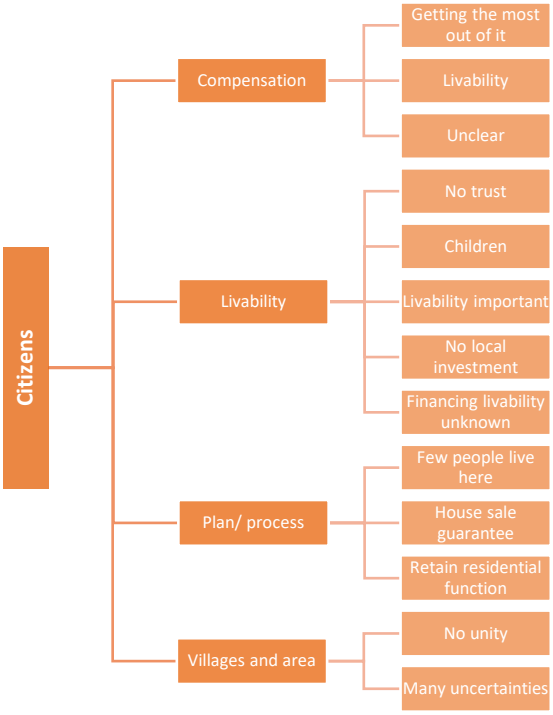
Appendix 6: Procedural (Gemeente Het Hogeland & Provincie Groningen, 2022)

Appendix 7

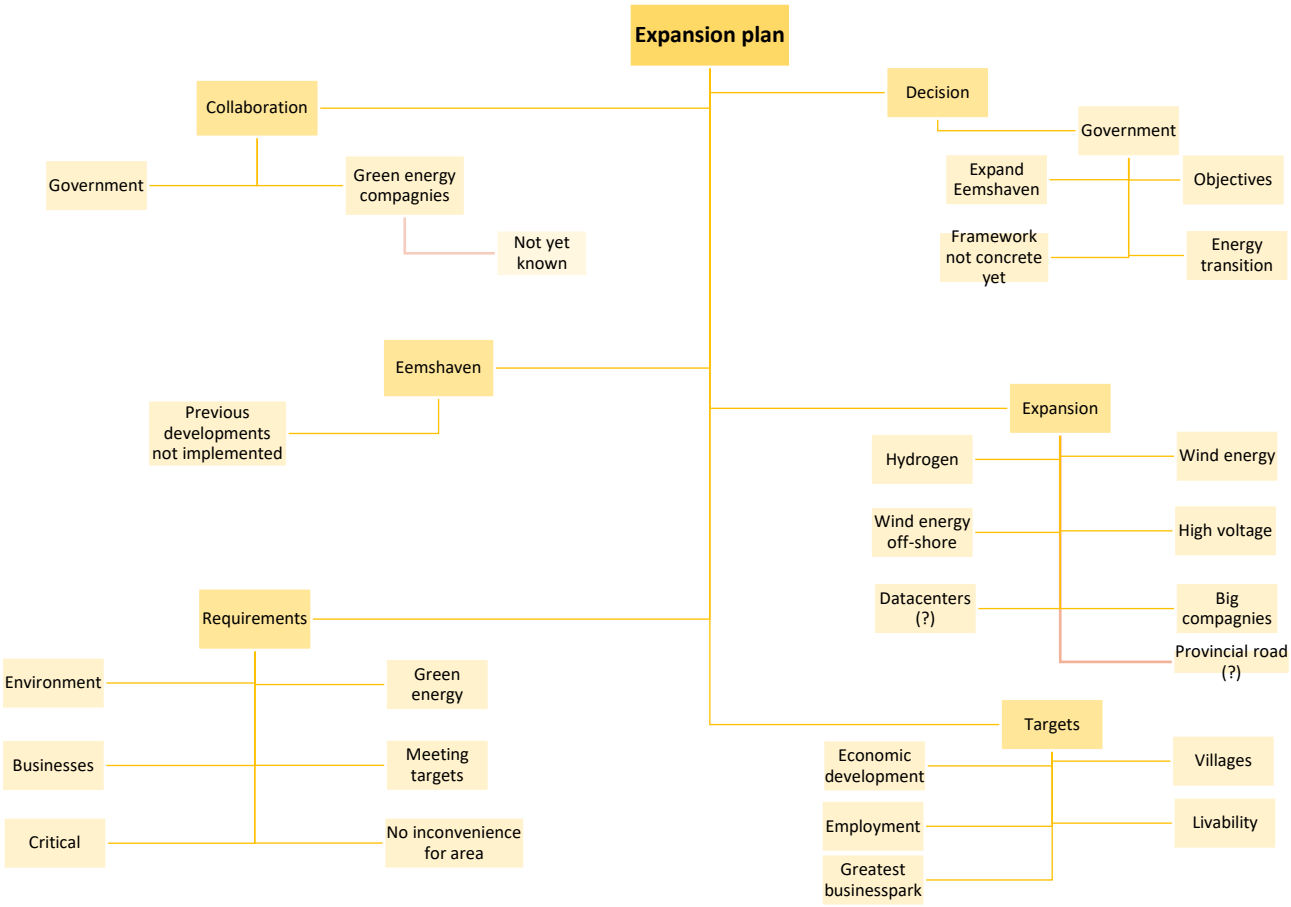
Codes 1 - Farmers



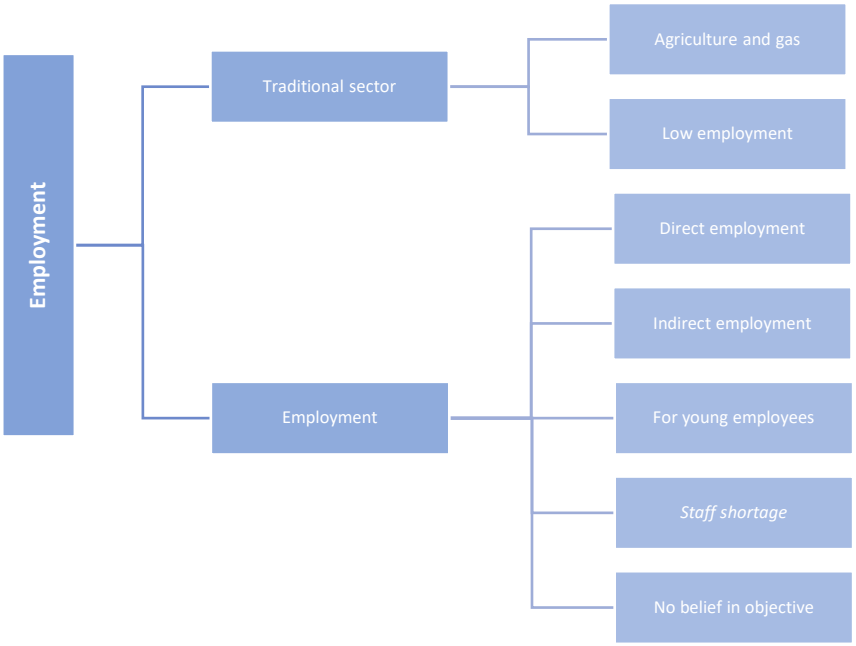
Codes 2 - Citizens



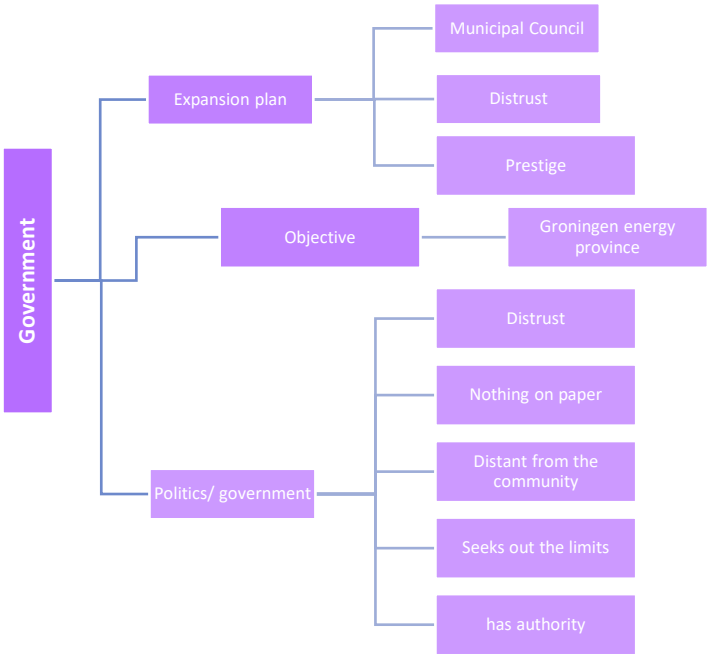
Codes 3 – Expansion plan



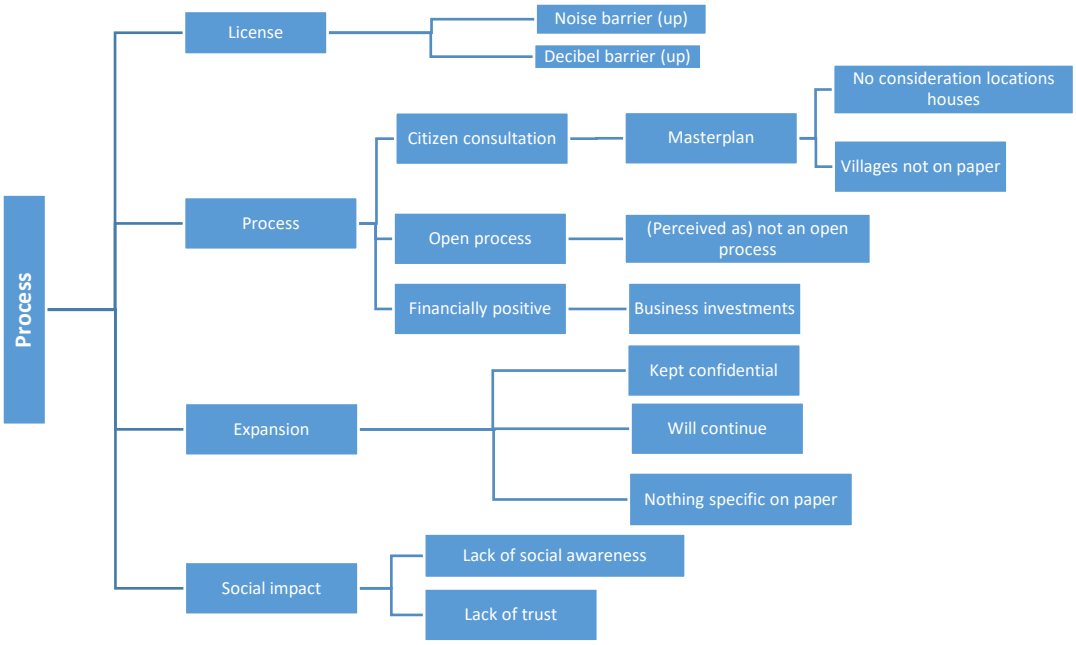
Codes 4 - Employment



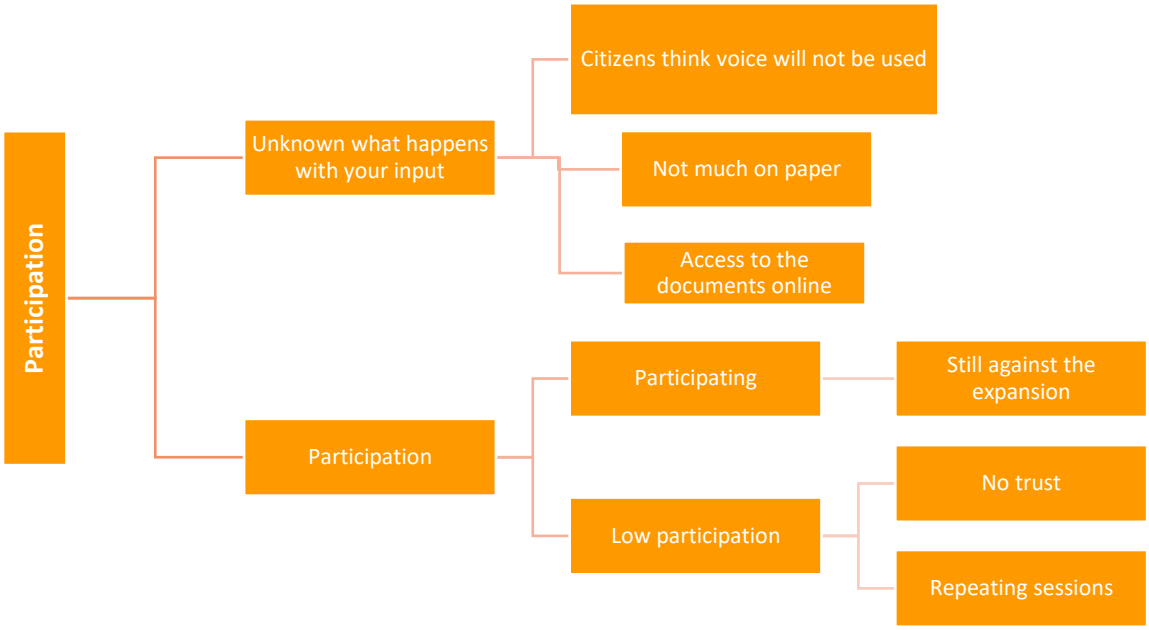
Codes 5 - Government



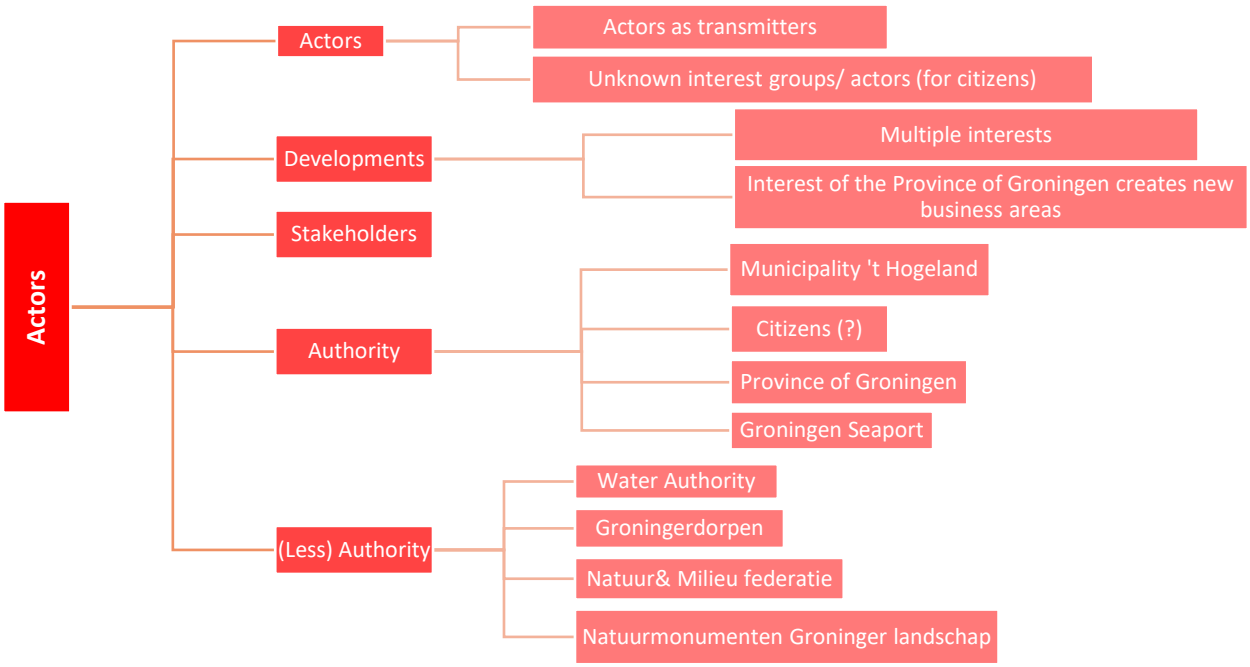
Codes 6 – Process



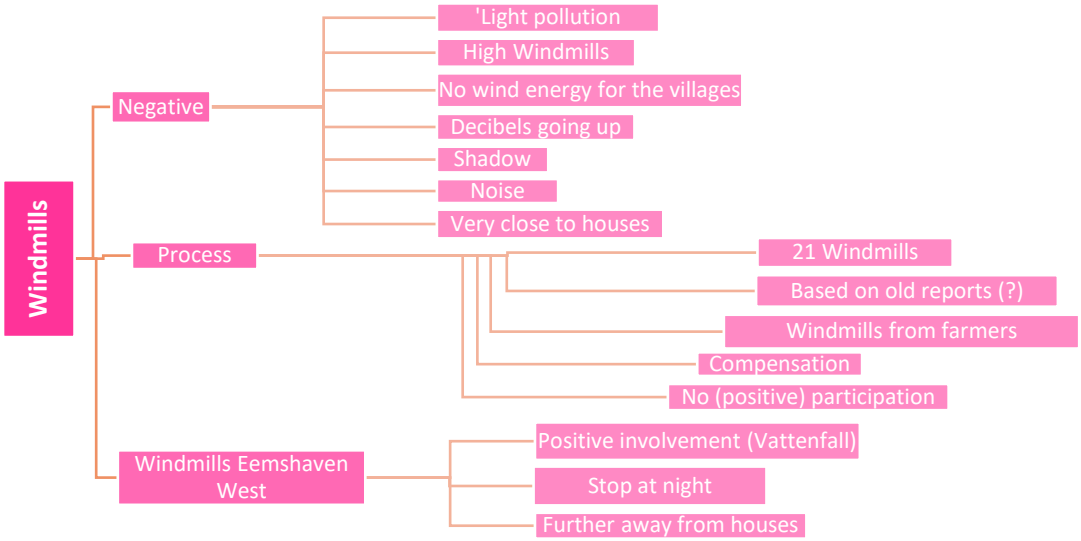
Codes 7 - Participation



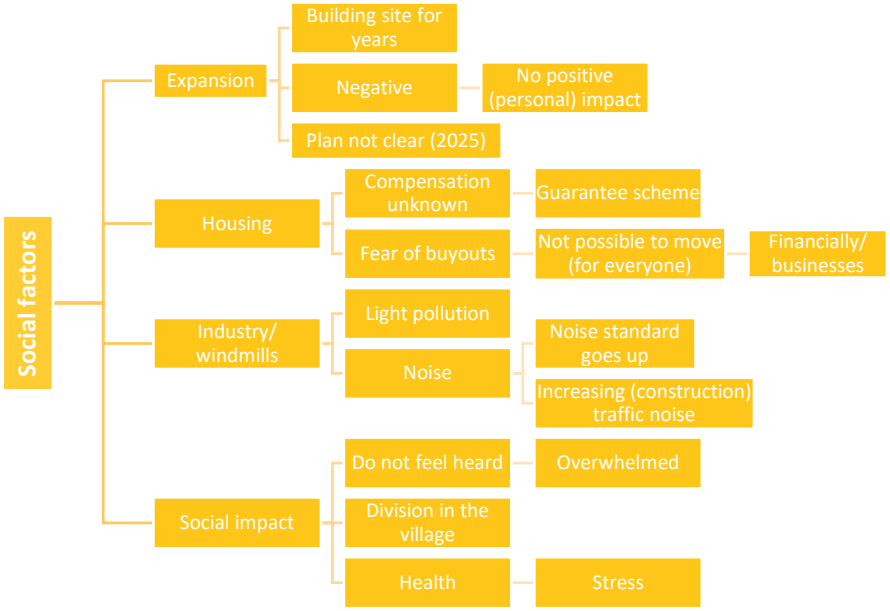
Codes 8 - Actors



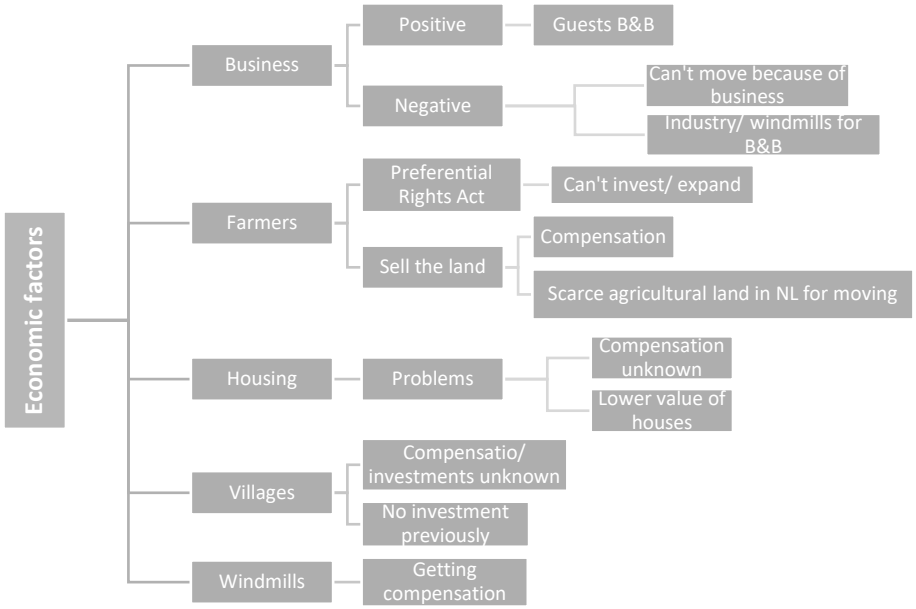
Codes 9 - Windmills



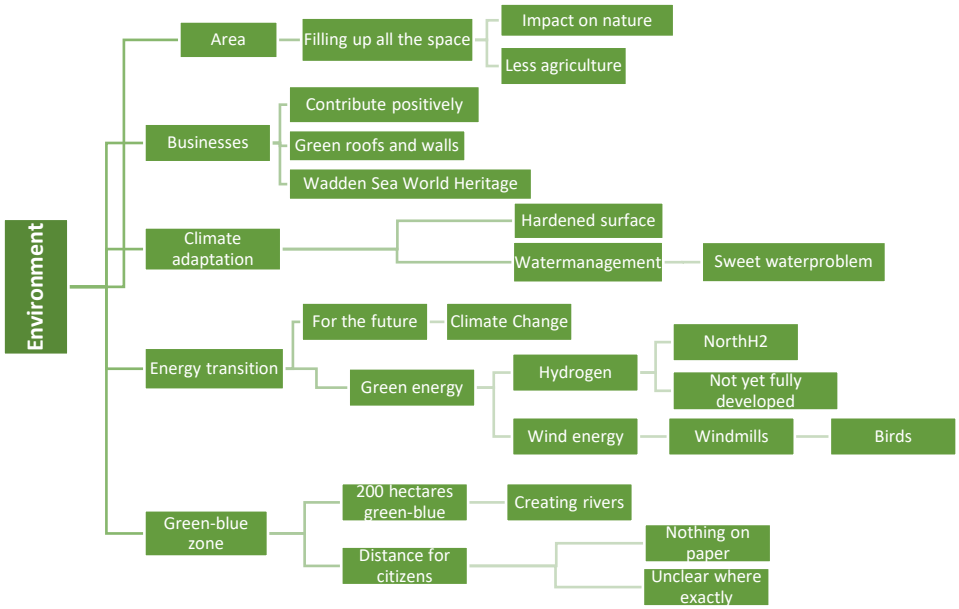
Codes 10 – Social Factors



Codes 11 – Economic factors



Codes 12 - Environment



Appendix 8

Interview guide

Doel onderzoek:

Onderzoekt de sociale, economische en milieu impact van de landschapsverandering voor de uitbreiding van de Eemshaven in de Oostpolder. De impact wordt onderzocht aan de hand van de vraag, van wie is de grond, wie bepaalt, hoe en waarom.

Hoofdvraag: Wat is de impact van de uitbreiding van de Eemshaven in de Oostpolder voor bewoners en boeren?

Deelvragen:

1. Wat zijn de huidige en toekomstige uitbreidingsplannen van de Eemshaven in de Oostpolder?
2. Wat zijn de belangrijkste actoren en processen (momenteel) rondom de ontwikkelingen en de implementatie van het gebied rondom de Eemshaven?
3. Wat is de (potentiële) sociale impact van de uitbreiding in de Oostpolder voor bewoners?
4. Wat is de (potentiële) economische impact van de uitbreiding in de Oostpolder voor bewoners?
5. Wat is de (potentiële) milieu impact van de uitbreiding in de Oostpolder voor bewoners?

Introductie/ warming up

- Het onderwerp
  - Onafhankelijk onderzoek
  - Anoniem/ vragen om op te nemen
  - Sociale geografie aan de Universiteit Utrecht
- Het belang van het onderzoek
  - Iets voor de omgeving kunnen betekenen met het onderzoek, hoe ziet het bestuur dit voor zich?
  - Landschapsverandering versus de eigenaarschap van het land
  - Doel is om de sociale/ economische en milieu impact ervan te onderzoeken
- Hoe oud bent u?
- Waar woont u?
- Hoe lang woont u hier? In Oudeschip?
- Heeft u land in de Oostpolder?
- Hoe veel mensen wonen hier in de betrokken dorpen?
- Iets vertellen over wat er nu allemaal speelt in de omgeving en over hun eigen rol

Huidige siuatie

- Hoe staat u in de huidige situatie? (Individueel)
- Hoe staat het Diggelschip er in?/ visie/ rol?

- Project
  - Hoe staat het project ervoor?
  - Wat vind u hiervan?
- Participatie
  - Wie is er betrokken?
  - Hoe gaan deze processen?
  - Hoe is het nu onderling tussen inwoners?
  - Voor of tegenstanders?
- Inspraak
  - Onderlinge relaties

- Wie bepaalt wat
- Hoe worden processen bepaalt
- Zeggenschap
- Zijn er alternatieven voor bewoners?
  - Verschillen de keuzes voor bewoners met en zonder land?
  - Welke keuzes heeft u?
  - Is er ruimte voor onderhandelen?
  - Is er ruimte voor compensatie?
  - Welke rechten heeft u?
- Hoe kijkt u aan tegen de betrokken partijen?
- Hoe ziet dit web van partijen eruit?
- Worden volgens u bepaalde groepen goed of niet goed genoeg betrokken?
- Voelt u zich gehoord?

- Belangen
  - Wat vind u belangrijk?
  - Wat heeft u nodig?
  - Wat merkt u dat nodig is in de gemeenschap?

- Ervaring
  - Wat ervaart u als positief?
  - Wat ervaart u als negatief?

Toekomst:

- Energie transitie
  - Wat denkt u van de plannen?
  - Hoe ziet u de toekomst? Focus op energietransitie of denkt u dat ze dat gaan aanpassen?
  - Wat denkt u over de insteek?
  - Vertrouwt u de overheden/ betrokken partijen?
- Werkgelegenheid
  - Ervaart u ook dat hier behoefte aan is?
  - Hoe ziet u dit voor zich?
- Landgebruik
  - Van wie is de Oostpolder?
  - Gesprekken met boeren (12 boeren of??)
  - Toekomst
  - Generaties hiervoor en erna
  - Wet voorkeursrecht speelt nu
    - Verschillen de keuzes voor bewoners met en zonder land?
    - Is er ruimte voor onderhandelen?
    - Is er ruimte voor compensatie?
- Verwachtingen en toekomst
  - Wat zou u het liefste voor u zien?
  - Waar hoopt u op?
  - Wat zou u nog willen meegeven?
- Afsluiter:
  - Opmerkingen en of vragen?

Appendix 9 – Flyer for door-to-door

Landschapsverandering in uw omgeving

Wat voor een effect heeft de uitbreiding van de Eemshaven in de Oostpolder op u?

Het onderzoek

Er is veel aandacht voor de plannen van de uitbreiding van de Eemshaven. Maar wat heeft dit voor een effect op u, uw gezondheid, gezin, of bijvoorbeeld uw huis en financiële situatie is? Of wellicht ziet u ook kansen liggen.

Dat is waar mijn onderzoek door middel van gesprekken met burgers over gaat. Graag ga ik kort met u in gesprek over uw kijk op de plannen van de Oostpolder en wat deze plannen voor u en uw omgeving betekenen.

100% anoniem en onafhankelijk

Het is geheel anoniem. De informatie wordt alleen met uw toestemming gebruikt, maar altijd volledig anoniem. Daarnaast doe ik onafhankelijk onderzoek vanuit de Universiteit Utrecht zonder invloeden van private of publieke partijen. Dit zorgt ervoor dat het onderzoek niet wordt beïnvloed.

Waarom zou u meedoen?

Als inwoner staat u voor mij centraal in de toekomstige veranderingen rondom de uitbreiding van de Eemshaven. Het is belangrijk dat er onderzoek komt naar de effecten van landschapsverandering op bewoners. Mede omdat de grond verder zal afnemen om plaats te maken voor de energietransitie in Nederland. Wat gebeurt er momenteel en wat betekent dit voor u in de toekomst en doet dit met u? Met uw hulp kunnen we samen dit duidelijk in kaart brengen.

Contact

Mag ik bij u langskomen met een plak verse cake of wilt u samen een kop koffie doen in het Diggelschip in de maand mei? Dan hoor ik graag een belletje of e-mailtje van u wanneer dit uitkomt.

Alvast hartelijk bedankt!

Universiteit Utrecht

Contact

Sanne van Soelen Telnr: 06 538 766 99

Masterstudent Sociale Geografie

Universiteit van Utrecht

s.vansoelen1@students.uu.nl

Appendix 10 – Consent form for interviews

Toestemmingsformulier

Dit onderzoek draagt bij aan het in kaart brengen van de effecten op u als omwonende door de mogelijke uitbreiding van de Eemshaven in de Oostpolder en welke invloeden een rol spelen.
Dit onderzoek is volledig anoniem. Het onderzoek wordt vrijwillig en onafhankelijk uitgevoerd door Sanne van Soelen als masterstudent aan de Universiteit Utrecht. Het onderzoek heeft een maatschappelijk belang. Omdat het landschap nu en in de toekomst meer verandert in Groningen, draagt u bij aan het verduidelijken van de effecten op bewoners uit Heuvelderij, Koningsoord, Oudeschip, Nooitgedacht en Polen.

Ik ga akkoord met deelname aan dit onderzoek, waarbij de volgende voorwaarden gelden:

- Ik heb informatie gekregen over het onderzoeksproject ''Sociale impact van de uitbreiding van de Eemshaven'' en het onderzoeksproject besproken met de onderzoeker Sanne van Soelen. Dit onderzoek wordt uitgevoerd in het kader van de master International Development Studies. Hiervoor zullen semi-gestructureerde interviews worden afgenomen.
- Ik begrijp dat mijn deelname aan dit onderzoek vrijwillig is. Het staat mij vrij om deelname te weigeren en ik heb de mogelijkheid om mij op elk moment uit het onderzoek terug te trekken. Ik kan ook weigeren om specifieke vragen te beantwoorden tijdens het interview
- De verzamelde informatie zal uitsluitend worden gebruikt voor de hierboven vermelde studie.
- Het interview wordt anoniem verwerkt. Er zal geen identificeerbare informatie worden gebruikt in het onderzoek.
- Als ik vragen heb over het onderzoek of meer informatie wil, kan ik contact opnemen met Sanne van Soelen (s.vansoelen1@students.uu.nl)

Ik begrijp dat de verzamelde gegevens van mijn deelname gebruikt zullen worden voor de masterscriptie, en ik geef toestemming om dit op die manier te gebruiken.
Handtekening geïnterviewde: _____
Datum: _____

Handtekening interviewer:: _____
Datum: _____

Appendix 11 – Survey flyer door-to-door

Universiteit Utrecht

Geachte heer/ mevrouw,
Zoals u wellicht in de *Oudeschipster* heeft kunnen lezen doe ik als masterstudent Sociale Geografie van de Universiteit Utrecht onderzoek naar de effecten op u als omwonende van de mogelijke landschapsverandering van de Oostpolder en welke invloeden een rol spelen.
Bent u ook benieuwd naar de resultaten van dit onderzoek? En wilt u ook graag meewerken maar liever door middel van een korte anonieme vragenlijst?

Scan de QR-code of vul onderstaande link in op internet op uw mobiel of computer:

ww.tinyurl.com/47tkcmpv

De vragenlijst invullen duurt ongeveer **3** minuten.

Heeft u vragen of opmerkingen? Contact mij gerust.
Sanne van Soelen Masterstudent Sociale Geografie Universiteit Utrecht
Telnr: 06 538 766 99 s.vansoelen1@students.uu.nl

Achterzijde van de flyer:

Informatie over het onderzoek:
Dit onderzoek is volledig anoniem. Ik doe dit onderzoek vrijwillig en onafhankelijk vanuit de Universiteit Utrecht en vanuit maatschappelijk belang. Omdat het landschap nu en in de toekomst meer verandert in Groningen, draagt u bij aan het verduidelijken van de effecten op bewoners. Hierdoor komt er *meer* aandacht voor de menselijke kant.
De reacties vanuit deze enquête worden anoniem verzameld en gebruikt voor het onderzoek. Hierdoor wordt duidelijk wat bewoners van Heuvelderij, Koningsoord, Oudeschip, Nooitgedacht en Polen verwachten dat de effecten zijn van de uitbreidingsplannen van de Provincie Groningen en Gemeente ’t Hogeland.

Appendix 12 – Advertising in the local newspaper Oudeschipster edition 07

Print screen from the digital version at https://oudeschip.nl/oudeschipster/

Universiteit Utrecht

Landschapsverandering in uw omgeving

Wat voor een effect heeft de uitbreiding van de Eemshaven in de Oostpolder op u?

Foto: Sanne van Soelen

Onderstaand een oproep van een masterstudent aan de universiteit Utrecht:

Over mijn onderzoek

Er is veel aandacht voor de plannen van de uitbreiding van de Eemshaven. Maar wat heeft dit voor een effect op u, uw gezondheid, gezin, of bijvoorbeeld uw huis en financiële situatie is? Of wellicht ziet u ook kansen liggen.
Dat is waar mijn onderzoek door middel van gesprekken met burgers over gaat. Graag ga ik kort met u in gesprek over uw kijk op de plannen van de Oostpolder en wat deze plannen voor u en uw omgeving betekenen.

100% anoniem en onafhankelijk

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Waarom zou u meedoen?

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Contact

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Sanne van Soelen **Telnr:** 06 538 766 99 **E-mail:** s.vansoelen1@students.uu.nl
Masterstudent Sociale Geografie, Universiteit van Utrecht

Kiek rondom diek!