

Sustainability of land-use: competing interests and power dynamics

A case-study of the Lutkemeerpolder in Amsterdam

A MSc thesis presented for the degree of
Sustainable Development (GEO-2321 - 30 ECTS)



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Abstract

Sustainability transition studies mostly deal with normative views of "sustainable development", only marginally referring to the fact that citizens, governments, companies and other stakeholders have not only different interests, but also diverging ideas of "what ought to be transformed" in society. By doing so, the literature often fails to picture those cases where bottom-up actors attempt to push for more radical transformations, by engaging in politically-charged conflicts with other stakeholders. These conflicts can take place in many different ways, but they are especially relevant for sustainability sciences when what is at stake is the use of natural resources.

Acknowledging that land is one of the most basic and fundamental resources for human activities and considering how the fast-growing rate of urbanization in the Netherlands has potential negative implications for ecosystems and climate regulation, this research analyzes how a transition can unfold on a land region located in the outskirts of Amsterdam. The approach uses a case-study to unravel how power dynamics shaped an ongoing struggle over land-use of two different coalitions of actors, which hold different interests and views of "how the land should be transformed".

The results of the study indicate that power imbalances between the groups are the main factors which prevented the bottom-up radical sustainability transition to occur. It did so by mean of a thick description of the case, 15 stakeholders interviews and document and policy analysis. The findings also point out the necessity of challenging more systematically normative views of sustainability in the transition literature, possibly comparing different empirical cases. One of the aims of further research could involve additional exploration of the highly-debated role of power in transition studies and its implications for sustainability discourses.

Keywords: Land-use; Netherlands; Power; Sustainability transition studies.

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Internship

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1 Introduction

1.1 Problem statement

The dooming state of the current environmental and climate crisis is urging institutions, organizations and citizens to take action (Butler & McFarlane, 2018; Pachauri et al., 2014; Rockström et al., 2016; Rockström et al., 2009; Shukla et al., 2019). On the other hand, the nature of the sustainability challenge is deeply political and cultural, and, as such, increasingly complex to address in an effective and shared manner (Connelly, 2007; Williams, 1996).

Sustainability challenges are shaped by the international economic and political order, and expressed in different value orientations, power dynamics and policies (Carvalho, 2001; Jacobsson, 2019; Wanner, 2015).

Who does not claim to be "sustainable" or in favour of a "sustainability transition" nowadays? However, different actors (corporate powers, governments, organizations, citizens etc.) have diverse interests and visions, which translate into different ideas of what "sustainability" entails and of "what ought to be transformed in society and why". These visions inevitably clash, sometimes more dramatically, sometimes in more subtle and entangled manners, thus creating a constant and complex interplay among stakeholders on many different battle fields. One of these battle fields is land. Increasingly scarcer, land is a fundamental driver of the feedback loops of the climate system, and it is the basis of human well-being through the provision of essential ecosystem services, freshwater and food supply (Shukla et al., 2019). 70 percent of the global ice-free surface is used and exploited by human beings on different scales. Technological development, population growth and increase of material *per capita* consumption are the socio-economic drivers that lead to conversion of land to industrial use and intensification of agricultural production with resulting pollution and decline of biodiversity (Koellner & Scholz, 2008; Riahi et al., 2017).

The combined effect of urbanization and climate change causes further pressure on human health and ecosystems, by enhancing the urban heat island effect and modifying weather patterns (Trusilova et al., 2008). Additionally, one quarter of global greenhouse emissions is caused by land-use (Houghton et al., 2012; Shukla et al., 2019; Strengers et al., 2004).

Especially in Europe, around 1500 acres of primarily agricultural land are converted for infrastructure and urbanisation every day, with loss of soil, habitat for species and less rainwater infiltration (BISE, 2020). To have an idea, this corresponds to converting the whole agricultural area of the Netherlands every 3 or 4 years (BISE, 2020, para 1). These pressures brought European governments to implement environmental regulations in protection of natural habitats and to take into account environmental externalities in spatial policies (EC, 2020; UN, 2016). However, as land accommodates different functions for human activities, the preservation of natural areas is inextricably linked with a number of other uses with which urban planners deal. Ultimately, the decision about land-use is political. In Europe, spatial planning itself is understood as a political and normative process, aiming at

”creating or alleviating scarcity of land according to politically defined spatial development objectives” (Gerber et al., 2018, p.3). In doing so, spatial and land policies aim to minimize conflicts, by reflecting power distribution between the national government, the local government and its citizens (Commission, 2020; Gerber et al., 2018). Nevertheless, formal power distribution of spatial policies is not the only factor which shapes the land changes: policy arrangements are dependent on resources (e.g. budget), actors (coalition and opportunities), rules of the game (laws, regulations, informal rules, difference in mobilization such as power) and discourses (such as norms, values, societal and environmental change) (van Straalen et al., 2016). All these components contribute to the decision on how to use the land as a resource and how the territory ought to be transformed. As a consequence, these interrelated elements often culminate in social power dynamics among stakeholders and have important implications for the sustainability of land-use.

As an example, the amount and the distribution patterns of resources determine who gets the benefit or the burdens of certain land uses. Similarly, political orientation and priorities shape the direction and specific aim of spatial planning policies. As an illustration, ”conservation” vs. more ”developmental” policies reflect two macro perspectives influencing the evolution of available territories (Folke, 2006). For instance, a more ”developmental approach” may lead to the decrease of green areas, with construction of buildings: green areas and native vegetation are replaced by poorly permeable surface, with effects on biodiversity and on the increase of climate extremes (Arnfield, 2003; Youneszadeh et al., 2015). This more ”developmental” approach can be explained also in light of the neoliberal planning paradigm which has greatly influenced the way European governments have dealt with land-use in the last 40 years (Gerber et al., 2018).

The next section discusses how the field of sustainability transition studies have addressed the necessity to move beyond ”undesirable patterns” in societal transformation and in the use of environmental resources.

1.2 Literature gap

As specified above, many sustainability challenges are crucially related to land-use and urbanization (Zähringer et al., 2019). To understand the direction of changes in society, the field of sustainability transition theory have contributed with an enormous and highly heterogeneous amount of studies dealing with the transformation of sectors towards more ”desirable and sustainable” states by the emergence of sustainability innovations (only to cite a few important ones: (Avelino & Rotmans, 2009; Bergek & Jacobsson, 2003; J. J. Bos & Brown, 2012; Cuppen et al., 2019; Elzen et al., 2011; Geels, 2002, 2011; Hansen & Coenen, 2015; Ingram, 2015; Wieczorek, 2018; Yenneti et al., 2016); and some important contributions in the last year (Desa & Jia, 2020; El Bilali, 2019; Feola, 2020; Van Poeck et al., 2020)). However, two main aspects remain poorly or are marginally addressed in the transition literature. Firstly, land itself is not sufficiently represented as a ”space” where transition or transformation can occur. In fact, the literature have for long time acknowledged specific national sectors, cities, institutions, organizations, everyday

life practices, technologies and infrastructures as places where transformation takes place (Fuenfschilling et al., 2019; Geels, 2002, 2011; Hess, 2014), but did not focus on broader developments that could take place on a "territory" as a contested political field. However, a few contributions had outlined the consequences of energy transitions on land as a natural resource from a social justice perspective. In other words, looking at the well-known dynamics of land grabbing and displacement (Yenneti et al., 2016). Ultimately, the role of land itself as a contested battle field is underrepresented in the broader sustainability transition literature.

Secondly, the focus on single projects or policy programs towards "sustainability" implies that a normative view of "sustainable transition" prevails. This view is expressed in the terms of the goal and the perspectives of the actors involved or committed to the transition. The transition is thus defined as one coalition of actors frame it. However, most studies fails to recognize that functionalist approaches ignores the fact that "stakeholders have conflicting visions, interests, norms, and expectations" (Desa & Jia, 2020, p.2). This normative outlook also fails to engage in deep critique of the current economic system (Feola, 2020) and the impact of it on the meaning of "sustainable transition". Some scholars tried to surpass this limitation, by showing the importance of analysing normative conflicts within a sector or project (Cuppen et al., 2019). In addition, recent literature have recognised the importance of including political discourses in the debate around disputes or conflicts over directions of sustainability transitions. In the Multi-Level Perspective (MLP), there are several accounts of the mechanisms of interactions between incumbent regime constraining or enabling niche innovations. For example, transition scholars have engaged in analysing power dynamics between the niche and regime (Hess, 2014, 2016) and also social movements and grassroots innovations have been included in the studies of transitions (Seyfang & Smith, 2007). Scholars have also concluded how inclusion of power and geographical dynamics can improve the socio-technical and socio-ecological transition theories (Lawhon & Murphy, 2012), by including insights from political ecology (Lawhon & Murphy, 2012), using institutional approaches (Isaksson & Hagbert, 2020) or by accounting different definitions of power in relation to the key elements of the multi-perspective framework (Avelino, 2017). Overall, more studies recognized the importance of including a symbolic discursive dimension into sustainability (Sze, 2018; Verlinghieri, 2020), and power discourses in sustainability transitions (Görg et al., 2017; Turnhout et al., 2020) and in other environmental literature (Berbés-Blázquez et al., 2016; Ingalls & Stedman, 2016).

Nonetheless, this field of study seems to miss a clear and comprehensive empirical translation of the fact that views of "sustainable development" are themselves the expression of different views of "what a sustainability transition is or ought to look like". Considering the recent direction of literature and as follows from the previous section, land can offer the space for analysing how these different views of "transition" unravel around such an important environmental resource. This can be done with the integration of discourses of power relations between stakeholders in sustainability transition literature.

The next section attempts to explain how this perspective can be translated into a

more specific research objective.

1.3 Research aim and questions

This study aims to contribute to the academic debate in transition theories and sustainability sciences around political struggles over land-use. It approaches the dynamics of day-to-day politics which shape land-use and urban environment from a critical social science perspective. As advanced in the title of this thesis, the focus is primarily on the dynamics of social power relations among the stakeholders which hold competing interests and views of "what a sustainability transition" is. This analysis uses a case-study to unravel how power dynamics shaped land-use change in conjunction with historical and structural macro processes in the region. The region of interest is the Lutkemeerpolder in the West peri-urban district of Amsterdam, in the Netherlands. The Netherlands is particularly relevant for analysing the process of land changes, both for their acclaimed tradition of spatial planning, and especially for the rapid rate of urbanisation and urban restructuring that the country underwent in recent decades (Alvarez, 2012; Bremer & Kok, 2000). Driven by the peculiar geographic location, the Dutch have always had a very special relation with land (Bontje, 2001): they have used land to shape their powerful agricultural position, they have managed newly created land to face the challenges of increasing population and of their location below sea level.

In the recent years, the country has experienced several transformations related to infrastructure and privatization connected with land developments (Van Den Brink et al., 2006). The limited availability of land put the Netherlands to the challenge of accommodating different functions, needs and interests. Land-use plays a key role in connecting local uses to regional and international dynamics. Ultimately, it defines a territory. It can do so in an irreversible way and, more importantly, it has an influence on other sectors and aspects, such as transports, economic position and liveability of the country. Finally, urbanisation and city expansion, which is expected to increase with the recent surge of decentralisation and liberalisation in the country (Nabielek et al., 2014), exert additional pressure on natural resources: as mentioned in the previous section, land developments have implications for the ecological systems of a territory (Arnfield, 2003). Grasping more about which forces and actors come to play in land developments is therefore essential to reveal the consequences of current land-use on sustainability.

Thus, the main research question is introduced:

How have competing claims shaped the land-use in a sub-area of the Lutkemeerpolder and what does this reveal about sustainable land-use transition?

To answer the main research question, three sub-questions (two descriptive and one exploratory) are used as intermediate steps:

1. *Which processes of land-use change occurred in the Lutkemeerpolder?*
2. *Which actors were involved and what are their interests and claims?*
3. *How was power exercised by the different actors and how did power dynamics influence the outcome of the Lutkemeerpolder case?*

The first research question explores how the land-use of the territory has changed over the years. This is the first account of how the land underwent an urban transition, to be able to identify at which point the actors started to interact to enact their different goals on land-use.

The second research question aims to explore which are the stakeholders involved and what are their interests, unfolding in different "views of sustainability".

The third research question focuses specifically on the micro-level interactions between the actors. One last sub-question is added:

4. *What are the implications of this case for sustainable land-use transition?*

This question tries to grasp how the case-study can be understood in light of the broader debate on sustainability transitions.

The main research question and the three first sub-research questions will be treated in the Results section (Section 4). The last sub-research question will be the object of the Discussion (Section 5).

1.4 Scientific and societal relevance

From a theoretical standpoint, this study tries to explore land-use transition in relation to the theory of power dynamics in sustainability transition research, following from the great theoretical advances of Avelino (Avelino & Wittmayer, 2016).

From a methodological perspective, this study falls under the prominent approach of transition research of using a case-study (Köhler et al., 2017). The case study takes the challenge of connecting micro and macro level of analysis (Köhler et al., 2017), which is constantly debated in transition research. It does so by using an actor-oriented analysis which explores the perceptions of local actors of macro events and their interests, as further explained in Section 3.

From a social standpoint, considering the pressure that urbanization and land-use put on the environment, this study contributes to the debates of land-use development in Europe, by understanding the direction and dynamics of land-use change.

1.5 Outline of this study

Section 2, the Theoretical Framework, situates the research in the broader theoretical debate and defines the key concepts applied to the specific case-study. In addition, it uses a grey and academic literature review to delineate how the development of old and current spatial planning policies shaped land-use in the Netherlands. Section 3 explains the methods used to perform the research. Section 4 presents the results: firstly, the processes of land-use and the stakeholders involved will be presented. Secondly, the power dynamics between the stakeholders will be

outlined. The last two sections are dedicated to the Discussion (Section 5), where the implications of the case-study for sustainability research will be presented, and to the overall conclusions (Section 6).

2 Theoretical Framework

The main theoretical focus of this study is on the role of power in sustainability transition theory, as conceptualized by Avelino (Avelino, 2017). Power is the relational mean that enable actors to enact their different views of "sustainability". The empirical focus is on the micro-level and day-to-day political power dynamics that influenced the development of land-use, analysed from an actor perspective (Long, 2003). This framework is the analytical tool needed to answer the questions: how can political and social dynamics explain the processes of land use? What is the historical and institutional context where these dynamics took place?

More specifically, this research deals with a case-study of contested use of land of two different coalitions of actors in a peri-urban area of Amsterdam, in the Netherlands.

The framework of this study combines different insights into a conceptual model which primarily draws from sustainability transition studies and secondly from spatial planning theories.

Firstly, the context of peri-urban zone is introduced in relation to social change (*which type of land?*). Secondly, the sustainability transition theory is advanced (*what kind of transition?*). Thirdly, the concept of power is explained in relation to sustainability transition and with reference to the case-study (*what is meant by social power dynamics?*). Fourthly, the historical and institutional context of the Netherlands is presented (*Spatial planning in the Netherlands*). This fourth sub-section will also explain how neoliberal policies influenced the spatial planning paradigm in the country. Finally, the concepts will be presented in two visual frameworks: one analytical and one conceptual (Figures 3 and 4).

2.1 Theoretical background

Which type of land?

The Lutkemeerpolder, the study area, can be considered as a peri-urban area (Ruimtelijkeplannen, 2020). The peri-urban zone in Europe is a zone of spatial restructuring and social and economic change (Ravetz et al., 2013), neither urban or rural, but "in-between". The high rate of urbanisation in the last 40 years created functional urban regions, where peripheral areas have been integrated in the metropolitan zone. Urban expansion leading to peri-urban change is the effect of demographic and social patterns, economic and employment growth, features of urban infrastructures (e.g. transports), structural factors such as globalization and liberalization and the combined effects of feedback loops among these dynamics (Ravetz et al., 2013). For example, globalization might affect the economic system by restructuring labour markets and pushing for the creation of new business parks, airport zones, shopping centers etc. (Ravetz et al., 2013).

The result of these effects can be a "transition", a system-wide physical and economic change which involves also an evolution of the role and identity of the region. For instance, Ravetz et al. (2013), defines a peri-urban transition as a "re-

structuring for globalized systems of production and consumption” (Ravetz et al., 2013, p. 27).

The peri-urban area of the Lutkemeerpolder underwent this kind of restructuring with the expansion of the airport and the progressive urbanization happening on the old agricultural land. Thus, it can be reasonably defined as a ”peri-urban zone in transition”. When a zone encounters a transition, some responses can take place, such as of adaptation or resistance to these modifications, by different groups of actors.

What kind of transition?

Having understood that transitions are intrinsic components of land developments and that land can be considered as a system, it is now necessary to clarify how transitions can be studied. Complexity and transition theory originate from the ecological thinking of complex adaptive systems, which, if applied to human-systems, shows non-linear, complex and unpredictable behaviour at multiple scales and at multiple dimensions, including self-organizing behaviours of individuals and groups (Ravetz et al., 2013). The field dealing with sustainability transition grew enormously in the last decade (Geels, 2011; Geels & Schot, 2007; Grin et al., 2010; van Schaick & Klaasen, 2011), with mainly four dominant frameworks emerging from the literature (Markard et al., 2012). Generally speaking, a transition is the process that lead to a fundamental shift in the system towards a new state. In sustainability sciences, the Multi-Level Perspective (MLP) as described by Geels (Geels, 2002) is among the most prominent framework and it is also the one of interest to the present work. The MLP analyses shifts of a system from one condition to another condition, more specifically, from one regime to another. There are three different levels which interact with each other in fostering or blocking any regime shift: socio-technical ¹ landscape, socio-technical regime and technological niche. A regime is a “deep structure”, where changes occur incrementally and stability dominates. Rules governing a regime can be shared beliefs, lifestyles or institutional arrangements. Niches are “protected spaces” where actors develop radical innovations which hold the potential of changing the regime. They are important as they give space for learning by doing and by providing “seeds for change” (Geels, 2002). Landscape, finally, is the macro level where changes usually occur slowly, and contains external factors such as population dynamics, war, economic crisis, emigration.

Having understood the broad context of transition theories, it is important to narrow it down to the specificity of the case-study. In other words, this analysis looks at peri-urban restructuring and transition of land by identifying what Ravetz calls ”sustainability tension” (Ravetz et al., 2013, p. 28), which is created when different agenda clashes. Every agenda represents a different view, usually embodied

¹With ”technical”, this field of studies refers to technological or infrastructural changes. However, this study will take a ”less modernist” approach, and account as a transition a ”system-wide” change. The transition here is ”socio-political” as suggested by Swilling et al. (2016)

by groups or individuals. Views are expressions of different interests: here, each interest is connected to a different level of the MLP. To put it simply, dominant interests are expression of the regime level and counter interests are expression of the niche level. In sustainability transitions studies, usually a transition comes from the niche level which breaches into the regime and creates a new "niche-regime", transforming niche level innovative practices in dominant schemes.

Clearly, whether a niche initiates a transition or not depends much on the which relation the niche establishes with the regime and on the surrounding landscape factors. For example, innovative practices could be dismissed by the regime or by an external landscape factor, such as a war.

Until now, niche and regime have been defined as abstract categories. However, to be able to grasp how these categories can be practically translated, this study employed the adapted Welfare model proposed by Avelino (Avelino & Wittmayer, 2019).

Four main groups can be identified in the welfare model: state, market, community and third sector. Community refers to spaces like clubs and community groups. In terms of individual actors these are households, families, neighbours, friends, etc. The third sector, hereby called non-profit, refers to NGOs, associations, foundations. At the individual level, non-profit is translated into activists, researchers, volunteers. State refers to municipalities, governmental departments, official agencies, tribunals. At the individual level, this means: politician, policy-maker, bureaucrat, voter, legal entity. Market refers to consumer, employer, entrepreneur, producer, etc. At the organization level, it can be multinationals, social enterprises etc. (Avelino & Wittmayer, 2019).

Whereas the binary categorization between private and public actor is difficult to apply, the private-public partnership is added at the crossroads between private and public roles. This is particularly useful considering how neoliberal policies brought to the profusion of the PPP entity.

According to Avelino, when making an MLP analysis, the challenge becomes to move beyond a simplistic association of, for example, 'the state' with 'the regime', but rather, "to search for regime elements as well as niche elements in each and every sector, including the state" (Avelino & Wittmayer, 2016, p. 639).

To account for this theoretical insight, the actors are grouped according to their interests in different coalitions. As explained above, the interest which prevails is associated with the regime. Instead, the opposed or rather "radical" interest is associated to the niche. A coalition of actors is the one "who share some common definition of a situation, similar goals, interest or value and who agree tacitly or explicitly to pursue a certain course of action", (Long, 2003, p.56). In other words, each coalition envisions a different transition. If the coalition of actors or individual actors cannot be classified under "regime" or "niche" according to their interests or to the "transition" they conceive, they will be classified differently and accordingly to the welfare model.

To recapitulate, in connection with the knowledge gap, the study aims to unravel the dynamics of the system in transition (land) at the micro level (actor interactions). This micro-lens of analysis is relevant to understand, for example, why at

a certain point, the land was developed into a building or used for other purposes. This perspective can enrich transition studies by connecting power and social issues to the transition framework. Next paragraph explains how this will be done.

What is meant by social power dynamics?

Within the MLP, power is given a central role. In other words, power dynamics shape the struggle over land-use, driven by competing politically defined interest and views of sustainability (Painter & Jeffrey, 2009). Power is the "outcome of complex struggles and negotiations over authority, status, reputation and resources, and necessitates the enrolment of networks of actors and constituencies" (Long, 2003, p.71).

Power, as a central concept to this thesis, goes here under the umbrella of social power relations, the relational dynamics which define the possibility of actions and interactions of the actors. Power is understood as the ability of an actor or of a coalition of actors to achieve a goal or to see their interests realized. Strictly speaking, to have an influence on the course of events. This study draws on the categorization of power proposed by Avelino (Avelino, 2017). The focus is on the social relations of power of the actors in the case study, which can reveal more of the "relational" (Lawhon, 2012) and ambiguous properties of power. To do so, three different components of power are analysed: the power dynamics as the main focus, and the power type and the conditions of power exercise as secondary focal points.

A. Power dynamics

Power dynamics are the resulting relations between groups. These can be of mutual dependence, one sided dependence, independence, cooperation, competition, co-existence, synergy, antagonism and neutrality (Avelino, 2017). Power dynamics can explain the ability of the niche/regime to pursue the realization of its interests. Figure 1 summarizes the kind of power dynamics that could take place.

The type of power dynamics are not necessarily mutually exclusive. Hence, moments of antagonism can alternate with moments of synergy or neutrality.

B. Type of power

In relation to the sustainability transition, every actor or group of actors exercise a different form of power: innovative, transformative and reinforcive (Avelino, 2017). The innovative power resides in the possibility of creating new resources. Transformative power is the capacity to develop new institutions and structures. Reinforcive power is the capacity to reproduce institutions and structures which already exist, and reinforce the *status quo* (Avelino, 2017). We can think of the reinforcive power of the State as the ability to enforce the laws that the State itself produces. Understanding which form of power is exercised can help in better

Type of power relations	Types of power dynamics		
<i>Power over</i>	A depends on B but B also depends on A => A and B have power over each other Mutual dependence	A depends on B but B does not depend on A => B has power over A One sided dependence	A and B do not depend on each other => A and B have no power over each other Independence
<i>More/less power to</i>	A exercises more power than B, but A and B have similar, collective goals Cooperation	A exercises more power than B, while A and B have mutually exclusive goals => Competition	A exercises more power than B, A and B have independent coexisting goals Co existence
<i>Different power to</i>	A's and B's different power exercises enable and support one another Synergy	A's and B's different power exercises restrict, resist or disrupt one another Antagonism	A's and B's different power exercises do not (significantly) affect one another Neutrality

Figure 1: Typology of power dynamics. Source: (Avelino, 2017)

explaining the power dynamics at play and the direction of change. For example, if there is a competition between two actors and the regime is preventing an innovative power to transform the regime configuration, it can be argued that the power dynamic is constraining a change of the system towards a new state. Figure 2, in the next page, is the representation of how categories of power are related to the MLP in a "Power in Transition framework" by Avelino (Avelino, 2017). "Moderate" refers to that power use which goes with dominant trends, "radical" refers to the opposition of these trends, and to the consequent formation of counter-trends.

C. Conditions of power exercise

Avelino (Avelino & Wittmayer, 2016) recognizes four conditions that are instrumental to power exercise: access to resources, strategies to mobilize the resources, skills to use the resources and the willingness to do so. These four dimensions will not be analysed in detail as a study object in themselves. However, they will be considered relevant where they help to explain the social power dynamics at play or where they are explicitly mentioned by the actors. One last important point regards the willingness to mobilize resources. This willingness is directly linked to the feeling of empowerment that a group experiences.

Avelino (Avelino & Wittmayer, 2016) argues the importance of understanding the concept of "empowerment" in sustainability transition, as a factor that could determine the extent and strength to which a transition takes place. Instead of empowerment, this study decides to revise this definition and to call it "recognition" (Verlinghieri, 2020). Recognition is understood as self-reliance, confidence and community affirmation of a group or of an individual (Verlinghieri, 2020). This definition is important because it goes beyond the organizational psychology binary

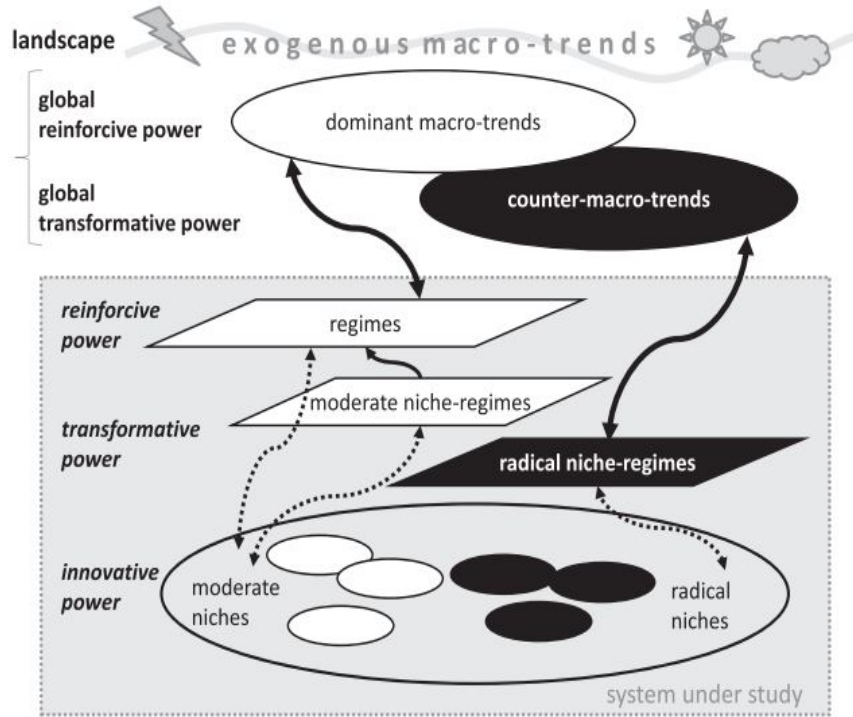


Figure 2: Power in Transition Framework (POINT). Source: (Avelino, 2017)

definition of empowerment as a two-sided condition: empowered or dis-empowered. Rather, it captures a more subtle dimension of power affirmation. For example, individuals or groups can feel dis-empowered on the one hand because of a specific event constraining their actions, but, simultaneously, they could experience a feeling of power from within themselves or from the community. This creates a sense of "recognition" of the importance of the group activity and the willingness to proceed with it. In other terms, the feeling of "recognition" determines the willingness to continue with the use of strategies and resource mobilization to achieve a certain goal.

The next two sections are devoted to the explanation of the institutional arrangements in spatial planning in the Netherlands. As a matter of fact, it is meaningful to understand the processes of land-use in light of the political-institutional context of the region of interest before proceeding with further discussion of the dynamics taking place at the local level.

Spatial planning in the Netherlands

All the three tiers of government (national, provincial and municipal) are active in land policy in the Netherlands. The land allocation plan is regulated by the municipality or by a combination of municipalities at the local level through policy guidelines and maps and regulations. The central government is responsible for broad national policy guidelines and the provinces for regional structure plans (Van der Valk, 2002). There are four practices of urban development in the Netherlands: changing land use without negotiations with developers (full active land policy), contracts between municipality and developers before changing land use (joint venture), facilitating land policy without negotiations and facilitating with contracts with developers (in the last two cases the municipality does not own the land in the process, so it puts in place a passive land policy) (Tennekes, 2018).

In the 70s and 80s the geographical characteristics of the land, mainly peatlands, forced the government (the municipal land companies) to purchase land to be able to ensure drainage, sewage maintenance and road extension. In those years, the pressure of urbanization rose up dramatically land prices.

The 80s also saw a relevant neoliberal political turn (Janssen-Jansen & Tan, 2018) which demanded less regulation and increased the role of the market. This was followed during the 1990s by market actors which bought land speculatively on a larger scale in strategic locations. However, according to some authors (Van der Valk, 2002) "private companies buying strategic parcels of land are portrayed in the Dutch press as land speculators. This is not correct from an economic point of view since the land is not bought with the intention to leave it derelict and make a speculative profit in the future. Land is used as an asset to acquire building contracts" (Van der Valk, 2002, p. 204). Nevertheless, municipal land agencies started entering in competition with private real estate companies. This nowadays still means that governments acquire land where a conversion from green (landscape, recreation and open space) to red (housing, commercial development and industrial estates) is planned and either develop those lands itself or participate in private-public partnership (PPP) to develop the land. The principle behind is that the profit from this conversion can be employed to finance green projects (the so-called "red-for-green") (De Wolff & Spaans, 2010; Van Den Brink et al., 2006).

The neoliberalization trend in the Netherlands followed similar waves to other countries of Europe, where spatial planning turned to the goal of making economic growth and competitiveness as policy objectives (Harvey, 1989; Haughton et al., 2013; Jessop, 2018; Keil, 2009). There are three recognized waves of neoliberalization: a first phase of so-called "roll-back neoliberalism" in the 80s, a second phase of "roll-out neoliberalism" in the 90s and a third phase of "roll-with-in neoliberalization" since 2000. In the first phase, the private actors' role in planning increased and the focus was on large scale infrastructural projects. In the second phase, the focus was on making city-region competitive in the European or world market. In the third phase, there was a normalization of neoliberal practices, with the use of tools such as contracts and the promotion of the competition state.

Therefore, since the beginning of the 1990s, while the Dutch economy was flour-

ishing (van Straalen et al., 2016), Dutch municipal land policy have acted mainly under a private contract law, where the municipality and private sector companies negotiate land use plans (the second case of a joint venture or public private partnership model (PPP))(Heurkens, 2009). This active land policy is the most common form of policy in the Netherlands and refers to the active role that the municipality plays in stimulating and leading the urban development process, by buying the land, making spatial plans and selling it to developers (Tennekes, 2018). When house prices started to rise between 1995 and 2008, also the land value increased and the financial benefit of an active land policy went together with it, as the PPP model gave the municipality the right to get a share of the development gain, used to finance municipal budget.

However, two main drawbacks of this approach were the "double hat" problem, where the municipality was acting both as government public body and a private landowner, potentially motivated more by profit than by public interest; and the free riding of the private companies not contributing to public services. Corruption was also a danger (Tennekes, 2018). In 2008, to address these challenges, a new system of a public law variant came into place, but the PPP model was still used in the majority of cases, especially because in the public variant is not possible to capture the benefit from the increase value of the land and certain public costs cannot be included (Tennekes, 2018).

These changes in spatial planning were also led by the international context of globalization with the growing importance of international networks. These changes are conceptualized by some authors (Heurkens, 2009) as a gradual shift from the Rhineland model of capitalism (regulated market economy with government control and legislation based on civic law) to the Anglo-Saxon model, which sees free market economies with limited governmental control. Anglo-Saxon principles have been widely applied in several policy domains in the Netherlands and this was also reflected in spatial planning (Heurkens, 2009). This model of negotiated agreement between private and public bodies lead to a mutual dependency, which can cause losses in case of economic stagnation or crisis to both of the parties, as it happened in 2008 (van Straalen et al., 2016). The next section specifies how these changes are translated in the most recent local policies.

Recent spatial policies in the Netherlands

The fifth Memorandum on Spatial Planning (2001) introduced the multi-layers approach: the layer of the substratum (dealing with physical effects and climate change), the layer of the networks (dealing with growth of mobility and of competitiveness of the country in the international networks) and the layer of the occupation pattern (dealing with the accommodation of spatial claims in relation to values). The layer approach underlined how every layer had a different rate of change. It was amended and edited over the years (Van der Valk, 2002). For example, in 2006, the "Nota Ruimte" introduced a higher level of decentralisation granting more autonomy to the municipal and provincial level of government in dealing with the different layers (Bos et al., 2019). However, the national government withholds the

final responsibility of planning in the area of national interests, such as in flood protection and in the major hubs of international transport networks (the layer of the substratum and of the networks), e.g. the main-ports of Rotterdam and Schiphol. The 2014 policy aims to stimulate these top-sectors of the economy (Waterhout et al., 2013). In fact, the Randstad is identified as the key core of the country international competitiveness, in line with the overall goal of the second wave of neoliberalization (see section above).

In 2013, the National Policy Strategy for Infrastructure and Spatial Planning was introduced (Government of the Netherlands, 2013). The policy, currently in place, states that the central government wants to make the Netherlands "competitive, accessible, liveable and safe", "to achieve an outstanding international business climate". Likewise, the decentralisation and the focus on companies remain central objectives: "the government intends to bring spatial planning decision-making closer to the stakeholders (individuals and companies), delegating more to local and provincial authorities (decentralisation as the first option)" (Government of the Netherlands, 2013, p.3). The provinces are in charge of balancing urban and green spaces, but the central government is the final property manager or landowner in zoning plans. Overall, the main focus of this specific policy is on competitiveness: by 2040, the government wants the Netherlands to be among the top ten most competitive economies. The safeguard of the environmental quality, natural habitats and biodiversity is defined in terms of making the Netherlands liveable and attractive to businesses and companies. The 2013 policy refers that "the environmental impacts of spatial and infrastructural developments must be taken into account" (Government of the Netherlands, 2013, p.13). The National Strategy for Infrastructure and Spatial Planning specifies "we must safeguard our natural habitats and biodiversity, our unique cultural heritage values and environmental quality. Good environmental quality means that the quality of the soil, water and air must at least comply with national and international standards" (Government of the Netherlands, 2013, p.9).

In the country, the Ministry for Agriculture, Nature and Food is responsible for nature protection (Government of the Netherlands, 2020). The National, Provincial and Municipal policies overlap with each other with respect to nature protection. Provincial and Municipal policies set more specific details plan for local protection (Bos et al., 2019). Natural areas and wild animals are protected by the Nature Conservation Act (RVO, 2020). The Dutch Government promotes "green growth", understood as economic growth which avoids negative effects on the environment (Bos et al., 2019). To this extent, the "National Ecological Network" aims to protect natural areas, by creating connection zones between them and with farmland. At the Provincial and Municipal level, this is done, for example, through the "Groen AS", to create migration routes for flora and fauna. Flora and fauna are further protected according to the Biodiversity Convention and the European Birds and Habitats Directives (European Commission, 2014). The "Groen AS" provides ecosystem services and landscape and recreation areas for citizens. The municipal zoning plans also contain the explanation of how national and provincial directives apply with regard to the zoning area with concerns to water and soil quality, ecol-

ogy, air quality and sound and odour nuisance (Ruimtelijkeplannen, 2020). Hitherto, this chapter defined the concepts of transition and power, and sketched the institutional context of the region of interest, where power dynamics and land-use change will be studied. The next section describes how all these concepts are related to each other in a conceptual framework and to the research objectives in an analytical framework.

2.2 Conceptual and analytical frameworks

Overall, the study tries to answer questions such as: which power dynamics between the actors happened in connection with a change of land-use? Or to put it differently, how changes or the lack of changes of land-use were influenced by a certain power dynamic?

The focus will mainly be on the power dynamics between the regime and niche levels actors, conceptualized as actors exercising different powers, as shown in Figure 3, the first figure appearing on the next page. The aim of the conceptual framework is to integrate the theories in a model that potentially can explain the relations between the phenomena under observation. The X axis of the conceptual framework indicates time, in terms of the historical and political-economic processes which influence the system along all the level of the Y axis. The Y axis indicates the local, regional and global dimensions. Clearly, this is oversimplified, considering that niches do not only operate at the local level, but might more broadly connect to the landscape level and vice-versa. Global, regional and local levels are interconnected, as shown by the spotted arrows. At the global level, landscapes are exogenous macro-trends (exogenous with respect to the system under study).

In the case-study, this can involve trends such as population growth, globalization and climate change. In addition, the exercise of collective reinforce power at the landscape level create endogenous macro-trends (i.e. neoliberalization of policies across a region, as briefly noted in the above section), opposed by counter-macro trends by niche actors (i.e. anti-globalization movements by transnational networks of social actors) (Avelino, 2017). Another example of an endogenous human-led trend is the urbanization of peri-urban areas, led by e.g. population growth. Avelino explains that, in terms of power, macro-trends are either the collective use of reinforce or innovative power by actors (Avelino, 2017, p. 511). For instance, in the agri-food system, an example of a counter-trend is the collectivization and de-industrialization of agricultural activities (through community-based agricultural practices and exchange of food products opposed to purchase).

The next page contains also the analytical framework (Figure 4). This framework shows how the concepts (key variables) presented in Figure 3 are related to each other and how each research question aims to explore one or more of these concepts. The last column suggests how the answers to the research questions are planned to be organized (results of analysis). Based on the theories, the analytical framework also hypothesizes the type of connection among the variables. For example, macro and counter-macro trends are expected to drive stakeholders interests and claims. In turn, macro-trends could undergo variations according to exogenous landscape

changes (e.g. global climate variations impact on cultural beliefs and policies). Starting from these considerations, the next section presents the methods which have been thought to be the most appropriate to these epistemological foundations and to answer the research questions.

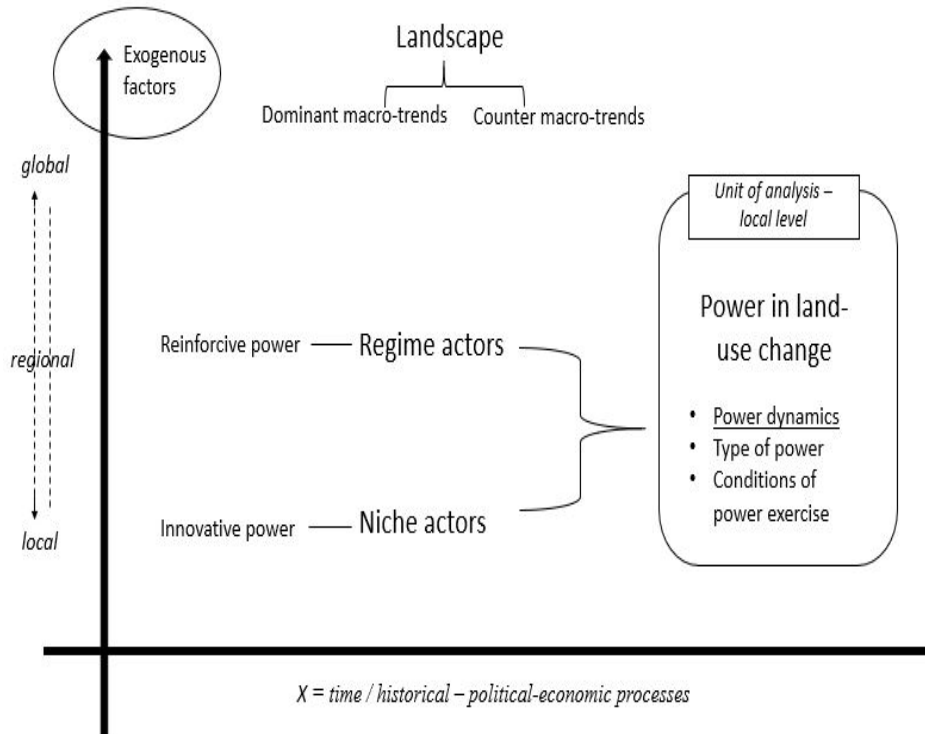


Figure 3: Conceptual framework. Source: Author's own elaboration based on (Avelino, 2017; Verlinghieri, 2020) and (Geels, 2011)

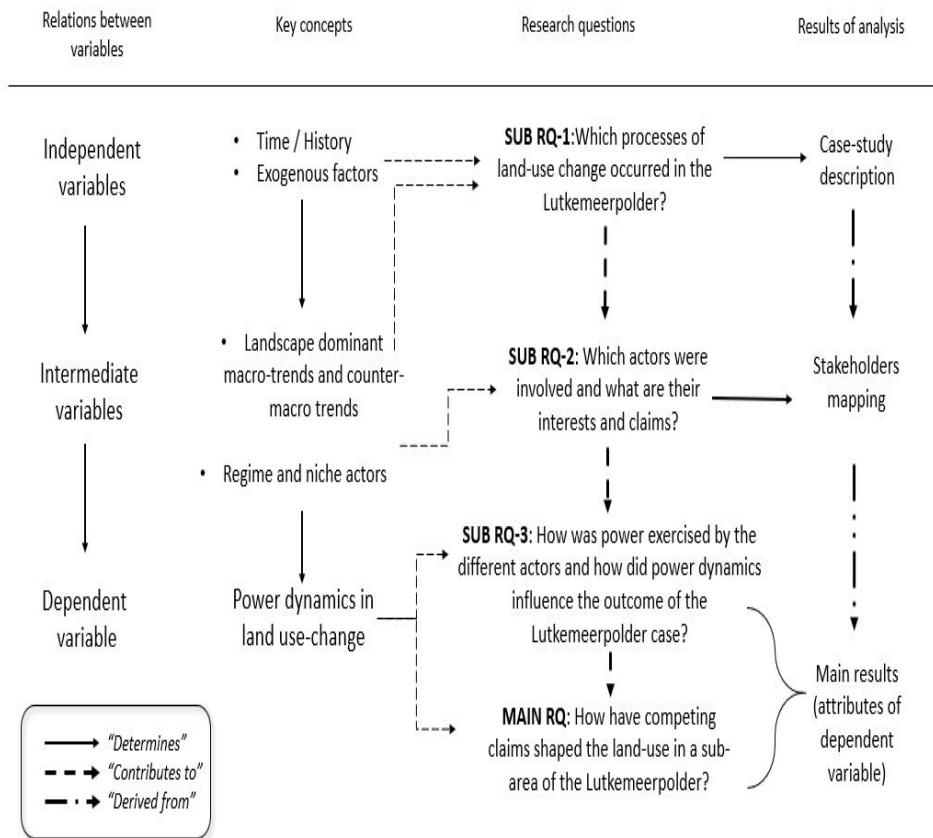


Figure 4: Analytical framework

3 Methods

This section introduces the overall research strategy and methods. The research was conducted in three main phases, often overlapping each other:

- phase 1: collection of preliminary information on the case-study, literature review and document analysis;
- phase 2: triangulation of data with selected key respondents interviews and access to additional documents;
- phase 3: more in-depth interviews with all the respondents.

The research involved phases of data collection, which included several field observations conducted from March 2020 to June 2020, in-depth interviews via Skype or phone and policy, municipal or legal document analysis. The data collection and analysis were alternated to phases of both inductive and deductive reasoning connected to literature review. "Inductive" means that the researcher used empirical observations to enrich or change the conceptual framework and the interview questions. By "deductive", I mean the framework was initially developed before any empirical observation.

Thus, the overall research process was non-linear, iterative and circular, with gradual adjustments of the framework and production of additional follow-up questions to the respondents as more data were collected. It can be argued that, to this respect, the research is based on insights from grounded theory (Glaser, 1978; Henink et al., 2020).

To deal with a profusion of social actors, as it is the case for this study, it is relevant to look at "conflicting interests" and "understand whose models prevail over those of others and in what circumstances" (Long, 2003, p.19). To do so, an actor analysis (Long, 2003) was chosen as the most viable method to grasp individuals and groups' issues and positions. The research process was also partially informed by participatory observation in form of "active participation", as the researcher directly engaged with some of the initiatives organized by a group of actors involved in the land-use case. This will be further explained in Section 3.4.

As part of Phase 1 of the research process, the researcher made use of a Boolean key search to spot similar studies in the literature. By way of the search, performed both in Google Scholar and Scopus, studies on power relations in land-use in the Netherlands were searched. The key terms for the first search were "land-use" AND "sustainability" AND "power relations" OR "social power relations" OR "power dynamics". A total of 1025 studies were found in full-text, and 14 in title-abs-key. However, a second and third search with the terms "sustainability" AND "power relations" OR "power dynamics" OR "social power relations" AND "land-use" AND "Netherlands" and the terms "sustainability" AND "power relations" OR "power dynamics" OR "social power relations" AND "land-use" AND "Netherlands" or "Dutch" lead to 0 results in title-abs-key and respectively 206 and 256 results in full-text. Abstract and title of relevant articles (duplicates excluded) were scanned. Where this was not sufficient, a full-text screening was performed. No specific empirical cases on power in land-use in the Netherlands was retrieved. This led the

researcher to hypothesize either a gap in the literature, a misuse of key search terms or a use of different language to describe power relations.

3.1 Overall research strategy and methods

This research is descriptive and exploratory in nature and makes use of a case-study. The reason to choose a case-study research is twofold: firstly, because it can offer an “in-depth, multi-faceted exploration of complex issues” (Crowe et al., 2011). Secondly, because, in transition studies, it is considered as a “best practice” and thus widely employed (Köhler et al., 2017).

As the case-study focuses on dynamics of social relations, an actor-oriented form of analysis was preferred (Long, 2003). In fact, “the actor-oriented analysis is especially appropriate for disentangling the complexities of struggles with respect to specific issues such as sustainability” (Long, 2003, p. 53). In addition, this approach “stresses the interplay and mutual determination of “internal” and “external” factors and relationships” (Long, 2003, p. 13), which can help in identifying how “macro trends” (understood as trends at the landscape level in the conceptual framework) interact with the activities of social actors.

Finally, an actor-oriented analysis serves to identify issues of power and how the confrontation of different actors “perpetuate or transform dominant discourses” (Long, 2003, p. 53). To implement this analysis, a qualitative methodology, key in understanding in-depth respondents’ perspectives and frames (Hennink et al., 2020), was chosen. The research materials are explained in the next paragraph.

3.2 Research materials: data collection

The materials needed to answer the research questions include both secondary and primary research materials.

Secondary research materials

Secondary materials were analysed mainly in the first phase of the research. These include municipal governmental documents, municipal zoning plans, legal interlocutory proceedings, project plans for the land, articles and academic literature. The materials were used to have a first understanding of the history of land-use. Legal proceedings were used to understand respondents’ claims and opposing interests. Some of these documents are named in the results as “confidential” and they have been retrieved behind direct provision of one of the respondents. Another part of secondary materials was collected from the official websites of the relevant respondents’ organizations. Finally, some publicly available materials were retrieved online, behind explicit indication of the respondents. These materials (in Dutch language) were more easily collected through respondents due to the language barrier, which limited the capacity of retrieving documents by key term search.

Primary research materials

Primary research materials collection involved 15 in-depth interviews and 3 field observations, collected between April 2020 and June 2020. The study area is located in Amsterdam West, in the area called Lutkemeerpolder (as explained in Section 1) and was reached by bike from Utrecht, to respect COVID-19 regulations. In view and respect of COVID-19 national restrictions, the majority of the interviews were conducted online. Interviews were conducted in English. 13 interviews were collected online and 2 were collected in person outdoor, following at least 1.5 metre of physical distancing. The average duration of the interviews was about 28 minutes. Answers to some follow-up questions to online interviews were obtained through email communication. In addition, 4 out of 15 of these interviews were followed by a second investigation with follow-up questions to the respondents, once additional documents were retrieved and more information led to the need of more data collection.

Acknowledging the claim of transition studies that "actor selection should involve both moderate and radical actors" (Wittmayer & Schäpke, 2014, p.5), the researcher contacted all the stakeholders who had a partial or total involvement in the case-study or who were mentioned in connection with the case-study in online articles and during informal meetings with people in the field area.

Individuals were identified from document analysis and through snowball sampling. Snowball sampling started with a personal connection with one of the organizations involved in the case. This personal connection allowed referral sampling (as it will be later explained in Section 3.4). The initial aim of the sampling was purposive, in the sense that it tried to capture the majority of the actors from all the categories mentioned in Avelino adapted welfare model (Avelino & Wittmayer, 2019) (see previous section). The field observations included collection of photographic materials, observations of the work of the farmers in the fields, and participation to some activities organized by other groups on the field, as explained in Section 3.4.

Table 2 (on page 38) provides an overview of the respondents contacted, their background, and the duration of the interviews (both the first interviews and the second follow-up interviews are included).

People who were involved in NGO work were divided in three different groups according to their level of engagement with the land-use case. More specifically, "activist group 1" refers to people who have been followed the case since the early stages, "activist group 2" refers to people who engaged directly in activities and actions on the land and have been followed the case at least in the last 4 years and "activist group 3" refers to the people who knew about the case, engaged in some activities, but were personally slightly less involved.

3.3 Data analysis procedures

Once all in-depth interviews were collected, the qualitative data have been analysed through *a posteriori* manual coding in Excel. Codes have been both deductively

and inductively deduced from data (Hennink et al., 2020).

The researcher did not choose to use NVivo both for practical reasons (the laptop of the researcher could not support the software in a relatively easy way) and methodological reasons (the language differences of the material collected and the relatively little amount of primary materials).

Sentences from about 52 pages of interview notes were inserted in Excel. An emergent exploratory coding technique from grounded theory was employed (Glaser, 1978). It involved three steps: (1) open line-by-line coding from the text, (2) axial coding, where repetitions in previous codes were grouped and (3) selective coding, in which the connection with the theoretical framework was established, by clustering and relating the codes to concepts from the framework.

This coding strategy was used in order to stay open to new insights and possibilities emerging from the data that have not been taken into account in the theoretical framework. However, given that "qualitative research is mediated by the author" (Glaser, 1978, p.23), it is to be noted that it was difficult to "make the data speak for themselves" as the process of coding was always interceded by *a priori* conception and linkages with the theories that the researcher had in mind. Figure 5 offers an example of how this coding strategy was employed: the first column includes extracts of sentences of the respondents, the second column is the axial coding and the third column is the selective coding. Open coding is not included in this representation.

3.4 Reliability and validity of data and ethical considerations

Collection of data respected the anonymity and requests of the informants.

Informed consent was organized by informing the participants about the finality of the study through an email communication and about the fact that they could have retrieved their participation at any point. Privacy has been respected by never sharing information that could have directly linked or exposed the respondents, or indicate the personal identity of the respondents.

The respondents were informed that the research was part of a Master thesis and they granted their consent through email communication and/or via phone. Interviews were not recorded, but notes were taken meticulously. General interview questions were structured to identify three main themes (history of land use, relations to other stakeholder groups, activities of the organizations) and asked to all respondents. An example of an opening question was: "do you know who owns the land of the Lutkemeerpolder?"

Besides this kind of "guiding" question, each interview asked specific questions tailored according to the respondent group, e.g. the activities of the respondent group, the involvement of the respondent in it, the view of the respondents of the project he/she was involved in, etc.. Ultimately, the use of follow-up questions proved to be the most useful tool for engaging in more in-depth explorations of actors' views, for eliciting further information, e.g. about project or policy plans, and for triangulating other material collected.

3.5 Positionality and reflexivity of the researcher

Positionality informs how this research was a product of a personal "trial and error" or "best try" of an autonomous individual in a situated position and role (Malterud, 2001). The research was likely to be influenced by the researcher's values and position in society. The researcher is a 25 years-old, white, female, high-middle class individual, mentally and physically not impaired, originally born in Italy, Europe. This privileged position facilitated or allowed most of the research process.

More importantly, the researcher had the idea of researching this topic in relation to the work that inspired her 6-month internship (February-June 2020) at the non-governmental organization ASEED Europe, in Amsterdam. The researcher was thus involved in some of the activities organized by the organization, which has been familiar with the case of the Lutkemeerpolder for many years. This role came to play in the research process not only allowing snowball sampling and a smoother collection of field observations, but also in the very core of the research: the choice of the research topic, the formulation of the research question and, consequently, in the interpretation of findings. In fact, "a researcher's background and position will affect what they choose to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions" (Malterud, 2001, p.484). For this reason, the researcher reflected on her meta-position. As an example, at times, the research had a more "activist" role (Choudry, 2020). More specifically, the researcher engaged in volunteering with the environmental activist organization which was helping other groups in keeping the land of the Lutkemeerpolder agricultural. At the time of the research, the major land occupations had already happened and the ground had already started to be prepared for constructions. Thus, the activities that the researcher primarily engaged with regarded smaller actions. The researcher also took part in several meetings of the activist organization, which allowed to better grasp the overall strategies and constraints of the group. This allowed the researcher to have relatively easy access to a certain group of respondents. However, the researcher was not directly involved with the core organizing team of the activities on the land of the Lutkemeerpolder. In addition, most of the activities were limited during the time of the research due to COVID-19 restrictions. This facilitated the possibility of separating this double "activist-researcher" role more clearly and vest a critical look on the case-study.

3.6 Limitations

Most of the secondary materials are in Dutch language. As the researcher is a non-native Dutch speaker, the materials were translated by online translation services and dictionaries. This increased the risk of a misinterpretation of information. To counter this limitation, data were triangulated by double checking with follow-up questions to the respondents. A second limitation is that it was not possible to interview all the actors who had a connection with the case study, as only a specific number of respondents consented and answered to the research request.

For this reason, it was not possible for example to interview all farmers living in the agricultural area. It is possible to conclude the ratio between people contacted and people who consented to the research from Table 2 (page 38).

A third key limitation of the research regards the Boolean search explained at the start of the paragraph: for time constraints, only two databases were scanned, which could mean that additional relevant articles were not retrieved or that some articles were not read thoroughly.

The next section presents the overall results of the research. Firstly, the field area is roughly described and processes of land-use change are presented. Secondly, claims and interests of the different actors are depicted. From this section, it will be clear the complexity and variety of the involved stakeholders. Then, actors are grouped under a certain coalition according to their interests. Thereupon, they are associated with the niche or regime according to whether they pursue a dominant interest or a counter-dominant interest. Finally, the power dynamics between the most prominent coalitions are described.

Date	Group	N. of people contacted	N. replies	N. of people interviewed	Avg. duration (in min.)	Interview type
March	Activist Group 1	4	2	2	1st: 20 min.; 2nd: 15 min.	Phone
April	Activist Group 2	3	2	2	1st: 30 min.	Skype, Phone + 1 f/u ⁱ
May	Activist Group 3	6	3	3	1st: 35 min.	Phone, Person + 1 f/u
May	Politician	10	2	2	1st: 30 min.	Phone
June	Municipality (Different departments)	6	2	2	20 and 29 min.	1st: Phone + 2nd: f/u via email
June	Citizen	4	1	1	1st: 15 min.	Personal
April	Journalist	3	2	2	30 min.	Phone
June	Legal advisor	1	0	0	-	-
April	Farmer	2	2	2	45 min.	Personal
May	Other ⁱⁱ	2	1	1	25 min.	Phone
Total		36		15	about 27	

ⁱ f/u stands for follow-up ⁱⁱ i.e. project partner, researcher

Table 1: Table of respondents

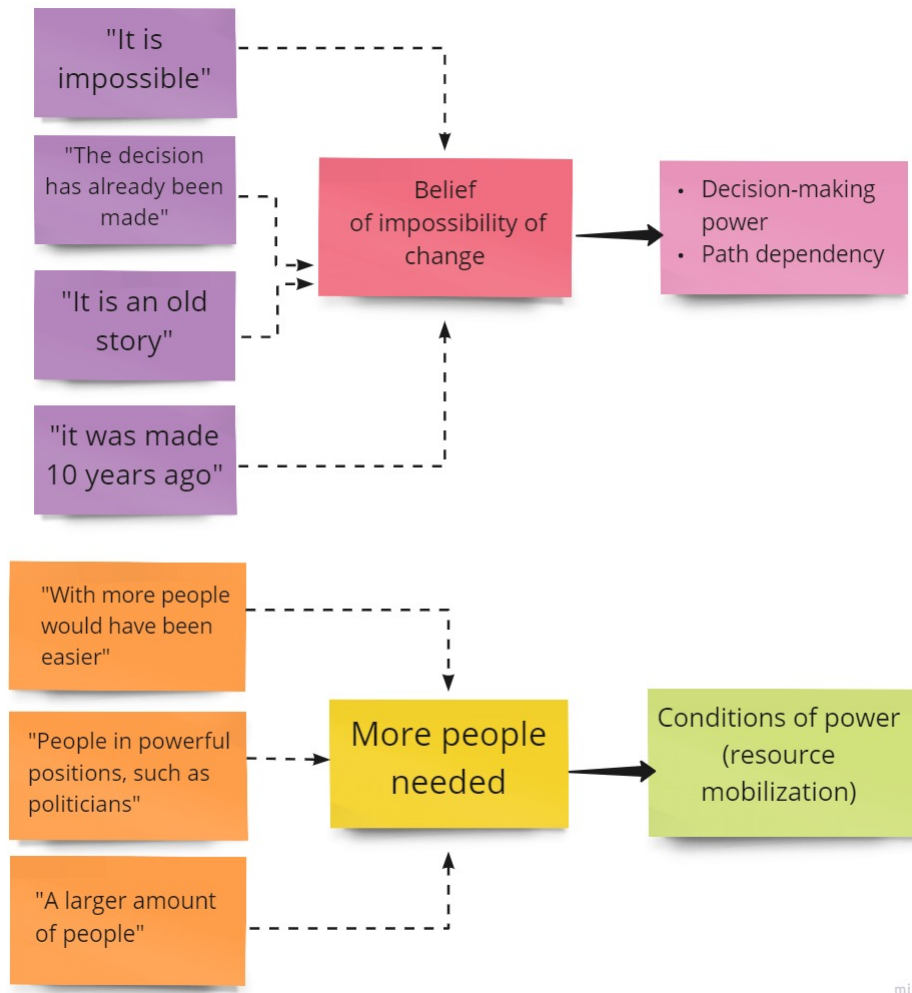


Figure 5: Example of coding strategy

4 Results

This section is divided in three sub-chapters. Firstly, the history of the land-use of the Lutkemeerpolder is narrated. Here, the processes of land-use change will be described in relation to the changes in policies at the local and regional level, and to the macro-trends at the landscape level (Section 4.1). Secondly, the claims and interests of the actors will be presented (Section 4.2). Thirdly, the power dynamics that shaped the last years of the struggle at the Lutkemeerpolder will be described. More specifically, the type of power and some conditions of power exercise, such as practices and strategies of the two opposing coalitions of actors, are exposed (Section 4.3).

4.1 History, landscape factors and processes of change in land-use

While biking on the West side of Amsterdam, slowly stepping out of town, it is possible to recognize a set of industrial buildings, some houses, and empty land. This landscape characterizes the peri-urban district of Amsterdam Osdorp. The air is fresher than in the town, birds are resting on the trees and dogs are playing around the fields. This peri-urban mixture (Ravetz et al., 2013) of open recreational space, empty land and grey buildings of local and international companies are the distinctive features of the Lutkemeerpolder. The municipal zoning plan of the Lutkemeerpolder denominates "sub-area 3" the area of interest of this study. The area is located in the Nieuw-West district (formerly known as Osdorp district), between the Ringvaart, the Wijsentkade, the Osdorper Bovenpolder and the Ookmeerweg (Ruimtelijkeplannen, 2020). This area, not so far from Schiphol airport, includes the land which is going to be used for the construction of Business Park Amsterdam Osdorp Phase 2, promoted by Schiphol Airport Development Company (SADC), and developed through the public-private partnership GEM BV Lutkemeer between the Municipality of Amsterdam and SADC. Part of the land hosts the ecological care-farm "De Boterbloem", which cultivates on a few hectares and used to cultivate in the past on a wider area before the land was bought by the municipality. This old agricultural land is contested and reclaimed by a group of civil society actors and by the farmers, which proposed an alternative plan to the business park, hereby called "the biopolder" plan. The next paragraphs are devoted to the description of the territory, the history of land-use and the most recent events which took place on the land.

Current spatial structure of the Lutkemeerpolder

The polder is part of the large green area of Tuinen Van West which accommodates agricultural, green and recreational functions and includes four polders, as shown in Figure 6.

The size of the Lutkemeerpolder and the planning area is about 218 hectares and can be divided into five subareas (Ruimtelijkeplannen, 2020):

- Sub-area 1: it was a former agricultural area that have been made suitable for businesses. It contains a petrol station. It is devoted to the first phase of SADC Business park, for approximately 20 hectares (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020).
- Sub-area 2: this former agricultural area was converted to have landscape and recreational functions. It contains a bicycle and pedestrian path. The western area is a nature reserve. Part of the ground of sub-area 2 in the North and East is for agricultural use.
- Sub-area 3 (the area of interest of this study): currently contains agricultural land, but since 2002 the grounds are intended for business activities, more specifically for the second phase of the Amsterdam Business Park Osdorp.



Figure 6: Tuinen Van West' polders. Source: (Ruimtelijkeplannen, 2020)

The total area is 45 hectares (SADC, n.d.-a) and the issuable ground for the project is about 25 hectares (Ruimtelijkeplannen, 2020) (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020).

- Sub-area 4: contains businesses, former agricultural companies, a pumping station, landscaping companies and allotments and housing.
- Sub-area 5 includes the cemetery and the crematorium Westgaarde.

Figure 7 shows the division in sub-areas.

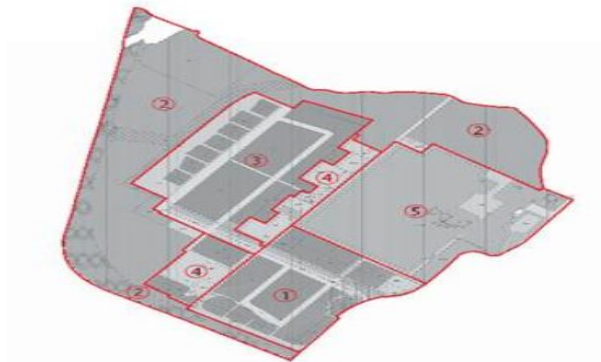


Figure 7: Division in areas. Source: Civil Servant Project Management Bureau, Phone Interview, June 16, 2020

First land-use change towards a "more urban" function (1865-1970

²⁾

With its 45 cm under the sea level, the Lutkemeerpolder is the lowest polder in the province of North Holland. Because water regularly caused flooding in the area, a dike was constructed and the territory was transformed into a lake (Figure 8).



Figure 8: The lake of the Lutkemeer. Source: (Ruimtelijkeplannen, 2020)

At the end of the 19th century, the search for more agricultural land led to the transformation of the territory into a polder: the area was drained between 1864 and 1865. The polder can be distinguished from the surrounding landscapes, as it has a more or less rectangular form, called "battle landscape". Since 1908, the Lutkemeerpolder was used for agricultural purposes by a number of farmers. In 1959, the Lutkemeerpolder was bought by the municipality of Amsterdam with the intention of expanding the city (Ruimtelijkeplannen, 2020). In that year, the municipality offered to the farm called "De Boterbloem", located in sub-area 3, a lease over the land (confidential document 5). After 1970, due to the pressure of urbanization, the crematorium and the Westgaarde cemetery were constructed. This is the first change towards a more "urban" function of the territory (Ruimtelijkeplannen, 2020).

Figures 9 and 10 show from two different angles photographs of part of the agricultural fields of the Lutkemeerpolder where the farm is located in the second half of the 20th century and around the mid-2000s.

Early agreements with the farm De Boterbloem (1963-2002)

³

²Appendix D contains the timelines which depict the most important events described in this section

³Ibid.



Figure 9: Region of the Lutkemeerpolder and agricultural land, year unknown. Source: (Lutkemeer, 2018a)

In 1963, the municipality stipulated a "pact" agreement (in Dutch: "pacht-overeenkomst") with De Boterbloem farm (confidential document 5, n.d.), which allowed the farm to use the land for free. In the 80s, the airport business was expanding. So, in 1986, the municipalities of Amsterdam and Haarlemmermeer, the Schiphol Group and the Province of North-Holland signed a covenant establishing that part of the polder would have been destined to businesses related to the airport ("Schipholgebonden bedrijventerrein") (Bos et al., 2019). In 1993, the old owner of the farm died and the heir took over the lease (confidential document 5, n.d.; Municipality of Amsterdam, 2019c). In 1997, the plans for the first and second phase of the business park Amsterdam Schiphol were written down. In those years, the Dutch economy was flourishing and the airport business sought to expand. Thus, some years later, in 2001, the municipality ended the lease rights with De Boterbloem farm, providing a financial compensation to the farm and a new loan agreement, which established that the farmers were allowed to use the land (14 hectares) for free until it would have been needed to start the business park Amsterdam Osdorp (confidential document 5, n.d.).

The loan agreement (in Dutch: "De Eerste Bruikleenovereenkomst") signed by the parties also stipulated that at the termination of the agreement the user could not claim any compensation, ask for other ground or interpret the agreement as a lease agreement (confidential document 5, n.d.).

In 2002, this loan agreement with the farm entered into effect and the municipality released the "Zoning Plan Lutkemeerpolder", which aimed to convert the area into a business park for Schiphol-related companies and to realize an ecological zone (Ruimteliijkeplannen, 2020). The zoning plan changed the destination of sub-area 3 from agricultural to business (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020). This first zoning plan change defines the beginning of a transition (Ravetz et al., 2013) towards a more urban function of the sub-area 3.



Figure 10: Region of the Lutkemeerpolder and agricultural land, year unknown. Source: (Lutkemeer, 2018b)

The corruption case (2005-2012)

4

In the early 2000s, there were several land transactions around the hectares of the Lutkemeerpolder, which involved a scandal of corruption. It is important to account for this event, as it influenced the history of land-use and consequently the claims of the stakeholders, as it will be explained in the next chapter. In 2005, the company Mainland B.V. was acquired by the British company Slough Estates⁵. Two years before the agreement was signed with the farm, Mainland bought eight hectares of sub-area 3 from the municipality (Hudig Nor, 2018).

Slough Estates and Mainland formed together the company Slough Estate Mainland BV, a private company with limited liability which builds single family homes and other buildings in the Netherlands. The company is currently part of SEGRO group, a public limited company (publicly-traded corporation) working in the real estate sector, based in the United Kingdom. In 2009, the private limited liability company SEKU B.V. sold to the municipality the eight hectares for three times the initial price (the land was bought for 2.3 million euro and resold for 8 million euros) (Hudig Nor, 2018).

"SEKU BV bought the Lutkemeerpolder from a farmer. It was bought by Jelle Kuiper" (Researcher, Skype Interview, May 20, 2020). SEKU B.V., in fact, was born as a cooperation between Slough Estates B.V. and the real estate developer Jelle Kuiper (Hudig Nor, 2018). More specifically, the land transaction of 2009

⁴Ibid.

⁵"I am very pleased that from the recent real estate conference MIPIM (in Cannes, France) have been instrumental in persuading British Slough Estates that the North Wing of the Randstad is still an attractive one is the location for international business," says the municipal member Hooijmaijers in the communiqué from the province of Noord-Holland (Hokstam, 2015)

were those which involved unlawful acts: the deputy Ton Hooijmaijers was convicted for malversation in land transactions in 2012 to three years of imprisonment. In 2009, a cooperation agreement was signed between Kuipers and Hooijmaijers, in which Kuipers was granted the right to use that part of the land (Hudig Nor, 2018). Researchers investigating the case point out that this is a common event in the real estate world in the Netherlands, and that it shed a grey light on the municipality in those years: "we are not blaming anybody, we are just saying this is connected to T. Hooijmaijers, who was convicted of corruption, because he was both a member of Province and working for SEKU" (Researcher, Skype Interview, May 20, 2020). In 2009, Hooijmaijers as member of the Province of North Holland, together with the alderman Van Poelgeest (from the political green party GroenLinks) presented at the PROVADA real estate fair the business park project. Shortly after, Hooijmaijers resigned because of the Icelandic financial crisis. In 2012, the trial took place and the province of North Holland set up an investigation committee to conduct an extensive research on the Hooijmaijers case (Hudig Nor, 2018): "Hooijmaijers has been sentenced to three years for a corruptive acts between 2004 and 2009 while he served as counsel member for North Holland. He was found guilty of accepting bribes from project developers in return for favors, for producing a large number of fake invoices and for money laundering" (Hokstam, 2015). The case was in the press for many years, and had an impact on the governmental reputation: "access to requested documents shows that the city council was not too happy with this private building company involved and the development of the polder because there have been past associations with corruption and they tried to get rid of his name on the project and he sort of found a solution by changing the name of his company Ark Projecten in Thunnissen Ontwikkeling. His name is still related to this company. There was a court case last year, but then because the suspicion has been there for 15 years, the court decided to drop the case and found not enough evidence that associated him with corruption" (Journalist 1, Phone Interview, April 23, 2020).

Developing the territory: the public-private partnership and the zoning plan (2008-2013)

6

The development of the area legally took the form of public-private agreements of the municipality with companies. This is in line with the overall national shift to neoliberal policies in spatial planning, as explained in the theoretical framework (Section 2). In 2008, a public-private partnership (PPP) between Schiphol Airport Development Company (SADC) and the municipality of Amsterdam was set for managing the development of the land through the joint exploitation society GEM B.V. (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020). The legal basis is a ground lease ("erfpacht" in Dutch) (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020), where the municipality charges

⁶Ibid.

a fee to a second party which has the right to make use of the ground. SADC has the responsibility of the circular design of the park. GEM Lutkemeer owns the ground for development, except for two parcels (Sloten H 1603 and 1604) owned by the municipality, which cover 9698 square metres around the farm (confidential document 3, July 2019). The municipality has both a private law role as a shareholder of GEM BV and a public role for the development of the land, such as granting permits. Other than the PPP, the municipality concluded a cooperation agreement with SADC, Slough Estates Mainland B.V. and the developer SEKU B.V., which is entitled to a profit share of 20 percent on the result of the land development and a development right of 33 percent of the ground which will be leased to companies (Municipality of Amsterdam, 2018a).

Some parties claim that this agreement was unlawfully completed because of the involvement of SEKU B.V. in the corruption case described above (Hudig Nor, 2018; Behoud Lutkemeer, 2020). On the 8th of December 2011, the 2002 zoning plan changed its focus through the adoption of a new covenant. The covenant introduced a more "market and international-oriented" approach, to make the metropolitan region more attracting, by engaging internationally competitive businesses (Ruimtelijkeplannen, 2020). This policy change is aligned with the overall objectives of the National Policy Strategy for Infrastructure and Spatial Planning, which will be released two years later.

In 2013, based on the covenant, the zoning plan of 2002 was revised (Ruimtelijkeplannen, 2020). According to some respondents who researched the topic, this was done because of the problems that SADC was facing during the economic crisis. The economic crisis can be seen as an endogenous macro-trend acting at the landscape level (see Conceptual Framework), which strongly influenced the business environment in the Netherlands. The respondent underlines how the changes in the zoning plan were driven more by economic circumstances rather than policy objectives: SADC was in economic troubles and the municipality helped the company by making the land available for use. As the quote illustrates:

"the municipality saved SADC by providing these plots in the land bank but now it appears that the development of the polder has nothing to do with Schiphol at all" (Journalist 1, Phone Interview, April 23, 2020).

The crisis also partially explains why the project has stalled for many years: "although SADC was able to restart in 2009 thanks to Lutkemeer phase 2, it has been struggling for fifteen years to fill up the first business park, Lutkemeer phase 1 in the adjacent polder. An analysis shows SADC as a high-risk company. The condition that lots must have a link with Schiphol has therefore been dropped. This was also noted by the accountancy firm PwC in 2017" (Van Vilsteren, 2018, p. page unknown).

The last years: agreements and negotiations with De Boterbloem farm (2008-2017)

7

On the 20th of October 2008, the municipality wrote a cancellation letter to the farm regarding the end of the temporary user loan agreement within October 31st, 2009 (confidential document 5, p.4, n.d.), who had been stipulated in 2002. At the time, the PPP was in place and the land needed to be prepared for construction. The farmers were unhappy with the decision of the municipality and started protesting:

”the Boterbloem farm was the only one protesting that it was a temporary agreement” (Activist Group 1, Phone Interview, March 26, 2020).

In fact, the farm did not accept the cancellation of the first loan agreement and organized with the platform Behoud Lutkemeer (”Preserve the Lutkemeer”) an action committee to protest in front of the council. Simultaneously, the municipality was ”flooded by emails” of protesters. This is the moment in which we can observe a first bottom-up contestation of the power of the municipality by a group of actors. Following this event, the municipality tried to find another location for the farm, but did not succeed and on the 29th of September 2009 decided that the farm was allowed to use the ground for another two years free of charge under a new loan agreement (confidential document 5, p.5, n.d.). It can be hypothesized, following the course of events, that the strategies used by the group of actors, accompanied by delays in the project plans due to the economic crisis, were the major casual factors impacting the development of the land.

After negotiations, the second loan agreement was signed. The agreement, running from November 2009 to October 2011, included a possible extension, depending on the progress of the redevelopment of the area (confidential document 5, p.5, n.d.). The new loan agreement established that the potential client interested in leasing the area could have carried out soil investigations for constructions and that the farm could have used the land free of charge until the potential business client would have not needed it for his/her services (confidential document 5, p.6, n.d.). This second loan agreement was then extended until November 2012, considering the delay in the implementation of the development of the business park (confidential document 5, p.6, n.d.). Following further delay in the construction, the agreement was extended again until November 2014. Finally, on the 23rd of May 2014, the municipality sold part of the land, where the farm is located, to GEM B.V. (confidential document 5, n.d.). More specifically, plot number 1602 was for GEM B.V. and plot number 1603 and 1604 was property of the council (confidential document 3, July 2019). The municipal document reports that the 13 out of 14 hectares of the land were sold to GEM B.V. (confidential document 5, n.d.). After the acquisition of part of the plots by GEM B.V, the farm signed an agreement with GEM B.V. for an extension of the user loan agreement firstly until 2015 (confidential document 5, n.d.) and then until the 1st November 2017.

⁷Ibid.

In 2017, the agreement was not renewed anymore, as "GEM B.V. wanted to make the land ready for construction works" and the farm had an obligation to clear the plots (confidential document 5, p. 7, n.d.). Failing that obligation, the farm would have needed to pay 5000 euros per day for each day after the farm had received a notifying letter from GEM B.V. (confidential document 3, July 2019). After the farmers refusal of leaving the grounds to be used for development by GEM B.V., a set of court cases followed between the farmers of De Boterbloem and GEM B.V.. The court cases concerned the refusal of the farm to leave the grounds and to stop using the building located on the farm as a living place (confidential document 3, July 2019; confidential document 5, n.d.). The farm lost the case in the appeal court. These years were characterized by a firm resistance to the construction work by the farmers and supporting groups, as it will be better explained in the next section.

Years of public resistance and further negotiations (2017-2020)

8

A group of civil society and social movements actors supported the farm in the occupation of the grounds. The main leading group was organized under Behoud Lutkemeer ("Preserve the Lutkemeer") platform.

The public resistance hampered the implementation of geotechnical surveys in preparation of construction. Other protests and the refusal to leave the grounds further delayed the start of the second phase of the business park (confidential document 5, p. 13, n.d.). In 2017, the court of Amsterdam established that the farm and the orchard could stay (Lutkemeer, 2019b). In 2017, the owners of the farm registered their residential address at the farm and in August 2019, the court voted down the possibility of residential living in the farm and asked for a penalty of 9000 euros. In October 2018, 2 hectares were offered to the farm, which refused. The farmer argued that two hectares were very little to be able to run an agricultural business:

"the farmer used to have 12 hectares and back then the municipality wanted to give only 2 hectares" (Activist Group 1, Phone Interview, March 26, 2020).

On the 21st of February 2018, the judge established that there was no possible legal basis for an extension of the user loan agreement and that the farm had no rental rights (confidential document 5, n.d.). In addition, according to the court, the farm also violated the property rights of GEM B.V. (confidential document 5, p. 10, n.d.). Several other motions, negotiations and protests followed. These will be further explained in Section 4.3. The last known official document dates 13th March, 2020. The document informs that GEM B.V. entered into a reservation agreement with an interested business for 5.5 hectares and construction work have therefore to take place as soon as possible (Municipality of Amsterdam, 2020a). Figure 11 shows the current location of the De Boterbloem farm (Ecologische Boerderij De Boterbloem) and of the Business Park Amsterdam Osdorp.

⁸Ibid.

The next section describes to what extent landscape factors influenced the development of the BPAO Phase 2 and the activities of the social movements' actors.



Figure 11: Locations of the farm and of the business park, year 2020. Source: Google Maps

Landscape factors: endogenous and exogenous trends

The growing importance of Schiphol Airport in the 80s and 90s, accompanied by good economic conditions, pushed the city to look for space for development of new businesses. Notwithstanding, the plan for the Business Park Amsterdam Osdorp stalled for some years with respect to the planned timeline (see Appendix D, Timeline 3):

”nothing happened during the (2008⁹) economic crisis, there was not much going on” (Journalist 1, Phone Interview, April 23, 2020). The finishing date for the project is also unknown: ”when the development of the business park is finished is difficult to say. There are external factors, like an economic crisis that affect the pace of the development. BPAO Phase 1 was expected to be developed in 2010, but there are still a few lots available because the crisis influenced the demand” (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020).

It is still uncertain how the pandemic will influence the plans: ”the corona crisis

⁹ Author’s Note

will have effect on certain markets. Markets that are currently struggling due to corona crisis are not looking for expanding their businesses. But market that is flourishing during this crisis is local distribution. So business in that market will probably continue to search for locations to expand. We will learn the impact of the corona crisis in the upcoming year” (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020).

The pandemic also influenced the activities of the civil society and social movement actors involved in reclaiming sub-area 3 of the Lutkemeerpolder as an agricultural area. From the outbreak of the pandemic, they mobilized to make the claim about the connection between the current socio-economic system with the wildlife and ecosystem human-led exploitation and the outbreak of the virus (Personal Communication and Zoom Meetings, March - April 2020). While mobilization occurred mostly via online media, some respondents actors were hopeful to find more political ground to expose the case of the Lutkemeerpolder to the general public and to government officials (Zoom Meetings and Personal Communications with environmental activists, March - April 2020). However, the restrictions following the pandemic imposed important limits to the group strategies, by prohibiting the aggregation of a vast number of people. This prevented groups to occupy the territory. Notwithstanding, different smaller actions were organized, including a petition to the municipality (this petition followed another petition which collected 13.000 signatures (Bos et al., 2019)) and some smaller direct actions on the field (personal observations in the land, June 2020).

When asked about strategies, respondents indicated to be more involved online: ”more computer work in corona time...” (Activist Group 1, April 14, 2020) or to be busy in exploring different approaches: ”about the virus restriction? We have to be creative” (Activist Group 1, Phone Interview, March 26, 2020). Other respondents found less opportunities in the crisis at the local level: ”I am not really hopeful that this pandemic will create new opportunities, I think people especially companies and municipality are more and more holding to their power, and to company that give them profit” (Researcher, Skype Interview, May 20, 2020). Indeed, there is no evidence that the plans for the constructions have been hampered by the pandemic. Instead, as explained above, this could have an impact on the type of businesses that will be attracted in the area.

The next section explains how and for which reasons the Lutkemeerpolder sub-area 3 has been designated as a ”business” area. This description helps to make sense of certain claims advanced by the stakeholders (see Section 4.2) and to relate the policy plans with the broader development of spatial planning policies explained in the theoretical framework (see ”Spatial planning in the Netherlands”).

The Lutkemeerpolder in the policy plans

The Lutkemeerpolder is considered in national, provincial and municipal policy plans (see Appendix C). The national policy expresses how the zoning plan of the Lutkemeerpolder safeguards the national interests, as it offers an ”excellent spatial-economic environment” (Ruimtelijkeplannen, 2020, p.page unknown) for interna-

tionally oriented businesses. The zoning plan is in line with the Schiphol Region Selective Establishment Policy Covenant, signed on 8 December 2011, which, as already anticipated, introduced a more market-oriented approach. In 2008, the Medjan Committee was set up to formulate an alternative to the previous 1986 covenant to the Schiphol Forum Board of Directors. In fact, the covenant was thought to "not respond sufficiently to the dynamics and opportunities of the internationally oriented market in the Amsterdam Metropolitan Area and sends a too negative signal to this primary target group" (Ruimtelijkeplannen, 2020, p. page unknown). Under the new scheme proposed by the committee in form of a covenant (not directly anchored in the zoning plans), also non-Schiphol related companies were allowed (Ruimtelijkeplannen, 2020).

In short, this new direction was integrated in the local zoning plan: the policy focuses now more on "creating the right business environments for the right companies, rather than enforcing rules to keep out unwanted businesses". The policy means that companies can also be indirectly internationally oriented, by supplying activities in an international chain (Ruimtelijkeplannen, 2020). The zoning plan also takes into account the "green structure", by designating part of the land as a nature destination (Ruimtelijkeplannen, 2020).

As explained in the paragraph "Landscape factors", this change of perspective was driven by the economic conditions.

The development of the polder is also contained in the Structural Vision of the municipality of Amsterdam 2040, which was adopted in February 2011 (Municipality of Amsterdam, 2011). The document sets an ambitious plan of development of the city of Amsterdam. The policy stresses the relevance of Schiphol expansions in terms of new transports road and infrastructure and related airport businesses: "major physical changes are occurring in the southern flank. Schiphol Airport and its strategic location on the inside of the Randstad, with associated infrastructure, are the big engines behind this" (Municipality of Amsterdam, 2011, p.75). The municipality has the goal of making the airport aviation more "sustainable". This must contribute to the smart and green appearance of the Amsterdam Metropolis" (Municipality of Amsterdam, 2011, p. 80). The Structural Vision also stresses the importance of the Hoofdgroenstructuur (main green structure), which is defined as "the required amount of greenery that Amsterdam wants to secure, consisting of areas that are valuable are for the city and the metropolis, because they are one fulfill indispensable function for green recreation, improving living environment, water management, heat damping, air quality, biodiversity and food production. Preservation of cultural-historical values and a varied total range of greenery are important aspects" (Municipality of Amsterdam, 2011, p. 239). In addition, the southwest area of the Lutkemeerpolder is contained within the National Ecological Network. In fact, the area of the Lutkemeerpolder contains important bird and bats and protected species (Bos et al., 2019). However, the land used for organic production of De Boterbloem farm is not included in the "Stadsrandpolder", which is the area reserved for "agricultural production and landscape experience" (Bos et al., 2019; Ruimtelijkeplannen, 2020) and in the green policy directive (Bos et al., 2019). In fact, subareas 1 and 3 (where the farm is located) are designated as

'works' and are classified under 'large-scale business parks' (Ruimtelijkeplannen, 2020).

4.2 Claims and interests of the actors

The large variety of actors have been arranged in two main groups according to the opposing interests on the object of litigation, the land, and the direction of the "sustainability transition". On the one hand, the decision of building the circular business park Amsterdam Osdorp Phase 2. On the other hand, the interest of keeping the land agricultural and to realize a larger local sustainable food production area in sub-area 3 of the Lutkemeerpolder. At the moment of writing, the construction of the business park represents the most likely scenario of development of the area, unless sudden changes in circumstances occur. Thus, this interest is recognized as currently dominant and, as such, can be framed as the interest of the regime. Opposed to the interest of the regime, the interest of the niche is to develop an alternative agricultural plan, the "biopolder".

The two plans are presented below by outlining the interests of the two different coalition of actors. Figure 12 sketches a diagram of the actors classification under the niche and regime in connection to their interests. Groups that do not fit under this binary categorization are represented at the intersection between the regime and the niche. Overall, some simplification in the classification of actors was unavoidable. This cannot capture the heterogeneity of actors' positions and cultures. However, the appendix (Appendix B) contains a long list of the stakeholders, which can help identify the specific actors in relation to their organization.

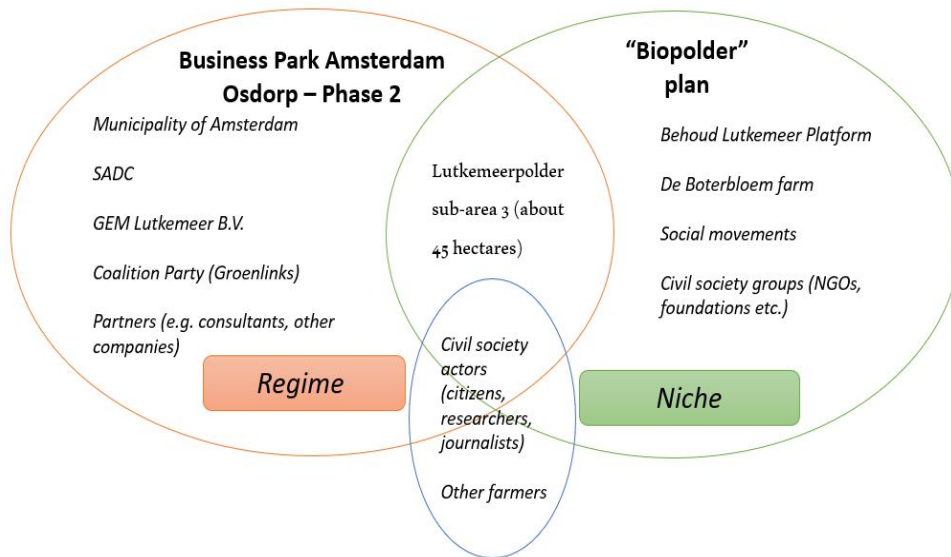


Figure 12: Main coalitions of actors

The original project plan: Business Park Amsterdam Osdorp Phase 2

The project plan for the Business Park Amsterdam Osdorp (BPAO) is divided in two phases: BPAO Phase 1 and BPAO Phase 2. The first phase is a common land development between SADC and the municipality of Amsterdam (Ruimtelijkeplannen, 2020) and is terminated: half of the available building plots are leasehold and built-up. More specifically, in 2017, 2 lots of 0.71ha and 0.62ha were still available (SADC, 2017). According to the zoning plan, the second stage starts when all the plots have been leasehold (Ruimtelijkeplannen, 2020). The municipality cooperates with SADC through the joint exploitation society GEM Lutkemeer B.V., which develops and starts the construction on the ground. However, the second phase have already started despite not all plots have been leasehold. As the quote illustrates: "SADC promised not to start before the other was full and in use. They pretended to have customers but they do not have customers!" (Farmer, Personal Interview, April 30, 2020). This situation can also be explained by the fact that the overall plan has already been delayed for many years, as explained in the previous chapter. Phase 2 is developed over 42 hectares of lots at a minimum size of 2,000 square meters (SADC, 2017), for a total area of 418000 square metres, of which 26 ha are still available (SADC, 2019). Initially, it attracted logistical businesses related to Schiphol, but in the last years, businesses from the city have increased their interest in the park. SADC encourages companies in the field of construction and trading, food and fashion, as well as life sciences and IT companies to establish in the vacant plots (SADC, n.d.-b). Figure 13 shows the available plots (green) and sold plots (red) and reserved plots (orange) of BPAO Phase 1 and Phase 2. The two available plots next to the highway S106, named Kavel B and Kavel 16 cover respectively 30.800 square metres and 5.888 square metres. The 13 red plots are occupied by the following companies: No Excess, G4S Cash Solutions, Sanquin Blood Supply, Taylor Guitars, Business Court Amsterdam, ANWB, Focus Amsterdam, BLOXXX, New Century China Hotel Amsterdam, McDonald's, Corning Life Sciences (SADC, n.d.-b).

The Business Park as a sustainable circular project

The goal of SADC is to create an area with the following characteristics: circular, climate proof, energy conscious and for sustainable business (SADC Official Website, 2020).

The ideal vision of "sustainable construction" for BPAO phase 2 is framed as follows: "we see BPAO as a landscape in which companies can function optimally, but also in which side by side work, recreation, sports, production of food and biodiversity go together. A welcoming ground at all times! In addition, this area is connected to its environment, such as the surrounding nature/recreational area and the Tuinen van West. Water, green, nature and economy are one with the area and the lots and buildings to be leased." Therefore, the project sees the natural landscape elements and the business elements are interrelated and equalized. In

other words, the landscape is understood as the additional factor which makes the park liveable and enjoyable.

The circular strategy of SADC was conducted in collaboration with SKBN, the Municipality of Haarlemmermeer, Port of Amsterdam and the Municipality of Amsterdam. The study was carried out by a team of researchers and consultants from Metabolic, APTO Architects, Ecorys, Akro Consult and HorYzoN (SADC, 2019). The study recognizes that for business parks on leaseholds land is difficult to manage the multi-cyclicity of the location needed for the short life cycle of these buildings, due to the form of land ownership. The best strategy of land form is not discussed in detail.

A brief outline of the circular strategy is presented. This is needed to put into context the claims of the niche with respect to this project (see next paragraph). The circular strategy focuses on use of raw materials, energy, logistics and information. The study includes 49 locations. As every location has a different role in the region, the analysis for potential circularity is recommended to start from understanding the local and regional opportunities, conducting a material flow (water and energy) analysis for 20 years, determining the specific objective of the work location and the related measures and, only finally, developing a circular area plan and establishing a land issue strategy (SADC, 2019). According to the study, due to the exponential exploitation of material resources, it is clear that the linear economy model cannot be sustained in the long-term. Thus, 7 pillars of the circular economy are presented: energy production and use based only on renewable sources and storage systems, closed loop recycle of materials kept at their higher level of material complexity for as long as possible, sustainable extraction and recovery of water, preservation of biodiversity, culture, functioning and flexible economic system and health (SADC, 2019). The material flow analysis shows that overall BPAO2 is going to produce 371230 tons of CO₂ emissions, 14090 tons of waste, 9350 tons of building waste and 1452040 cubic metre loss of waste water. 42 percent of emissions will come from refrigerated warehouses, 33 percent from parking areas, followed by 12 percent of offices, 7,5 percent of restaurants and 5,1 percent of industries (SADC, 2019, p.32). Some of the proposed measures to implement from the study are: use of biomass, solar panels roofs, electricity run (independence from gas), new cycling and walking routes, energy efficient lightning, green facades. The study examined three different possible energy and material use scenarios and concluded that for BPAO an investment between 14 and 65 million euros is required and about one third of the investments can be recovered. This financial gap can be covered by the rental income of offices. As the benefits could be also seen only in the very long-term, the study suggest that the initial business owners will not take advantage of a large part of it (SADC, 2019, p.42).

Figure 13 shows the available plot in green of BPAO Phase 2. The location of the farm is indicated by the red spot in Figure 14: the total green area amounts to approximately 42 hectares, on which approximately 25 hectares are issuable for the BPAO Phase 2.

According to SADC, the top layer of the soil will be removed and used elsewhere and that buildings will fit to the consultations with actors (Infographic SADC,



Figure 13: BPAO Phase 1 and 2 - Plots. Source: (SADC, n.d.-b)

2020). However, some respondents living in the area claimed that they "have never heard of these consultations" (Personal Communication during field visit, June 2020). The company have not publicly specified the outcome of these public participation sessions. However, one respondent specified: "there have been three public participation sessions in 2019/2020 in which we invited local residents to learn about the plans regarding BPAO phase 2. During these sessions they were asked to provide their opinion about the plans" (Civil Servant Project Management Bureau, Personal Communication, 26 June, 2020). In addition, a relevant negotiation that the company has informed the public about is the one which took place with the farm De Boterbloem.

The 1st October 2017, the SADC project director declared their intention to include De Boterbloem farm in the negotiations: "we are currently investigating whether it is possible to retain an area for food production around the farmhouse De Boterbloem. And in addition, we are looking at a range of other possibilities for the farm: as a meeting place for new users, as an ecological manager of the area, and as an example farm to show where our food comes from" (SADC, 2017). De-



Figure 14: BPAO Phase 2 - Location of the farm. Source: (SADC, n.d.-b)

spite this intention, as anticipated, the negotiations with the farm did not succeed. Reasons for this will be outlined in the next paragraph.

The alternative plan: the "biopolder" as a sustainable food production and environmental awareness project

Behoud Lutkemeer Platform states that SADC has already "hundreds of hectares available and have large distribution center located in Westpoort" (Lutkemeer, 2019b). Thus, there is no need to build in sub-area 3 of the Lutkemeerpolder. Considering that GEM BV is a public-private partnership between SADC and the municipality of Amsterdam, Behoud Lutkemeer is convinced that the municipality can still reverse the decision. On top of that, the platform claims that it does not cost 42 million euros to quite BPAO 2 (as claimed by the municipality), but 1 million per hectare (Lutkemeer, 2019b). As an alternative to BPAO, Behoud Lutkemeer together with the farmers associations Voedsel Anders, Toekomstboeren, the foundation Anmec and the organization Nature Optimist proposed the "Biopolder" plan to the municipality (Figure 15). The Biopolder plan is intended to create a space on 43 hectares for local food production, recreation, biodiversity

conservation and climate regulation (Lutkemeer, 2020a).

The plan involves the production of local food to be distributed to the city of Amsterdam, the creation of an in loco kitchen, the creation of new hiking trails and educational routes, the conservation of current and original drainage ditches to preserve the traditional landscape value and an organic agricultural production based on wide crop rotations, the use of organic fertilizers, no use of pesticides and the use of resilient vegetable and seeds varieties. More specifically, the plan is designed to provide a weekly vegetable package to 800 households and weekly fruits to 1750 households. In addition, it will provide at least 30 full-time jobs. The focus, however, will not only be on production, but on building awareness around the food chain and preserving and educating about the biodiversity and the landscape of the polder. Finally, the project will counteract the urban heat island effect of the city and contribute to climate targets (Lutkemeer, 2020a). Every entrepreneur who will take part in the plan will choose his/her preferred legal form to work in collaboration with the others and start with his/her own resources. This will be done under different models: horticulture, food forest, Community Supported Agriculture (CSA), self-harvest garden and arable farming. The food distribution is fossil fuel free, as goods will be transported to the city with electric vans, in cooperation with the transportation company Cityhub. This will put in place a short food supply chain (SFSC), where the farmers will also sell their products directly to the customers in the local shop and collaborate with the closely located agricultural entrepreneurs in Tuinen van West. According to Behoud Lutkemeer, the plan for the Osdorp business park have become "obsolete", due to the developments related to climate change. In their words: "many cities around the world are implementing more plans to reserve land for urban agricultural developments and, as Amsterdam is also committed more sustainable local food production through the Milan Urban Food Policy Pact, it is expected to work towards that goal" (Lutkemeer, 2020a, Para 1).

The presentation of the "biopolder" plan to the municipality as an alternative to BPAO Phase 2

This plan was presented to the municipality by the legal advisor group Advieburomonster on the 28th of May 2019 with the aim of changing the current zoning plan of the Lutkemeerpolder (sub-area 3) back to agricultural/recreational (Behoud Lutkemeer, 2020). The legal advisor made the case that insufficient attention was paid to environmental protection regulation and there was a lack of democratic procedures involved in the spatial planning and development decisions by the municipality, because of past conflict of interests. More specifically, the document states that "the suspicion of corruption at the root of the development of Lutkemeer sub-area 3 is strong. There are good arguments on the basis of which the agreement between SADC, SEKU and the municipality is null and void on the grounds of Article 3.40, paragraph 2 of the Dutch Civil Code, because it concerns unlawful acts favoring SEKU" (Behoud Lutkemeer, p.2, 2020). This claim regards

the cooperation agreement established in 2009, explained in the previous chapter. In addition, the advisor underlines how not enough consideration was given to environmental issues: "in the current zoning plan, insufficient attention is paid to the Flora and Fauna legislation and the special ecological importance of this area and the landscape value of the polder. The North Holland 2040 Structural Vision states with regard to the development of Lutkemeerpolder into a business park that the planning area is in principle not in accordance with the structural vision. Plan Biopolder does this and should be seriously considered in this regard" (Behoud Lutkemeer, p.2, 2020). The document also claims that from the introduction of the 2011 new covenant that established a "more market oriented" approach (for details see section "The Lutkemeerpolder in the policy plans"), "the selection policy of companies was no longer in the hands of the local democracy, but has come into the hands of parties with commercial interests" (Behoud Lutkemeer, p.4, 2020). The whole argument is that economic opportunities outweigh natural values of the area, which, instead, should be reconsidered, especially in regards of the new climate policy agreements: the document proposed the "Biopolder" alternative as an effective project to preserve the historical landscape of the Lutkemeerpolder and to contribute to the interest of the city of Amsterdam in fulfilling its climate goals. The document was signed by De Boterbloem Farm, Dorpsraad Sloten – Oud Osdorp, Mileuddefensie Amsterdam and the institute for nature education and sustainability IVN. The next section presents how these different views of actors can be hardly conciliated. Understanding these claims is the starting point to grasp how they unfold in the relations between the groups, explained in Section 4.3.

Competing interests

The construction of the Business Park falls back to a decision that the municipality took in 1986, with the Schiphol covenant (Bos et al., 2019). However, it was only in 2002 that the zoning plan of the area was officially destined to businesses related to Schiphol (Ruimtelijkeplannen, 2020) and only 6 years later, in 2008, the PPP was created to manage the development of the area. In the words of one of the respondent: "the GEM of 2008 is a PPP between SADC and municipality to guide the development of the area (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020)".

Currently, the change of focus towards businesses not related to Schiphol (see Section 4.1) is justified by the municipality not in relation to attracting international companies, but because of the need to make space available for housing in the city of Amsterdam: "New houses are built in locations that were first allocated to businesses. Since the municipality does not want these business to leave the city, they have to find locations elsewhere to relocate them. One of these locations is Business Park Osdorp. The municipality aims to connect all these ambitions for housing and work with other ambitions such as recreation, climate and sustainability" (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020; confidential document 5, n.d.). Nevertheless, the policy also aims to strengthen the business climate, by "attracting sustainable businesses and offering economic



Figure 15: A graphic representation of the Biopolder plan. Source: (Lutke-meer, 2020a)

opportunities to everyone” (Ruimtelijkeplannen, 2020, p.page unknown).

This goal is further clarified by the word of the respondent: ”the business park was once part to be used to Schiphol and now today the focus is not for Schiphol anymore, but, for instance, we see that we have an immense shortage of housing, and people want to live in the city, so the new houses are built in the city where there are the businesses, but those business have to go somewhere else so we are looking for other places for these business to go to. For example, in Osdorp we can give space to the city businesses because we also want to have more houses. We try to connect all these policies and ambition for houses and for business for having place to work” (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020).

Another civil servant clarifies that ”the point is we do need a green space in and around the city of Amsterdam, but we also need business and enterprises, and housing, this is the whole discussion. Few months ago we had a new business strategy for the city of Amsterdam and we also need new business districts in Amsterdam” (Civil Servant Spatial Development and Sustainability, Phone Interview, June 26, 2020).

The goal of the municipality is contested by the niche actors and considered ”superficial”. The respondent underlines that ”there is a lot of housing in Amsterdam,

but it is too expensive (because of neo-liberalism) and it has gotten out of hand with the whole air-bnb and tourism business” (Activist Group 2, Phone Interview, April 22, 2020). Some other respondents similarly argue that there is enough space for housing, but it is not well managed: ”if the municipality wants more housing inside the city they could do this by many other means. They could end reckless airbnb rentals, reduce the number of hotels, and stop speculators from keeping living spaces empty while they wait for higher profits. They could also use business spaces that already exist along the edges of the city that are either empty or have been zoned for restaurants and recreation” (Activist Group 1, Phone Interview, April 14, 2020).

Whereas, on the one hand, policy-makers recognize the need to stick with policy goals related to business project, on the other hand, politicians also see how BPAO 2 is not a project that can simply change. The motives have to be traced back to political decisions which took place in the past. In the political realm, a general statement of inevitability due to old decisions prevails: ”the space for the distribution center.... the contract is already signed, so there’s nothing we can do about it. We do not need it anymore, but it is impossible to do something” (Politician 1, Phone Interview, June 13, 2020).

The councilor Alderman Van Doorninck, who is responsible for Spatial Development and Sustainability, underlines that ”of course, the realization of the business park will damage green areas, but this goes back to decision-making from a long time ago, and in Amsterdam there is also a need for business parks” (Municipality of Amsterdam, 2020a).

Also within the project development, the argument is that ”this project goes back a long time and there are a lot of (financial/legal) contracts that cannot be easily changed. I think the municipality today allocates a lot of attention and resources to sustainable development, but they also have to deal with decisions made in the past. Change is possible but abrupt change can only occur under extreme pressure. Yet, these project plans still fit current research and policy which indicates that this business park development is necessary to make sure that important functions (i.e. housing, infrastructure, recreation) sustain in the city” (Civil Servant Project Management Bureau, Email Communication, June 17, 2020).

These legal decisions have, clearly, also economic consequences if the plan would be abandoned: the estimated costs for abandoning the project of the business park, according to calculations from Groenlinks, amounts to 42 million euros (Groenlinks Official Website, 2020). For Groenlinks: ”this would be at the expense of important plans, such as making the city climate neutral. Moreover, the decisions of previous colleges and the council cannot simply be reversed” (Groenlinks Official Website, 2020). Again, the political party reports that ”the construction of the business park is an unstoppable process, in 2009 and 2013 decisions were already made about the land development and the zoning plan” (Groenlinks Official Website, 2020). When asked about the importance of preserving green spaces due to the new climate policy goals, the answer pinpoints that the plan has changed to incorporate elements of circular economy, which the policy of Amsterdam have been promoting since the release of Amsterdam circular strategy (Municipality of Amsterdam, 2020b).

In the words of the respondents working for the municipality: "I think that the municipality is thinking ahead and the plan already changed a lot" (Civil Servant Project Management Bureau, Phone Interview, June 16, 2020). These changes are related to the circularity of the project (SADC, 2019), as already explained in the previous paragraph. The project intends to have "circular ground use (so no (new) ground will be imported or exported in the project area); circular water use" and a "decentralized energy systems linked to one building (so own heating pumps, solar panels, etc.)" (Civil Servant Project Management Bureau, Email Communication, June 17, 2020).

A sustainable business is "a business that assists the development of the city (so local distribution warehouses that transport goods with electric cars into the city; or business that are based in the city but have to move because of new housing development" (Civil Servant Project Management Bureau, Email Communication, June 17, 2020). The niche, other than claiming that the project for the construction should be abandoned because there is no real need for business, clarifies that the arguments about the sustainability and circularity of the projects are an elaborated form of "greenwashing". The respondent claims that the "circularity is only considered for the operation not for the construction of the business park, which means huge resources and capital investments/debts to realize" (Activist Group 3, Personal Communication, July 6, 2020) and that this type of "green modernization" is not sustainable and will only damage the polder further. As seen in the previous paragraph, SADC project plan indeed specifies the amount of CO₂ and waste that the construction will generate. "Circular economies are about eliminating waste. If you first have to destroy a valuable resource you have already defeated the purpose. Not to mention a distribution center means that products will be shipped there from around the world, and there is no way to check what kind of wasted resources went into each product. A distribution center cannot be circular" (Activist Group 1, Phone Interview, April 14, 2020).

On the other hand, the political party Groenlinks, which currently holds the majority of the seats at the council, clarifies that the quality of land, the biodiversity and migration routes will be preserved during the construction of BPAO Phase 2 (Municipality of Amsterdam, 2019c). The construction of the park, according to respondents opposing the plan, will only cause further "carbon emissions due to flying of products, a destruction of fertile soil and biodiversity and contribute to let people losing touch to nature and to the value of local food production" (Activist Group 3, Skype Interview, April 13, 2020).

Actors from the third sector, but which do not fit under the niche or regime, joins the niche argument, saying that "you cannot have a circular development when you destroy the last hectares of ecological farm and make way for industrial building, even if you plant green flowers between the building, still doesn't make it circular in my opinion" (Journalist 2, Phone Interview, April 22, 2020).

For these reasons, the main activist group, supported by other organizations, sent several motions to the council for the conservation of the territory as a protected area. The motions were rejected. Furthermore, Behoud Lutkmeer proposed the alternative plan "biopolder", which was also rejected by the council: "the plan to

preserve the entire Lutkemeer is completely new, but it is also a passed station. As far as the college is concerned, the biopolder Lutkemeer is an unfeasible map” (Alderman Marieke van Doorninck, Municipality of Amsterdam, 2020c).

The vision for the Biopolder goes hand in hand with the belief of the niche and other third sector actors that the polder holds important values to be preserved for the future of the city: ”the polder is also a lot other values in terms of agriculture, recreation, education, food production, biodiversity” (Activist Group 1, Phone Interview, March 26, 2020).

”Since 1996, this land is organic. It was the first ecological farm in Amsterdam” (Farmer, Personal Interview, April 30, 2020). People who visited the polder and took part in some activities organized by the main activist group, specify: ”you could see how much history and emotions were attached to that field” (Citizen, Personal Interview, June 20, 2020). ”The ground is super fertile, one of the few places left in Amsterdam” (Activist Group 3, Personal Interview, June 24, 2020). The ground can be claimed as the last fertile ground of Amsterdam, as its soil composition is different from the other soils in the city (Bos et al., 2019). In fact, also the municipal policy underlines that ”the Lutkemeerpolder is a clay polder and this allows for different crops than in the other polders” (Groenlinks, 2020). The values are also connected to the climate regulation that a natural land could (potentially) provide, as the two following quotes illustrate: ”is good for slowing down climate change and keeping green spaces for a densely populated city” (Activist Group 1, Phone Interview, April 14, 2020). ”The biopolder plan has much more nature than the business park. It is obvious. It would be a perfect source for climate regulation, more diversity of species, in terms of bird, species, aquatic life. And also in term of cooling the urban heat island, which at the municipality they are all talking about it” (Activist Group 2, Phone Interview, April 15, 2020).

The project is supported by other actors from civil society groups: ”because I think with climate change and putting all this export instead of plants and trees, it is very dangerous for the city and it is a very short time vision, because you can never change it back. Once the concrete is put on the land it will never be fertile anymore as it is now. So for me it is very important on how I see the city and the local production of food with a short food chain” (Researcher, Skype Interview, May 20, 2020).

It would also be a source for ”reconnecting people to local food production and getting to understand the efforts needed to feed ourselves, this is really important, and I think is main problem we see around us, people are quite disconnected from the food” (Activist Group 3, Skype Interview, April 13, 2020).

To sum up, on the one hand, the regime is concerned about the need for businesses and the impossibility of changing the plan due to legal and financial constraints. On the other hand, the niche sees the construction of the park as a destruction of the current ecological and social value of the land, and for these reasons, it claims that it should be prevented.

It is clear that these statements and views reveal separate worldviews of sustainability of the actors. Balancing economic, ecological and social values of ecosystem services such as land is a long-standing topic in sustainability sciences (Daly, 1973;

Farley, 2012; Neumayer, 2003) and it is not the object of this dissertation. Instead, What is of interest to this study is related to which one of these conflicting interests prevail and under what circumstances (Long, 2003; Painter & Jeffrey, 2009). The next section tries to answer this question by looking at the interactions between the coalition of actors.

4.3 Power dynamics

This section aims to unravel the power dynamics between the niche and the regime. The main type of power dynamic that can be observed in the last 12 years is one of "antagonism", where the niche and the regime exercise different type of power, which "resist, restrict or disrupt one another" (Avelino, 2017).

Power type, conditions of power and interactions

Several strategies have been put in place from the side of the niche to resist the construction of the business park. The niche operated on two different levels. On the one hand, through submitting requests to change the zoning plan to agricultural with the help of several organizations. On the other hand, with the use of organized civil disobedience and public resistance actions in support of the biopolder plan and of De Boterbloem farm, which, ultimately, led to a series of court cases and eviction notices to the groups occupying the polder.

In September 2019, the groups occupying the polder were forcibly removed from the land: "they (the police¹⁰) were quite violent, some of the activists got thrown in the bush, they were really quite brutal" (Activist, Skype Interview, 13th April, 2020). This power exercised by the regime can be rightfully called "reinforcive" power, in the sense that it reinforces the "status quo" (Avelino, 2017) or, to put it differently, it enforces the rule of law of the dominant regime.

The occupations of the grounds hampered the implementation of geotechnical surveys in preparation of construction (confidential document 5, n.d.). Other protests and the refusal to leave the grounds further delayed the start of the second phase of the business park (confidential document 5, p. 13, n.d.). To this extent, the power exercised by the niche is in open antagonism with the power of the regime. It can be argued that the strategies used by the niche had an influence on the course of events, and to this extent, the niche exercised a "radical" power which aimed to promote "change" in the system (Geels, 2011).

In response to the public resistance and along with the ongoing negotiations with the farm, the municipality offered 3 hectares to De Boterbloem farm. The farmers refused considering the ground not suitable for growing enough crops: "they (the municipality) propose to keep 3 hectares. But then that is really hard to do wheat or grain, which is a shame, cause there is a real need of an organic straw of it" (Farmer, Personal Interview, April 30, 2020). In fact, 3 hectares are considered enough for small-scale "urban farming", but not for extensive arable farming. The farm had, in fact, been extensive arable farming since the beginning of the 20th century.

Since 1963, the farm had a pact agreement to use the land, which was changed into a user loan agreement in 2001, entered in force in 2002, according to which established that the farmers were allowed to use the land (14 hectares) for free until

¹⁰ Author's Note

it would have been needed to start the business park Amsterdam Osdorp (confidential document 5, n.d.): "I should have never signed a piece of paper concerning the pact, the peasant right. But it was difficult not to sign it. Because they threatened to cancel the business of my brother. If I would have been a millionaire then it would have been easier. They threatened to put my mother and brother out of business of the wood. My father died young. It was in the 90s. I signed in 2002 because I trusted them that they would care about the land" (Farmer, Personal Interview, 30th April, 2020).

The following quote further illustrates these circumstances: "In 1997, the father of the farmers died and she got into complicated times with the family and then the city council used the opportunity to change the normal lease into a temporary lease, she's farmed since 1997 and temporary lease started into 2001" (Activist Group 1, Phone Interview, March 26, 2020). These two quotes illustrate how this situation came about as a result of the interactions between individual decision-making with contextual circumstances and with the role exercised by the actors which were using "regime strategies". "Regime strategies" refers to the use of legal binding arrangements, as a "standardized way of doing things" or according to normal "policy paradigms" (Geels, 2011, p.31).

From 2009, after "resistance from the farmer" (confidential document 1, February 2018), the municipality decided to postpone the user loan agreement until 2011. The agreement with the farm was then extended until 2017 (and not renewed anymore) in collaboration with the owner of the land GEM BV (confidential document 1, February 2018).

In March 2018, Groenlinks became the largest party in the municipality (Groenlinks, 2020) and in the same year the first big protest was organized. Other protests followed: in March 2019 and in April 2019 the grounds were occupied by the farmers, Behoud Lutkemeer and supporting groups, which received an eviction notice in September 2019 (Lutkemeer, 2019a). The court case specifies: "every weekend more third parties are invited to the Plot to do gardening, more amenities and more events are organized on the Plot" (confidential document 6, p.3, n.d.). The legal document also clarifies that it is unclear what kind of organization and which people are behind Behoud Lutkemeer, and that the groups set up a kitchen, compost toilets and solar panels in the field (confidential document 5, p.7, n.d.). In March 2019, Behoud Lutkemeer Platform organized "The Gardens of the Lutkemeer" initiative. "In 2019, Behoud Lutkemeer squatted the field and made it into a garden" (Activist Group 1, Phone Interview, March 26, 2020). The judge decided that the farmer had to stop using the ground on the 31st January of 2020, otherwise additional fees would be charged (confidential document 5, n.d.). As indicated in one of the documents (confidential document 5, n.d.), the activities carried out at the garden (workshops, tree planting, agriculture, lectures etc.) prevented the GEM B.V. to fill and work on the waterways and further advance the development of the BPAO phase 2. These activities were a form of disruption of the business park project, as manifested by some degree of frustration in certain legal documents from the side of GEM B.V.: "the damage suffered by GEM Lutkemeer will only increase the longer the occupation continues. It is expected that potential users of the lots

in connection with the delay and the 'hassle around Lutkemeer' choose a different location" (confidential document 6, p. 12, n.d.) and "it is clear that Behoud Lutkemeer does not intend to stop being on the Plot until the municipality announced that its 'biopolder' plan get accepted". Given this situation, the respondent safeguarding the company plan insists: "GEM BV also demands that whenever anyone without permission enters and plot and resides there for a short time, a sentence will be enforced against this individual for two years" (confidential document 6, p. 12, n.d.). Again, reinforce power is used by the regime, which employs legal means to stop the illegal wish for change of the niche. Another example is how the municipality responded to the occupation of the private property with an eviction notice (confidential document 3, July 2019): "in 2019 the council sent a letter, saying "we will evacuate you from the field and also evict you from the farm"" (Activist Group 1, Phone Interview, March 26, 2020). The mean of communication by the regime actors has primarily been in forms of letters and legal proceeding documents, attesting the illegality of the actions of the farm and of the supporting niche actors: "the farmer is using the land against the zoning destination plan and this is an illegal activity" (confidential document 4, August 2019). The regime uses "reinforce power", which reproduces and enforces bureaucratic and hierarchical structures (Avelino, 2017).

The activities carried out by the niche actors can also be considered the manifestation of a form of "innovative power", as defined by (Avelino, 2017). In fact, the infrastructures (solar panels, self-made construction with reusable materials, compost toilets) created at the polder are "new resources", and show "self-organizing behaviours of individual and groups" (Ravetz et al., 2013), which are identified in the literature elements as "seeds for change" or "protected spaces", from which a transition can take place (Geels, 2002). These initiatives have a generative power in themselves, as the number of mobilized people grew over the years, with the effect of increasing the mobilisation potential and the local, but also regional, awareness about this specific piece of land (Personal communication with people who organized activities on the field between 2019 and 2020). As such, resources such as people can be legitimately considered as an important condition of power (Avelino & Wittmayer, 2016) for the niche.

On top of that, of interest is to see how the popular mobilisation put in place by Behoud Lutkemeer and supporting groups led not only to the decision of the municipality to extend the user loan agreement, but also opened more spaces for the use of other strategies. In fact, as a legal document specifies: "considering that Behoud Lutkemeer wish to prevent the plans for Business Park Amsterdam Osdorp, it was given the opportunity to submit an opinion or appeal and object to the zoning plan" (confidential document 6, p.12, n.d.). The niche took this window of opportunity and in May 2019, the farm submitted a request to the council of Amsterdam (Lutkemeer, 2019b) to change the destination plan of sub-area 3 into "Agricultural purposes 1" and "landscaping and nature." As already explained in Section 4.1, the request was accompanied by the proposal of a "biopolder" plan, which would destine the ground for sustainable organic food production.

The request to change the zoning plan was not the only motion submitted to the

municipality. One year before, on the 21st of March 2018, the members of the municipal chamber J.W. Nuijens and T.A.J. Geenen presented a motion (2018-316) for the preservation of the farm and its agricultural land. The motion got rejected by the municipality. On the 28th of June 2018, the private association Heemschut Amsterdam presented a motion to the municipality to designate the Lutkemeerpolder as a protected area, based on its cultural-historical and landscape unique character. The motion was presented on the basis of the unique soil type, the panoramic view, the monumental orchard, the possibility of shaping local food policy and the connection with a nature reserve (Heemschut, 2018). The motion was rejected by the municipality on the 19th of December 2018 with the alternative proposal to make 3 hectares of land available for care farm function to De Boterbloem for urban agricultural purposes (Municipality, 2018). The proposal would have required an adjustment of the BPAO plan by GEM B.V. and a change of operational management of the farm from extensive arable farming with care function to small-scale urban agriculture (Municipality of Amsterdam, 2019c). On the 5th of June 2019, the council addressed this request and refused the motion, reaffirming the zoning plan and the proposal to the farm of accepting to keep 3 hectares of land (Municipality of Amsterdam, 2019b). The discussion took place in the council with the following parties involved: GroenLinks, Party for the Animals, the deputy chairman and the councilor Van Doorninck. The alderman underlined that the park would be "as green as possible" and that she regretted that the farm did not accept to be included in the business plan with 3 hectares. More importantly, the council underlined how changing the decision of the council is a no-go (see Section 4.2). For this reason, alternative plans are not viable: "the biopolder Lutkermeer is an unfeasible map" (Municipality of Amsterdam, 2020c). On the 17th July 2019, the counsellor Marieke Van Doorninck sent a note (reference number 2019-7144) to the members of Amsterdam council, re-stating the municipal decision: "the GEM Lutkemeer wants to develop a business park. The draft development plan has now taken into account the integration of a care farm with urban agriculture (3 hectares). It also takes account of motions 1394 and 1395 on promoting biodiversity and migration routes. I am very sorry that they are not interested in a discussion about the details of the municipal council decision" (Municipality of Amsterdam, p.3, 2019c).

The niche and regime actors had controversies also on the preparation phases of the construction works. The farmer was using the house located on the territory of the farm as a place of residency, to "protect the land from exploitation" (confidential document 4, August 2019). Observers indicated that "they started to prepare the land to make the building possible, and they did quite a lot of damages to the parcel of the farms" (Journalist 2, Phone Interview, 23 April, 2020). "They put stones over the fertile ground. They prevented it to be used for farming" (Activist Group 3, Personal Interview, April 24, 2020).

The part of the land which has been damaged is the land property of GEM BV and where the biopolder wants to be realized. In response to the activists claims, the project director of GEM Lutkemeer specified that the work has been done after necessary permits were granted and in consultation with ecologists, to preserve the topsoil and without using fertilizers and pesticides (Activist Group 3, Personal

Email Communication, April 6, 2020). In response to this answer, the activist underlined that the manager lied about the fact that they already had a buyer. In addition, the respondent specified that: "he's right that it is best to have something sown, but the only reason they didn't use non organic grass was because a bunch of people called the day it started happening and they offered to take it into account" (Activist Group 3, Personal Email Communication, April 6, 2020).

The motions to promote biodiversity, explained above, are thought to be a result of these disputes from the side of the niche.

Finally, on the 13th March, 2020, the letter from the alderman Van Doorninck informed that the land was ready to be used and to be prepared for the construction plan, as GEM Lutkemeer entered into an agreement with an end user company for 5.5. hectares (Municipality of Amsterdam, 2020a) ¹¹. Behoud Lutkemeer and supporting group have continued to organize protests and actions. The last, on the 24th of June 2020, saw Behoud Lutkemeer supporters bringing 7500 signatures to the alderman Marieke van Doorninck at the municipality offices (Lutkemeer, 2020b).

Factors constraining the niche transition

This section is devoted to explain better some of the niche's actions and what are perceived or understood as the major hindrances for change.

One of the activists present on the occupation date specifies that "in September 2019, there was an action camp in the Lutkemeerpolder, I was impressed how the vibes were positive. You could really feel how the community was diverse in terms of age, race, background, exactly everything which Amsterdam should be standing for. The first land occupation was the strongest one... people chained themselves, human chains and blockages and that's always very brave because it's illegal, you sacrifice your own health and safety. We also organized smaller actions. As an example, guerrilla is already more of a symbolic method. It shows resistance, we don't want the land to take away from multinational companies. But at the same time, everyone is aware that spreading some seeds does not lead to a revolution, but it as a beautiful sign of resistance" (Activist Group 3, Skype Interview, April 13, 2020).

"There has been such a well organized campaign for many years" (Activist, Phone Interview, April 14, 2020). Another grassroots organization organized a festival "to be in solidarity with the occupied gardens" (Activist Group 3, Skype Interview, April 13, 2020) on the land, which developed as a "protected space" for radical innovation. As an example, "we had experts talking about the value of a place like

¹¹I inform you that on March 12, 2020, the GEM Lutkemeer has entered into a reservation agreement with an end user for a site of 5.5 ha, located within the first subarea of Business Park Amsterdam Osdorp phase 2. The name of this end user is not currently known, as is not uncommon in listed companies and will follow when applying for the environmental permit. In the quarter of 2020, work will start on preparing the first sub-area, including preparations for the necessary infrastructure construction. (Municipality of Amsterdam, 2020a)

that (biopolder)”(Activist Group 1, Phone Interview, April 14, 2020).

”There were at least 200 or 300 people taking part in activities on the land (Citizen, Personal Communication, June 20, 2020). These quotes illustrate how the niche felt empowered by the organized actions over the years to keep the land agricultural. This form of empowerment comes from within the community itself and as such, it can be called ”recognition”, as explained in the conceptual framework. On the other side of the spectrum, it is relevant to notice how the niche community recently experienced a sense of ”loss of power”, although this did not prevent (and is currently not preventing) the community to keep resisting the construction: ”I do not feel I have the power to change the situation by now, but what keeps me motivating is the continued collective fight together. The never ending amazing creativity coming out of the groups linked to the struggle” (Activist Group 2, Phone Interview, April 22, 2020).

External actors specify that the niche community, ultimately, has not completely lost the fight: ”I think they are also fighting something really big, a big company, a big business, it is not an easy task” (Skype Interview, May 20, 2020).

”I think the community had an amazing success: even if they will lose in the end, they will achieve a lot, because they got so much attention by the continuous effort to put this on the agenda, they really fight for this polder and I think is such a valuable thing. And some of the manifestations have been not friendly towards the developers, they can be angry and I think that is okay with me, they have always been peaceful but really showing we don’t accept what you are doing, keep telling the city council the craziness of this plan... this is already a big achievement” (Journalist 2, Phone Interview, April 23, 2020). The niche underlined two main factors which were the main obstacles in the achievement of their objectives. Firstly, on the political level, the overall unresponsiveness of political parties to the demand of a large group of citizens and associations. The four following quotes speak for themselves about this perception: ”the biggest obstacle is the municipality and their old-school view on city planning” (Activist Group 2, Phone Interview, April 22, 2020).

”I think the biopolder plan has just been ignored in the discussion with the municipality, they shut it off as a non-expert opinion” (Activist Group 1, Phone Interview, April 14, 2020).

”I understand that the municipality has a desire to build this park, even if there is speculation, they still need speculation for their budget balance, but the fact that they have been so unreceptive of the biopolder plan is a bit sad” (Activist Group 2, Phone Interview, April 15, 2020). ”It seems there is not real ground or space for negotiations” (Activist Group 2, Phone Interview, April 22, 2020). ”What could have been useful would have been to have more backup within the political institutions”(Activist Group 2, Phone Interview, April 22, 2020).

This can be partially explained by the current composition of the city council. The majority of seats are assigned to a coalition between Groenlinks and smaller parties: ”in the city council there are only 4 or 5 seats supportive of this (the biopolder¹²),

¹² Author’s Note

the other 45 seats are not supportive” (Politician 2, Phone Interview, June 13, 2020).

According to Geels (Geels, 2011), niche usually gain momentum when there is a participation of actors which ”convey legitimacy”, and resources to the niche. This can often come from actors in ”more powerful positions”. To this extent, it is clear that there was not such support available for the niche in this case. However, considering the binding legal agreement taken in 2002, some respondents are stressing the exceptionality of the results of the negotiations: ”it is in a way a miracle that we organized there hectares with the Boterbloem” (Politician 2, Phone Interview, June 13, 2020).

On the side of the regime, it is a must that the political decisions should not influence the planning of projects and the work of civil servants: ”As a civil servant, I understand the importance of having a democratic system with politics, but I also see that the important role for policy-makers is to create continuity and consistency in implementing urban policies. Of course, change is always possible but if we do it based on the political cycle of four years, the municipality would not be able to develop anything” (Civil Servant Project Management Bureau, Phone Interview, June 19, 2020).

As seen, there is not real political ground for a big change, and the municipality has shown to be more open to negotiations (the 3 hectares offered to De Boterbloem) only behind strenuous public resistance. The second obstacle for the niche was resource mobilization, as the following three quotes underline:

”I think it would have been a stronger message if 100 Amsterdam citizens would have joined the movement, not only about the quantity but also the position and role of those people, for example people in powerful positions such as politicians who would have openly joined the movement... that could have a bigger impact” (Activist Group 3, Skype Interview, April 13, 2020).

”I feel that at the very beginning all of this big climate movements going up, if all of them they would have been more connected to the Lutkemeerpolder that would have helped. Also involving non-dutch speaking communities” (Activist Group 2, Phone Interview, April 15, 2020).

”First of all, more people were needed. Of course money are also welcomed. But people are the power. There is always a bubble, the activist bubble. To really make this bigger we have to connect with different groups and audiences. Which is a challenge of course” (Activist Group 3, Personal Interview, April 24, 2020).

What would have helped, according to the activists, would have been also an earlier intervention in the legal processes: ”to combine activism with policy-making and urban planning... when land-use plans are being decided and farmland is being converted to urban uses. Also, by building a stronger and popular base and connecting with local residents, listen to how they would like to get involved (Activist Group 3, Personal Communication, July 6, 2020).

What emerges also from the answers of the respondents is that the willingness to act of their group was always very present and continues to characterize the main element of the struggle: ”it is more about showing that there is hope activity people who want to make a difference and who are not obedient and what to build their

own society” (Activist Group 3, Skype Interview, April 13, 2020). ”We will say no we and will try to change that in our power” (Activist Group 3, Personal Interview, April 24, 2020).

However, the relative lack of public support (especially from the citizens of Amsterdam) and the struggle over the legitimacy of their claims impeded the niche to achieve the approval of their biopolder plan. Ultimately, the final decision-making power is in the hands of the regime. Their willingness to continue with the BPAO Phase 2 is clear and has been demonstrated by multiple affirmations of the council of Amsterdam (Municipality of Amsterdam, 2020a).

The preservation of the polder is not a question of recognizing the ecological value of the piece of land, but more a question of interest and specific priority that the municipality has set in the past 40 years, since the creation of the Schiphol covenant and the consecutive inclusion of strategic planning of business areas in the zoning plan (Ruimtelijkeplannen, 2020). Members of the niche and of the third sector depict this as a confirmation of the main priority of the Dutch government in terms of economic growth and development: ”those politicians who could do something about it, obviously do not care” (Activist Group 3, Skype Interview, April 13, 2020).

”The policy of Amsterdam is profit oriented, whenever is possible to combine protection of nature and profit, they do it but profit first for sure. We need a real left and green government that is actually concerned about the citizens living in Amsterdam and not about their own position within parliament” (Activist Group 3, Skype Interview, April 13, 2020).

The emphasis is on the economic obstacles to changing zoning plans and dissolve the agreements with the private parties: ”when it comes to the government, (the argument¹³) is that it costs too much money and for me is quite downgrading because the money they talking about... is projected income, it is speculated money and the second thing is that it is a green progressive government who still focus on capital rather than doing what’s best for its constituents. They are more concerned with money than what with citizens campaign for” (Activist Group 1, Phone Interview, April 14, 2020)

”Everyone sees the value of the Lutkemeerpolder, I think no one doubts not even Marieke van Doorninck, but they have other priorities and other political interests and that seems to be so powerful that hasn’t spot anything in 10 or 15 years so I can’t imagine changing in the future. . .” (Activist Group 2, Phone Interview, April 15, 2020).

Past legal decisions seem to be the biggest binding factor to many respondents: ”we have been trying to change the destination into agriculture and to keep the part of the polder where de Boterbloem agriculture, we failed because it was a long term legal decision ages ago” (Politician 1, Phone Interview, April 16, 2020).

”Technically speaking from a standpoint of civil servant there is no need of any decision because the decision has been made, and actually we have been successful

¹³ Author’s Note

for keeping (it agricultural¹⁴) for a long term” (Politician 1, Phone Interview, April 16, 2020).

The opposition party uses similar arguments to those of the niche actors: ”we suspect that there is a corporate lobby that this thinks that the business park is needed and that’s of course something we detest and disagree. The whole situation of building of gentrification and of further city planning as making more business park etc. it is not a human or nature requirement but capital so we are strongly against it” (Politician 1, Phone Interview, April 16, 2020). It might be possible to regard how actors positions are also part of a web of institutional constraints, dominant views of thinking (Geels, 2011) and path dependency.

The decision of building BPAO Phase 2 have been criticized especially in relation to the current political composition of the city council: ”well, the weird thing is. . . we now have a green city council, so that’s dominated by green leftist party and of course they have green ambitions with Amsterdam and that makes it so fascinating that they keep pushing for the industrial development for the last ecological farm in Amsterdam, it is very cynical, under a green city council the last ecological farm will not be able to survive” (Journalist 2, Phone Interview, April 25, 2020).

However, the city council is clear about that the final decision cannot be subjected to changes: ”of course, this must be the continuous struggle about the space in Amsterdam, we need houses, green space and business. This already was regarded as a business zone” (Civil servant Spatial Development and Sustainability, Phone Interview, June 26, 2020). The response underlines the challenges of spatial planning in the densely populated country such as the Netherlands (see Section 2).

”There’s just this huge drive to make profit, they always say profit before people and planet. There is this idea of development and growth and having more money and I think there’s really we reached that limit and should think about it differently” (Researcher, Skype Interview, May 20, 2020).

This final quote illustrates how dominant macro-trends of liberalisation, priority of economic growth can be posed at the root of this land struggle. To be more precise, the connection with neoliberal policies (see Section 2) has been underlined by some respondents as one of the main problems connected with the development of the business park: ”however, I think that we are seeing a trend of hyper liberal policies, because in some regions they still privatize public goods and that is terrible. Capitalism only makes trash not only of goods but also of people. If we really want to be sustainable we really have to throw capitalism. If we really want to have a circular economy we need a system change, we need climate justice. If you privatize infrastructure you got this strange story that you have to make profit out of it then it’s over” (Politician 2, Phone Interview, June 13, 2020).

With neoliberal policies, here it is intended that BPAO Phase 2 is managed by a public-private partnership. At this proposal, respondents comment that: ”PPP is a neoliberal policy, it brings state and business closer together and offloads responsibility from the state onto private sector who benefit from more public money to fund their self-profit motivations. PPP are less accountable and it is harder to ensure fair

¹⁴ Author’s Note

and healthy working conditions. Not to talk about the effects on local communities and ecologies... PPP will continue as status quo and there will be some experiment with civic-public partnerships that are also vulnerable to being neoliberalized as shrinking states shift responsibility and work onto citizens for the common good. Amsterdam is an expert in implementing neoliberal policies while seeming green and social" (Activist Group 3, Personal Communication, July 6, 2020). The fundamental underlying paradigms of Dutch policy and the development of the business park are the preservation of the prosperity of Dutch society and its market and institutional structures, as underlined by the market-oriented approach of the 2013 National Policy Strategy for Infrastructure and Spatial Planning (see Section 2). One of the respondents comments on this approach: "the structural factor that hinders progress towards sustainability is that land use planning focuses on the rent that can be extracted from a piece of land so they prioritise capital-intensive developments instead of broader values and criteria for selecting developments, e.g. environmental services, social and cultural value, emission reductions" (Activist Group 3, Personal Communication, July 6, 2020).

To conclude, the last three sections have showed how the regime enforces a private regulative strategy and a discursive strategy of circular economy to legitimize its goals. When this fails and encounters civil resistance, a coercive power is exercised to enforce the rule of law. On the other hand, the niche pushes for its alternative by the use of legal instruments (negotiations and motions to the municipality), and by the use of innovative power by means of public mobilization. Ultimately, the definitive statement of the controversy (Flynn, 2007) lies in the decision-making hands of the regime actors, supported by past legal binding agreements and contracts. The regime makes also use of monetary power, by means of compensation to the farmers for the land acquisitions. The legal documents become themselves an object of contention between the actors, recognizable in opposing words such as "this is a decision taken a long time ago" and "it is sad how the plan has been shut off".

5 Discussion

The aim of this section is to contribute to the theoretical debates of sustainability transition studies, especially in relation to the role that power and politics play in the sustainability of land-use. By doing so, this discussion also spots limitations of this work and aims to suggest areas for further critical research.

5.1 Transition and sustainability

Avelino and most transition scholars focus on policy programs connected to specific national or regional-wide transformations of unsustainable sectors, such as the mobility or energy sector (Avelino, 2011). This study, instead, wanted to make a case for a transition of a territory. This work contributes to explain how certain dynamics hindered the (bottom-up) transition (the biopolder) to take place. Sustainability transition literature takes a dialectic perspective: regime vs. niche. In this case, we see how the niche contests the regime by advancing a different kind of transformation of the land-use to a more extensive sustainable production of food. The results also indicate how, under the current circumstances, there is no space for this transformation of the land. Understanding how this came to happen can enrich the broader debate on "unsustainability" of current trends in land-use.

A second contribution relates to trying to view the transition beyond a normative definition of "sustainable development".

In fact, from a general perspective, the case study shows how the different coalitions of actors have opposed understanding of how the land ought to be transformed. "Actors themselves decide what ought to be transformed and why" (Avelino, 2011, p.84): for the regime, the transformation regards the business development itself towards circular economy objectives. For the niche, the transformation regards the overall land-use. In other terms, the case shows how different conceptions of sustainability cause different perceptions of problems and solutions (Wieczorek, 2018), but it also shows how there is space for negotiation among the actors.

The next section clarifies how the dynamics between the actors relate to different transition phases and to the use of power.

5.2 Transition, sustainability and power: the phases of the transition

This case illustrates how the regime power can be challenged or weakened in different ways (Avelino, 2011): on the one hand, there is the bottom-up attempt of disruption from the niche proposing the biopolder plan. On the other hand, the regime has to adapt to the increasing landscape-level political pressure of climate change, which lead to the proposal of a circular business plan. In fact, in the project description, the well-known definition of "limits to planetary boundaries" (Steffen et al., 2015) is integrated as a rationale for the proposal of the circular project.

A second point of discussion regards in which stage the bottom-up transition situates itself.

To begin with, “struggle and antagonistic relations” (Avelino, 2011, p. 252) characterize the take-off stage of the niche bottom-up transition. The niche does not only contests the business project of the regime, but it also contests its overall policies and use of power (see Section 4.3). At the moment of writing, the bottom-up transition discussed in the Results section seems to have been reversed by the regime (see end of Section 4.1, “The last years: agreements and negotiations with De Boterbloem farm (2008-2017)”), but this might also change in the future.

If we look at power relations of the regime actors, we can see mainly synergetic relations between the regime actors (company and municipalities), which take the form of cooperation agreements stipulated in the past and reinforce each other positions. At a certain point in history the legitimacy of these relations is also at stake (see corruption case). A point of discussion can be what these synergetic relations represent. At this proposal, Avelino argues that “this story-line” of transition phases is difficult to grasp empirically. Avelino observes how innovation in the Dutch transport sector is in line with “neo-liberal trends” and “environmental policies based on market principles” (Avelino, 2011, p. 124). This case study shows a similar pattern. In fact, the business park focuses on accommodating the needs of the region (e.g. housing) and integrating the discourse of sustainability in order to ensure a “liveable environment” for businesses and citizens, where businesses can function “optimally” (see Section 4.2). Land, as a natural resource, is protected by environmental policies and preserved in the surrounding area as a regional goal (see Section “Spatial Planning in the Netherlands”). Sustainability concerns are incorporated to serve economic growth. A sustainable business must be competitive. In other words, the survival of the system can be seen as the objective of the business project. Nevertheless, the inclusion of discourses of circularity can also be seen as an attempt to develop new structures and institutions (transformative power): the circular strategy outlines how that the benefit of the circular project will not be retained by the first businesses lease-holding in the area. Thus, this involves a longer-term vision. However, the strategy clearly reinforces the economic agenda (Amsterdam as the most competitive region before 2040), and the neo-liberal discourse (see Section 4.1., sub-section “Developing the territory: the public-private partnership and the zoning plan (2008-2013)”).

Based on these considerations, the bottom-up transition sympathizes with counter-movements such as localism. Instead, the circular project is aligned with dominant trends such globalization, privatization and neoliberalization. Therefore, it can be argued that the bottom-up transition is a *radical* transition (Avelino, 2011, p. 283).

Avelino argues that “while, in theory, transition discourse also revolves around bottom-up innovation and radical social change, in practice there seemed to be little to no involvement of social movements or grassroots initiatives, directly involved in the observed projects and programs” (Avelino, 2011, p. 270). This case study aimed to show the perspective of grassroots initiatives. Indeed, it also shows how the involvement of the niche in the land-use plan of the regime (circular project) is limited, as the niche proposal is rejected by the regime (“the biopolder is an unfeasible plan” - see Section 4-2 - sub-section “competing interests”).

The next section clarifies the relevance of integrating more grassroots and social movements' perspectives in transition literature.

5.3 Bottom-up transition and social movements

The coalition of the “bottom-up” transition is very broad in terms of the social movement (SM) and grassroots initiatives that supported the agricultural quest. Social movement theories (SMT) can support transition literature in understanding better the actors involved in bottom-up or community-based initiatives (Seyfang Smith, 2007). For example, SMT shows how SM already have an alternative vision of power and agency. The case study shows how these movements contest the power of the regime also from what could be defined an “anarchist” or grassroots perspective. That is, they engage in an open critique to many aspects (see Result section 4.2) of the political-economic configuration and sustainability conception of the regime. These critiques could be further explored in the literature to integrate the criticism that Feola moves to transition scholars: these theories hardly include a “critique of capitalism” (Feola, 2020). This study has partially taken into account this perspective, by showing the dominance and influence of neoliberal discourses in spatial planning.

In addition, SMT can complement transition studies by employing concept of “political opportunity” in a more systematic manner. Elzen (Elzen, 2011) has made an attempt in this direction by showing how the capability of niche actors depends on the alignment of normative pressures, policy and political opportunity. In our empirical case, it is clear how there was not a window of opportunity for the most radical actors, because of the specific coalition at the government. Furthermore, social movements can have effects on broader values (Kohler, 2016). The study has shown how the movement received quite a broad support. That is, the number of signatures of the petition and the connection with some very well-known transnational climate justice groups. These transnational networks can represent what Avelino framed as “counter-macro trends”. By connecting with broader environmental movements, the local niche strengthened itself. To this extent, the concept of “empowerment” proposed by Avelino can be reframed in terms of “recognition” (Verlinghieri, 2020), not only as a form of empowerment from within the community (as hypothesized in the Conceptual Framework), but also as a form of empowerment from other international and broader actor networks. In addition, SM resource mobilization theories (Jenkins, 1983) can help in understanding the conditions of power exercise, such as resources, skills and strategies.

5.4 Landscape factors, path-dependency and institutionalism

The development of the business park was constrained by economic factors. Avelino also has found that, in transitions, there is a perception of great uncertainty connected with the economic development (Avelino, 2011). This also demonstrates how landscape factors (in this case global economic downturn and exogenous fac-

tors such as the pandemic and urbanization) can have a direct impact on actors' capacity of mobilization, as also suggested by studies of transition in developing countries (Wieczorek, 2018). The more we understand how these processes interact with the regime, the better we can attempt explanation of how "higher" socio-economic configurations or landscape level political-economic processes unfold in the regime/niche.

The case also shows how path-dependency (Grin et al., 2010) is a useful concept to explain lock-in mechanisms of transitions, in this case the legal-institutional mechanisms of land acquisition put the regime in a difficult condition to change the project. From the results of this case study, it also emerges that the incumbent regime holds the ultimate decision-making power in the struggle. Understanding better formalized decision-making processes and institutional arenas is definitely a direction in which further research can move, as suggested by (Kohler, 2017). More specifically, from the results it emerges that not only path dependency can constrain the direction of change, but also historical and economic developments at various levels are "system-builders" and can regulate transition directions (Furlong, 2014). In fact, also place-dependency has been recognized important by the literature (Fuenfschilling, 2019, Wieczorek, 2018); especially in the forms of policies, markets and natural landscape features. This is clear in the way that the neoliberal policies together with the Dutch spatial planning tradition influenced the whole history of land-use and constraint or enhanced the actors' power at different times in history.

5.5 Power in transition: power dynamics

Scholars agree that political processes form the major barriers to transition (Avelino et al., 2016a).

The literature on sustainability transition underlines how "different dimensions of power are dispersed across interrelated agents at numerous levels" and not only divide between niche and regime. By focusing on the power dynamics between these two opposing views of transformation, this case study partially fails to pinpoint the dispersed forms of power and the dynamics happening within each coalition of actors. This would have required a more in-depth and long research on the interactions within each coalition over time.

However, this study partially captures the extent to which the regime can be seen as "a socio-political constellation embedded in economic structures" (Avelino et al., 2016a, p.560), as shown by the statements of the actors about their "relative" limited power to change and the effects of the economic downturn. This case-study, thus, shows again the importance of integrating discourses of power and politics, initially drawn from development studies (Swilling et al., 2016) in the transition literature. The negotiations between the regime and niche prove how change is the result of conflict and bargaining (Wieczorek, 2018). As an example, the case shows how the bargaining of the niche lead to certain decision of the regime (the offer of 3 hectares to the farm) and vice-versa.

5.6 Limitations and alternative research strategy

A next step for this research could be to include proper “longitudinal, historical and comparative analysis of the power exercised by ‘constellations’ or ‘groups of actors’ over the course of time” (Avelino, 2011, p. 286)

Comparative analysis of cases of bottom-up transitions could help to identify the specific elements that bridge the gap between the take-off phase of the transition and the stabilization phase. Transition theorists could engage more in examining and comparing different transitions dynamics in terms of power and explain what are the factors which make a difference in each case and to what extent radical transitions, as the one presented in this study, could take place.

In fact, explanation of patterns of success and failure of grassroots innovations across countries, is currently lacking in the literature (Feola & Nunes, 2014). Finally, there is space of improvement in the methods of the research. As the researcher engaged with the activities of what has been re-defined as “the bottom-up transition”, an action research could have shed more light on the internal dynamics of the niche and possible strategies for reaching a stabilization phase of the transition. Retrospectively, I also argue that a direct involvement in the regime project could have helped to spot practices of innovation and distance from old prevailing paradigms within the dominant configuration. However, the researcher has to stress that this would have required much more time than just five months.

Ultimately, in distilling some lessons for further research some straightforward questions can help:

”if, in a societal and system-wide transition of a peri-urban area, two opposing views of transitioning of land appear, what counts as the ”most sustainable” alternative? And why?”

”What are the cultural and local (e.g. Dutch) factors which influence the decision-making process in such a way that there is little space for alternative ”socio-cultural” views?”

”Finally, which institutional processes can be put in place so to reduce the power imbalances between the actors?”

6 Conclusion

This research investigated how social power dynamics between two different coalitions of actors shaped the land-use in a peri-urban area of the Lutkemeerpolder, located in municipality of Amsterdam, in the Netherlands.

The question was approached from a sustainability transition theory perspective to offer a tentative empirical account of some aspects of the framework "power in transition" proposed by Avelino (Avelino, 2019, 2016, 2011).

The results indicate that the interests of the two coalitions of actors (the actors in favour of the agricultural biopolder plan and the actors working towards the realization of the Business Park Amsterdam Osdorp Phase 2) diverged and power dynamics were mostly antagonist.

The combination of document analysis, in-depth interviews and participant observation in an actor-oriented analysis indicate that each coalition was employing a different form of power (reinforcive vs. innovative/transformative) to achieve its objectives. That is, also, at times limiting the space of actions and the goals of the opposing group. The reinforcive power used by the "regime", at the moment of writing, seems to have reached the objective of building the Business Park and rejecting the alternative biopolder plan for the land area under study.

Findings also show how, ultimately, the power imbalances, the institutional arrangements, path dependency and political opportunity conditions were the factors constraining the bottom-up biopolder plan.

Perhaps, the conclusive objective of the study was to challenge the normative orientation of sustainability transition theory by including land as an object of political dispute and presenting how different claims and views of "what ought to be transformed" by the two coalitions of actors is a substantive issue of "transition" theory that should be taken more into account in further research.

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Appendices

Appendix A

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Appendix B

Long list of the stakeholders

Behoud Lutkemeer

Behoud Lutkemeer is a platform which unites several organizations and groups that supports the "Biopolder" plan for sub-area 3 of the Lutkemeerpolder, a plan for creating a local organic food production agricultural field and environmental awareness and recreational programs. The platform has been campaigning (Figure B.1, B.2, B.3) and sending petitions to the municipality to keep the ground agricultural and to oppose the construction of BPAO 2 (Lutkemeer, 2020b). Behoud Lutkemeer is supported by the following organizations: Milieudefensie, Landschap Noord Holland, Bond Heemschut, IVN, Anmec, Aseed, Food Other, Vokomokum, Red de Boterbloem, Village Council Sloten - Oud Osdorp, Foodcouncil MRA, Toekomstboeren, Dwars (Lutkemeer, 2020b).

De Boterbloem Farm

De Boterbloem farm is care-farm, managed by Trintje Hoogendam and her husband Erik. The grandfather of Trintje sold the land and concluded a lease agreement with the municipality. He also arranged inheritance, so that the family business could continue (Ceton Denzegani, 2018).

There was a conflict in the family about the division of the property, which Trintje avoided, while signing an agreement with the municipality (Ceton Denzegani, 2018), which was converted into a temporary user agreement in 2001.

The farm covers both a care function and an organic production function. The activities carried in the farm are pruning, planting, sowing, weeding, harvesting and chopping wood in the vegetable garden (approximately 0.33 ha) and in the orchard (approximately 0.37 hectares). De Boterbloem has an affiliation with the Landzijde foundation, an healthcare institutions which reunites and supports the care farm. De Boterbloem is thus open to people who had psychological request for help, burnout, long-term unemployment, addiction background or judicial background. It is open 4 days a week to host an average of five participants per day.

Figures B.4 to B.8 shows a Google Map view and photographs of De Boterbloem

farm. Figure B.9 shows the ditches and the delimitation of the area owned by GEM B.V..

Schiphol Group

Royal Schiphol Group N.V. is an airport company, owner and operator of Amsterdam Airport Schiphol, Rotterdam The Hague Airport and Lelystad Airport, and holds a majority stake in Eindhoven Airport (Schiphol Group, 2020). It has four shareholders:

- Dutch government: 129,880 A shares (69.77 percent)
- Municipality of Amsterdam: 37,276 A shares (20.03 percent)
- Municipality of Rotterdam: 4,099 A shares (2.20 percent)
- Groupe ADP: 14,892 B shares (8.00 percent).

itemize

SADC

SADC is a development company with four equal shareholders (25 percent each): the the Municipality of Haarlemmermeer, Municipality of Amsterdam, Province of North Holland and Schiphol Group. SADC was founded by the above mentioned institutions in 1987 (confidential document 6, n.d.). SADC developed several business plans for the development around Schiphol.

SEGRO plc

SEGRO plc is a publicly-traded corporation based in the United Kingdom. It is a "UK Real Estate Investment Trust (REIT), and a leading owner, asset manager and developer of modern warehousing and light industrial property." It "owns, develops and manages warehouse and industrial properties in the UK and Continental Europe" (SEGRO, 2020), buy buying assets and land, developing them and selling them again to customers. It currently has three available warehouse property in the area of Schiphol airport (SEGRO Park Amsterdam Airport 2132, SEGRO Logistics Centre Rijnlanderweg and SEGRO Logistics Centre Schiphol). It owns 45 properties in Continental Europe and 99 in the United Kingdom. Their profit before tax in 2019 amounted to 267.5 million of pounds, an increase of 10.8 percent from 2018.

They "realize economies of scale in a capital efficient manner" and are committed to sustainable use of materials, energy and resources, reducing their embodied carbon (SEGRO, 2020).

SEKU B.V.

SEKU B.V. is a private company with limited liability registered at the Chamber of Commerce with number 34340872 (Drimble, 2020). It is a combination of Thunnissen Ontwikkeling, a private developing builder (Thunnissen, 2020) and Ark Projecten B.V. (Drimble, 2020a), managing rental of real estate (SADC, 2017). As explained in Section "History", SEKU B.V. was involved in the corruption scandal. The ownership structure of SEKU B.V. has been researched by SOMO (Centre for Research on Multinational Corporations) (**speculatie2018**) and is shown in Figure B.10.

Slough Estate Mainland B.V.

Private company with limited liability, working in the Netherlands, part of SEGRO. Born in 2005 from the merge of the two companies Slough Estate and Mainland.

GEM Lutkemeer Beheer BV

GEM BV is a private limited liability company in the branch of financial holding, registered at the Dutch Chamber of Commerce with 59473649 (Drimble, 2020b). GEM Lutkemeer B.V. is responsible for the development of phase 2 of the business park. GEM B.V. has two shareholders: Schiphol Area Development Company and the municipality of Amsterdam, which have 50 percent of decision-making powers. GEM B.V. is financed by GEM C.V., which is a limited partnership having no less than two partners and with a zero rate of tax. GEM C.V. has two shareholders: SADC and the municipality. The control ratio is 50/50, but the financial consequences are 80 percent for SADC and 20 percent for the municipality (Municipality of Amsterdam, 2018).

GEM Lutkemeer CV

GEM CV is a limited partnership in the branch of project development, registered at the Dutch Chamber of Commerce with 59489634 (Drimble, 2020b). GEM CV finances GEM BV.

Groenlinks

Green left political party of the Netherlands, formed in 1989. After the municipal election of 2018, Groenlinks held the largest share of seats in the council of Amsterdam. As no party held a majority, a left-leaning governing coalition was formed between GroenLinks, D66, the Labour Party, and the Socialist Party, which together hold 26 of the city's 45 council seats (Dutch News, 2018).

Heemschut Amsterdam

It is a private association for the protection of cultural monuments (Heemschut, 2020).

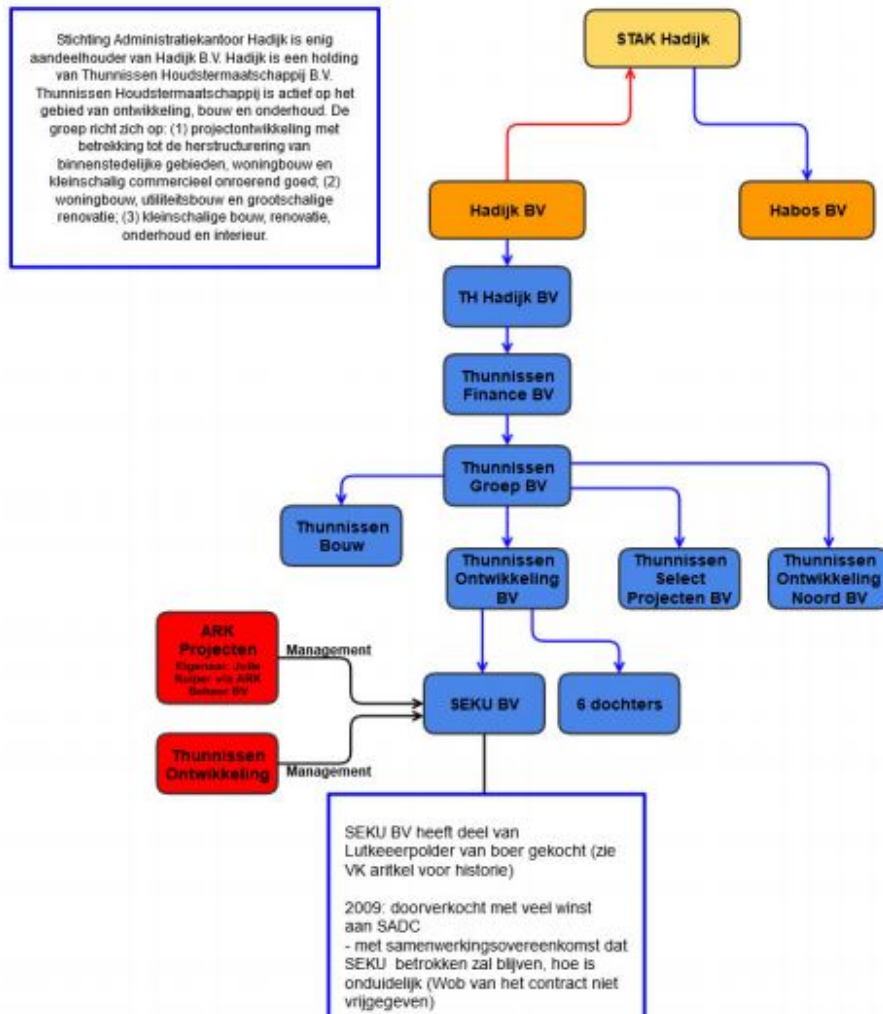


Figure B.1: Ownership structure of SEKU B.V. Source: Hudig Nor, 2018

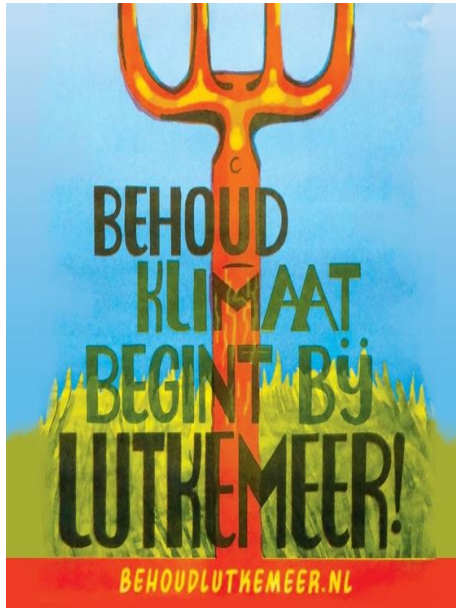


Figure B.2: Campaign of Behoud Lutkemeer. Source: (Lutkemeer, 2020b)



Figure B.3: Campaign of Behoud Lutkemeer reading "Preserving the climate starts from (preserving) the Lutkemeer". Source: (Lutkemeer, 2020b)

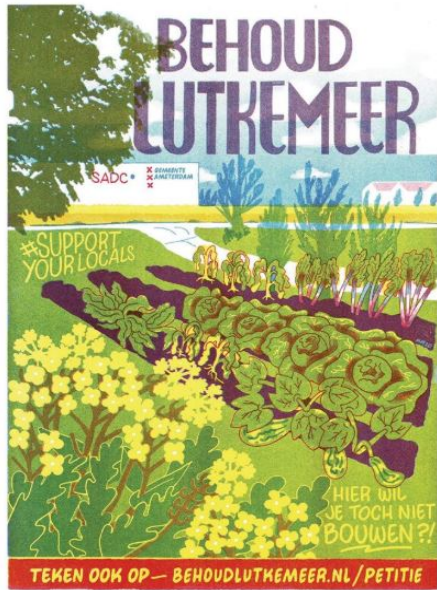


Figure B.4: Poster for the petition to the municipality. Source: (Lutkemeer, 2020b)

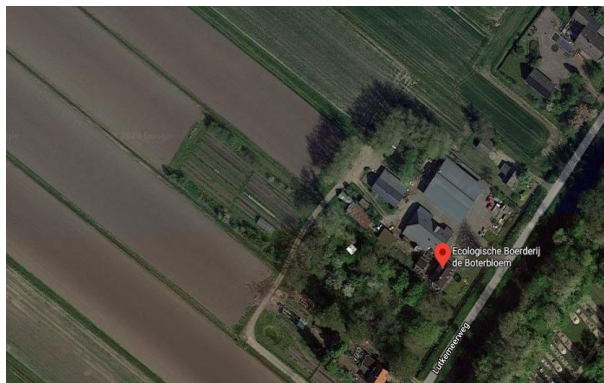


Figure B.5: De Boterbloem farm. Source: Google Maps



Figure B.6: De Boterbloem farm, year 2020. Source: Author's photo, April 2020



Figure B.7: Opening hours of the farm. Source: Author's photo, April 2020



Figure B.8: Monumental Orchard next to farm. Source: Author's photo, April 2020



Figure B.9: Farm shop selling locally produced food and plants. Source: Author's photo, April 2020



Figure B.10: Ditches and black plastic fence delimiting area owned by GEM B.V.. Source: Author's photo, April 2020

Appendix C

Details of the Lutkemeerpolder zoning plan

Zoning Plan 2002

Details of the plan:

Plan: Lutkemeerpolder

Plan Type: destination plan

IMRO idn: GB.IMRO.0363.F1003BPSTD-VG01

(Ruimtelijkeplannen, 2020)

Appendix D

Timelines

This appendix contains three timelines:

- Timeline 1: history of land-use and agreements
- Timeline 2: agreements, policy and negotiations
- Timeline 3: project timeline for BPAO Phase 2



Figure D.1: Timeline 1: 1865-2013. Author's elaboration based on different sources

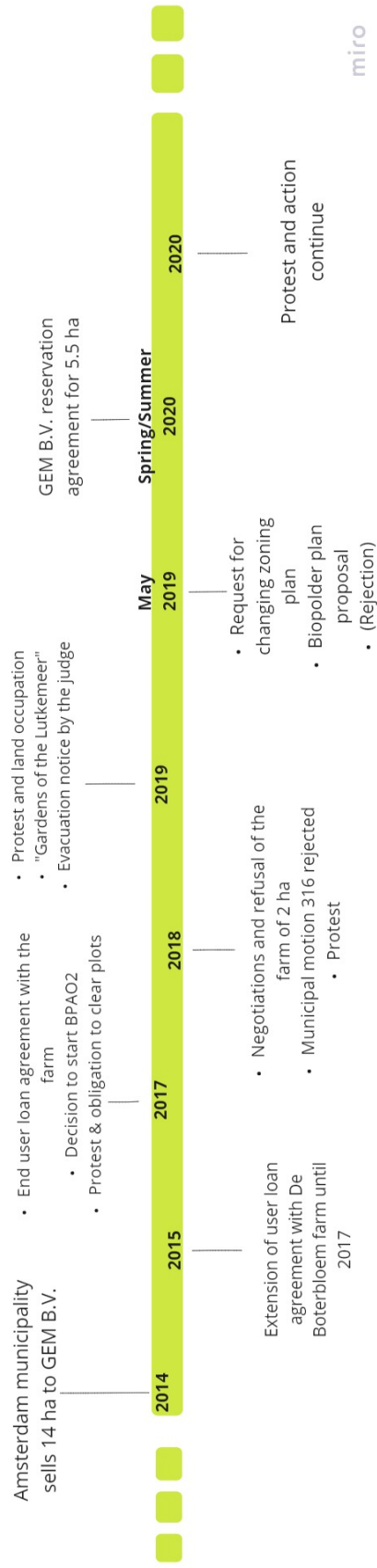


Figure D.2: Timeline 2: 2014-2020. Author's elaboration based on different sources

BPAO Phase 2

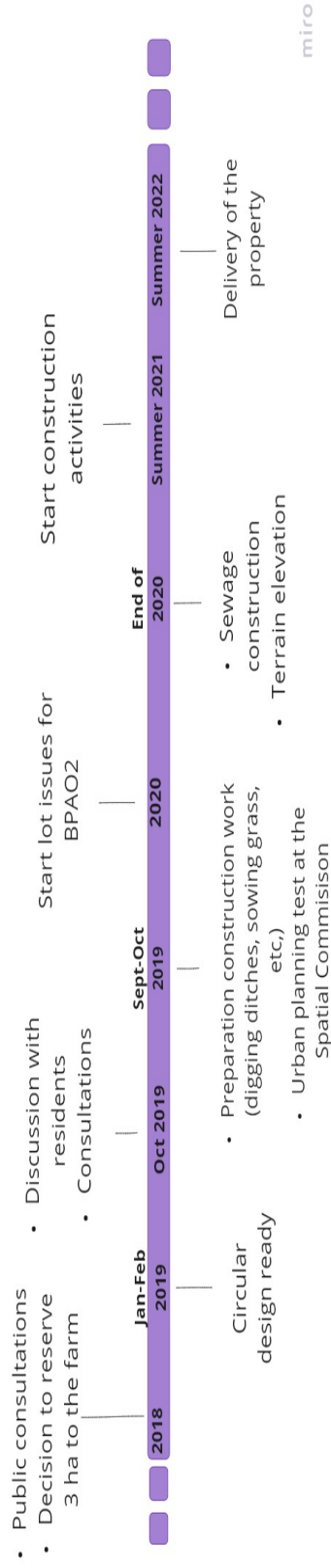


Figure D.3: Timeline 3: BPAO 2. Author's elaboration based on SADC, 2019 (Infographic SADC, 2020)