

Marloes Belgers 2985187 m.w.belgers@students.uu.nl 23-02-2024

# Sowing the Seeds of Equal Citizen Participation:

A case study analysis on engaging vulnerable citizens in urban green policy-making in The Netherlands



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Supervisor: Prof. dr. Peter Driessen

Second assessor: Dr. Heleen Mees

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## Abstract

Adaptation to climate change in The Netherlands requires place-based solutions. The limited mandate and capacity of local governments to adequately deal with increasing climate risks and impacts means stronger collaborative approaches, such as citizen participation, are needed. To prevent inequalities, it is necessary that municipalities actively try to involve vulnerable citizens. Therefore, adequate goals for citizen participation must be formulated by the municipality. However, the relationship between the goals set for citizen participation in urban green policy and the extent to which vulnerable citizens are engaged remains underexplored in literature. Therefore, this research aims to answer the following question: To what extent do the objectives set by municipalities for citizen participation lead to the engagement of vulnerable citizens in urban green policies, and what lessons about citizen participation can be drawn from this for policymakers? It was hypothesized that the objectives set by the municipality should be broad enough to cover all five conditions for citizen participation by Lowndes et al. (2006). Namely, citizens engage depending upon their available resources, their sense of belonging to a broader community, whether they are helped to participate by supportive organisations, if they are mobilised, and if they experience a response. The three first-mentioned conditions require a more normative approach. It was therefore expected that a normative rationale for the objectives of citizen participation contributes to better involvement of vulnerable citizens. The results show that setting normative objectives indeed corresponds to more effort put in by a municipality to engage vulnerable citizens in urban green policies. Studying the inclusion of vulnerable citizens in climate adaptation policies is relevant because empowering vulnerable citizens to participate is essential for creating a more equitable landscape in climate adaptation. Moreover, when citizen participation is exercised to its full potential, it enhances the liveability of urban spaces, thereby benefiting all citizens.

## Key concepts

Citizen participation; climate adaptation; vulnerable citizens; urban green spaces

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## 1. Introduction

The consequences of climate change are becoming visible around the world (Calvin et al., 2023). Many countries are facing serious threats such as flooding and extreme drought. Especially densely populated areas, such as cities, are susceptible to the impacts of climate change, which can manifest in extreme temperature events, flooding, air pollution, and other related challenges (Larsen & Gunnarsson-Östling, 2009; Sharifi, 2020). Since more than half of the world's population lives in urban areas (UN DESA, n.d.), it is important to minimize these negative impacts of climate change. Moreover, future urbanization may expose more people to climate change impacts, that are also expected to be more frequent and intense (Aerts & Botzen, 2014; KNMI, 2023).

To minimize the impacts of climate change, there has long been a focus on limiting CO2 emissions. These so-called mitigation measures are defined by the IPCC as "a human intervention to reduce the sources or enhance the sinks of greenhouse gases" (Pachauri et al., 2015). These measures are thus focused at preventing climate change. Since the negative consequences of climate change are already happening, there is also a need for adaptation measures (Sharifi, 2020). The goal of adaptation measures is to reduce vulnerability and enhance coping capacity and is defined by the IPCC as "the process of adjustment to actual or expected climate and its effects" (Pachauri et al., 2015).

## 1.1 Urban green spaces

Adaptation to climate change requires the development of place-specific solutions to increase communities' resilience against its impacts (Grasso, 2010). In urban areas, the most popular adaptation measure is the creation of urban green spaces (Gaffin et al., 2012; Graça et al., 2022; Wong et al., 2021). While different concepts related to urban green spaces have emerged in the last 15 years, such as nature-based solutions (Ferreira et al., 2020), urban green infrastructures (Gaffin et al., 2012), or urban ecosystem services (Soto et al., 2018), this research adopts the definition by The International Union for Conservation of Nature: "areas to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits" (Cohen-Shacham et al., 2016). Certain urban green spaces, like urban park systems and urban forestry, are well-established and familiar. In contrast, newer concepts like green roofs, although relatively recent, are gaining recognition and proving to be effective solutions (Gaffin et al., 2012).

Urban green spaces have great potential as an adaptation measure since they have a crucial role in providing solutions to some of the negative impacts of climate change. Firstly, it provides cooling within dense, hot cities (Mathey et al., 2011). Secondly, it also increases water runoff, thereby limiting the impacts of (pluvial) floods (Graça et al., 2022). Lastly, it can enhance air quality by contributing to increased air humidity and improved air circulation (Graça et al., 2022). Next to this, there are potential co-benefits of urban green spaces for climate adaptation such as human health, well-being and social benefits (Parker & Zingoni De Baro, 2019; Venkataramanan et al., 2019).

However, in most cities in the world, greenspace is inequitably distributed. In Western societies, wealthy white neighbourhoods typically have more access to greenspace, representing both an environmental and social justice concern (Zuniga-Teran & Gerlak, 2019). This study therefore focuses on a western country, namely the Netherlands.

## 1.2 Citizen participation in climate adaptation

Local municipalities have explored various strategies to lessen their exposure to climate-related risks by putting adaptation measures into practice (Birkmann et al., 2010; Bulkeley & Castán Broto, 2013). Nevertheless, the capacity of localities to successfully implement effective climate change adaptation measures remains uncertain (Sarzynski, 2015). Even affluent cities in developed nations have been hesitant to address climate change due to competing priorities, resource constraints, and uncertainties regarding its impacts (Sarzynski, 2015).

The limited mandate and capacity of local governments to adequately address the increasing risks and impacts of climate change highlight the urgent need for stronger collaborative approaches (Brink & Wamsler, 2019). This should specifically be done by engaging local stakeholders and affected citizens in the planning and execution of adaptation efforts, also known as citizen participation (Mees et al., 2019; Wamsler & Pauleit, 2016).

The concept of citizen participation is not consistently conceived or defined (Sarzynski, 2015). Conceptualizations range from empowering participants in decision-making to less influential forms like consultation and information provision (Arnstein, 1969; Glucker et al., 2013; Serrao-Neumann et al., 2013; Uittenbroek et al., 2019). Still, the concept involves at least five distinctive elements that characterize how participation is structured: who participates, when participation happens, what happens, how much participation, and why the actors participate (Glucker et al., 2013; Sarzynski, 2015).

In this research, citizen participation is defined as the involvement of citizens, individually or in organized groups, in the decision-making process (Sarzynski, 2015). The level of participation, strategy or the stage in which the citizens are involved are thus not predefined in this research but rather shaped by the goals set for the involvement of citizens.

## 1.3 Negative sides of participation: exclusion of vulnerable citizens

Within the research area of citizen participation in climate adaptation policies, the focus is mostly on the potential benefits of the involvement of citizens in the decision-making process (Frantzeskaki, 2019; Luederitz et al., 2015; Wamsler et al., 2020). For instance, facilitating open dialogues during the collaborative development of green spaces can foster a more democratic form of governance, ultimately resulting in improved outcomes. (Frantzeskaki, 2019; Kabisch et al., 2016). Furthermore, when implemented correctly, citizen participation holds the potential to enhance equity by incorporating a broader array of voices, including those from vulnerable citizen groups. (Toxopeus et al., 2020). Additional benefits include gaining acceptance and support for decisions, tapping into local expertise, and nurturing social cohesion within communities (Mees et al., 2019; Uittenbroek et al., 2019).

Despite the many favourable arguments towards public participation in decision-making processes, scholars claim that it remains a challenging task for decision-makers and practitioners (Mees et al., 2019; Uittenbroek et al., 2019; Wamsler et al., 2020). Moreover, only limited attention has been directed towards considering potential trade-offs or negative consequences of citizen participation in the creation of urban green spaces (Brink et al., 2016; Ferreira et al., 2020; Frantzeskaki et al., 2019; Wamsler et al., 2020).

The negative consequences mentioned in literature are mostly about equity issues (Glaas et al., 2022; Hügel & Davies, 2020; Serrao-Neumann et al., 2013; Uittenbroek et al., 2019; Wamsler et al., 2020). Wealthier and higher educated citizens are more inclined to participate in climate adaptation initiatives (Mees et al., 2019; Michels & De Graaf, 2017). This creates an unrepresentative group of participants. Powerful individuals may exploit this bad representation as a chance to manipulate policy for their own benefit. (Irvin & Stansbury, 2004). Thus, equity issues emerge when decision-makers do not include input from key vulnerable groups (Serrao-Neumann et al., 2015). To prevent this, it is necessary that municipalities actively try to involve vulnerable citizens.

When speaking of vulnerable citizen groups in citizen participation, most scholars mean citizens who lack the money, time or willingness to participate (Buijs et al., 2021; Mees et al.,

2019; Serrao-Neumann et al., 2015; Van De Wetering, 2023). They are not part of a community in which engaging in participation is common and do not see the added value for them to participate or are simply not asked to participate (Kiss et al., 2022). This is a social-economical perspective on vulnerability. One could also look at the term 'vulnerable citizen' from a climate impact perspective. Certain neighbourhoods or citizen groups in municipalities are more vulnerable to the negative impacts of climate change. These are for example neighbourhoods with poorly built houses, no greenery to cool down, or flood-prone areas (Houghton & Castillo-Salgado, 2020; Smith et al., 2022). Vulnerable citizen groups include children, the elderly, citizens with health issues or who are lonely (Cacioppo & Cacioppo, 2018; Sturiale & Scuderi, 2019). In this research vulnerable citizens are characterized by both definitions: citizens who can or will not engage in participation projects and are living in neighbourhoods vulnerable to the negative impacts of climate change. There is no specific focus on a particular vulnerable citizen group.

#### 1.4 How to include vulnerable citizens: CLEAR

Engaging vulnerable citizens in climate adaptation projects is easier said than done. It is wrong to assume that vulnerable citizens are always willing and capable of engaging in participation projects (Burton & Mustelin, 2013; Wamsler & Pauleit, 2016). It is thus needed that municipalities actively try to engage vulnerable citizens in climate adaptation policies.

For municipalities to engage vulnerable citizens in climate adaptation projects, there are five conditions that the public participation process should entail (Lowndes et al., 2006). These are mentioned in the CLEAR framework. For vulnerable citizens to participate they must 'can do', 'like to'. 'enabled to', 'asked to', and 'responded to'.

The condition 'can do' means that vulnerable citizens have the resources and knowledge to participate. The condition 'like to' means that vulnerable citizens have a sense of attachment that reinforces participation. The condition 'enabled to' means that vulnerable citizens are provided with the opportunity for participation through the existence of networks and groups which can support participation and which can provide a route to decision-makers. The condition 'asked to' means that vulnerable citizens are mobilized through public agencies and civic channels. And lastly, the condition 'responded to' means that vulnerable citizens see evidence that their views have been considered. The more conditions are met, the more likely vulnerable citizens will engage.

## 1.5 Goal setting

To meet all five conditions, adequate goals for citizen participation must be formulated by the municipality. This is because goal setting determines performance in general (Locke & Latham, 2006). Moreover, for citizen participation, the objectives set often determine if and how citizens are approached to take part (Glucker et al., 2013; O'Faircheallaigh, 2010).

Glucker et al. (2013) found nine different possible objectives, belonging to either a normative, substantive, or instrumental rationale. From a normative point of view, public participation in environmental policies is a (democratic) goal in itself. Objectives in the substantive rationale emphasise the potential of public participation to improve the quality of the decision output. The instrumental rationale emphasizes that public participation can serve as a tool to enhance the effectiveness of environmental policies by legitimizing the decision-making process.

Setting the right goals for citizen participation is seen as one of the biggest challenges for citizen engagement (Glaas et al., 2020; Glucker et al., 2013; Sarzynski, 2015; Willems et al., 2020). This is firstly because there are diverging views about the role of citizen contributions (Glaas et al., 2020). Municipalities mostly have objectives in the instrumental rationale whereas citizen organisations opt for a more normative rationale (Sarzynski, 2015; Willems et al., 2020). Secondly, legal requirements for citizen engagement are usually limited to information provision and public consultation (Kiss et al., 2022). However, when participation is only treated as a policy requirement, citizen engagement is essentially non-existent.

## 1.6 Aim of this research

Many scholars argue for a better alignment between the objectives set by the municipality and the wishes and needs of the citizens to be able to actively participate (Brink & Wamsler, 2019; Burton & Mustelin, 2013; Glaas et al., 2020; Glucker et al., 2013). It is however not yet known how the objectives set by a municipality relate to the extent to which vulnerable citizens are engaged in the participation process. This research aims to fill this knowledge gap by getting a better understanding of what goals municipalities should set to ensure that vulnerable citizens participate. To do so, for four municipalities in The Netherlands, which are Den Bosch, Groningen, Nijmegen, and Zwolle, the following research question will be answered:

"How and to what extent do the objectives set by municipalities for citizen participation lead to the engagement of vulnerable citizens in urban green policies, and what lessons about citizen participation policies can be drawn from this for policymakers?"

It is expected that to engage vulnerable citizens, the objectives set by the municipality should be broad enough to cover all five conditions for citizen participation by Lowndes et al. (2006). To answer the research question, five subquestions are formulated:

- 1. What is the municipality's current citizen participation strategy for climate adaptation policies?
- 2. What are the objectives of the municipality for citizen participation in climate adaptation?
- 3. Which of the five conditions for citizen participation of Lowndes (2006) are met by this strategy?
- 4. How do municipal workers and citizens perceive the municipality's success in engaging vulnerable citizens in participation for climate adaptation?
- 5. What causal mechanism is there between the objectives set by the municipality, the conditions met, and the involvement of vulnerable citizens?

## 1.7 Relevancy

This study holds scientific significance as little attention has been paid in literature to the negative consequences of citizen participation in urban green spaces (Brink et al., 2016; Ferreira et al., 2020; Frantzeskaki et al., 2019; Wamsler et al., 2020) Especially how to involve vulnerable citizens in urban green space policies remains underexplored (Glaas et al., 2022; Hügel & Davies, 2020; Serrao-Neumann et al., 2015; Uittenbroek et al., 2019; Wamsler et al., 2020). Currently, most research in the area of involving (vulnerable) citizens in climate adaptation hypothesizes that the objectives of the municipality should match those of the citizens involved (Brink & Wamsler, 2019; Glaas et al., 2022; Glucker et al., 2013). This research builds further on this hypothesis. However, it is argued that before the objectives of the municipality and citizens can be aligned, it is important that the vulnerable citizens are actively involved. This research argues that this requires adequate goal-setting of the municipality, according to the five conditions for citizen participation by Lowndes et al. (2006).

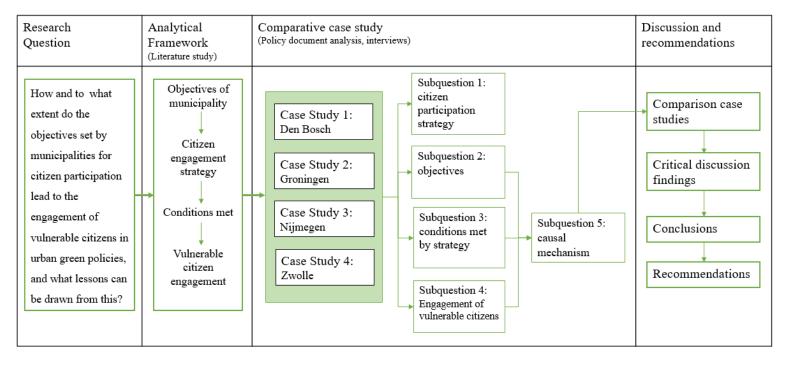
Investigating the involvement of vulnerable citizens in climate adaptation participation holds social relevance from both normative and practical perspectives. Normatively seen,

vulnerable individuals and groups should be empowered to participate to create a more equal playing field in climate adaptation policies and make sure that the people suffering most from climate change in urban areas also get the chance to benefit from adaptation policies (Glaas et al., 2022; Kiss et al., 2022; Wamsler et al., 2020). The outcomes of this research are thus most relevant for these vulnerable citizen groups. However, when citizen participation is used to its full potential, everyone benefits from enhancing the liveability of urban areas in alignment with local desires. (Kabisch et al., 2016). From a practical perspective, people's satisfaction with decisions and their support for authorities largely depends on whether they perceive that they have been treated fairly throughout the decision-making process (Dushkova & Haase, 2020; Smith & McDonough, 2001). When executed successfully, citizen engagement can aid urban planning by uncovering the needs and preferences of local residents. This, in turn, serves as a foundation for enhancing the quality of urban spaces, with potential benefits for both people and the environment (Kabisch et al., 2016).

#### 1.8 Research Framework

This research consists of a literature study followed by a case study analysis of four municipalities (figure 1). For each municipality, the objectives for citizen participation in urban green policy will be studied as well as the conditions for citizen participation. Data will be collected through policy document analyses and interviews. The results will be analysed and compared, leading to a conclusion and recommendations.

Figure 1
Research Framework



## 1.9 Reading guide

After this first chapter, the introduction, the report is organized into five more chapters The second chapter explains the theory behind the study, delving deep into the concepts and analytical framework. This is followed by a chapter that describes the methods that were used, giving a detailed look at the research strategy. Then, the results are presented in another chapter. Finally, the report ends with a chapter where findings are discussed followed by a chapter summarizing of the main conclusions.

## 2. Theory

This research dives deeper into how to engage vulnerable citizens in urban green policy. To do so, the body of literature on citizen participation in urban green spaces must be explored. To conceptualize this, two different theories are explored, namely the objectives by Glucker et al. (2013) and the CLEAR framework by Lowndes et al. (2006).

## 2.1 Citizen participation in urban green spaces

Currently, when it comes to climate adaptation in The Netherlands, the main role of citizens is that of a taker of measures, such as installing green roofs, replanting greenery, and harvesting rainwater (Hegger et al., 2017). In certain cities, efforts are made to raise citizens' awareness regarding their role in and impact of the hardening of garden surfaces. However, residents' understanding of their own action potential when it comes to climate adaptation measures remains relatively limited (Hegger et al., 2017).

For good citizen participation, a municipality should make an effort to give vulnerable citizens a voice (Basta et al., 2021; Glaas et al., 2022; Wamsler et al., 2020). There are different approaches to achieving this goal. While much of the research concerning the engagement of vulnerable citizens in climate adaptation suggests that the municipality's objectives should align with those of the involved citizens (Brink & Wamsler, 2019; Glaas et al., 2022; Glucker et al., 2013), this study hypothesizes that, first, active involvement of vulnerable citizens is necessary before aligning the objectives of the municipality with those of the citizens.

## 2.2 Goal setting for citizen participation in climate adaptation policy

Citizen participation in climate adaptation is a broad concept that can be differently interpreted by scholars and practitioners (Glucker et al., 2013). Therefore, many researchers focus on the objectives set for citizen participation, as they determine who to involve, when to involve them and how to involve them (Evans & Pratchett, 2013; Glaas et al., 2022; Glucker et al., 2013; Sarzynski, 2015; Uittenbroek et al., 2019). In other words, the objectives set for citizen participation determine the citizen involvement strategy (Glucker et al., 2013; Lister, 2007; O'Faircheallaigh, 2010; Uittenbroek et al., 2019; Van De Wetering & Groenleer, 2023).

Glucker et al. (2013) have researched this why, who and how of citizen participation in environmental impact assessments (EIA). Although EIA is not exactly the same as urban green policies, the paper gives clear insights into the motives of municipalities to engage in citizen

participation for environmental policymaking. They distinguish between normative, substantial, and instrumental rationales.

From a normative standpoint, citizen participation is essential to uphold democratic principles and empower marginalized communities. From a substantive viewpoint, the quality of decision-making improves when citizens are actively involved. From an instrumental perspective, citizen participation fosters legitimacy and aids in resolving conflicts. Each rationale contains several different objectives that can be found in Appendix A. In this research, only the level of detail of the general rationale of the objectives will be studied.

Lister (2007) argues that it is the role of decision-makers to develop explicit goals that lead to the structures and processes to involve citizens who are "least likely to be heard". However, different goals set by municipalities can encourage or limit the ability of vulnerable citizens to engage in citizen participation (Van De Wetering & Groenleer, 2023). For instance, to 'resolve conflict', it may suffice to contact a select vocal group of individuals who disagreed with a policy and voiced their concerns. Vulnerable citizens will then not be involved. On the other hand, if the goal of citizen participation is 'Influencing decisions', all who are affected by a decision should be able to influence that decision, placing the responsibility to enable vulnerable citizens to participate on the municipality.

## 2.3 Is the citizen involvement strategy CLEAR?

To know if the citizen involvement strategy will be successful in engaging (vulnerable) citizens, there are different conditions this strategy should fulfil. Multiple scholars have researched these conditions (Lowndes et al., 2006; Mees, 2022; Nesbitt et al., 2018; Tonkens & Verhoeven, 2019).

This research uses the framework of Lowndes et al. (2006). They created a model that identifies five reasons that explain citizens' uneven response to participation. This framework fits this research best since it focuses on the perspective of the citizen whilst giving policy targets for decision-makers to enhance the position of the citizen (De Graaf et al., 2015; Tonkens & Verhoeven, 2019). In this respect, it is a bottom—up tool (Lowndes et al., 2006). Policymakers need to understand citizens' perspectives on participation initiatives and consider how these initiatives can be developed or enhanced.

Moreover, this framework has already been used since 2006 by the EU and many others to evaluate citizen participation strategies (Bakker et al., 2012; De Graaf et al., 2015; Evans & Pratchett, 2013; Soares Da Silva & Horlings, 2020; Tonkens & Verhoeven, 2019). The

framework will be enhanced by insights from the work of Mees (2022), Nesbitt (2018), and Tonkens & Verhoeven (2019) to make it fit the target group of vulnerable citizens better. The framework of Lowndes et al. (2006) consists of five conditions: 'can do', 'like to'. 'enabled to', 'asked to', and 'responded to'.

#### Can do

The condition 'can do' entails the socio-economic factors influencing participation rates. It suggests that having the right skills and resources boosts participation (Denters, 2023). These skills range from public speaking to event organizing, and access to resources like the internet or photocopying. These skills and assets are much more commonly found among those with higher socioeconomic status (Evans & Pratchett, 2013). In disadvantaged neighbourhoods, this becomes particularly crucial, as variations in skills and resources are recognized as significant factors contributing to inequality in civic engagement (Tonkens & Verhoeven, 2019). Municipalities could fix this gap by putting in effort to support citizens in developing participation skills and resources. Besides, municipalities must be aware of the resources and skills of vulnerable citizens and tailor their participation requirements accordingly (De Graaf et al., 2015).

Mees (2022) emphasizes in her study on why citizens engage in citizen-led climate initiatives that it is important to distinguish between objective and subjective capacity. Here, objective capacity means the socio-economic factors that enable citizens to engage, whereas subjective capacity is about citizen's perceptions of their own capacities. This research, however, will not take subjective capacity into account because of the limited time available.

#### Like to

'Like to' is about how a sense of belonging drives people to engage. When you feel a part of something, you are more likely to participate (Denters, 2023). Conversely, feeling excluded or unwelcome can deter participation (Bakker et al., 2012). In high-trust communities, where residents trust other residents, collaboration risks and transaction costs are lower (Denters, 2023). Mees, (2022) identifies this as the following two conditions: peer influence and group identification. Peer influence involves conforming to a group's social norms to gain acceptance, while group identification is the sense of belonging to a community an individual identifies with.

What also makes people 'like to' participate is the belief that their participation will be meaningful. Citizens who have low self-confidence in their own contribution and lack trust in the government will be less inclined to participate (Fledderus, 2015). Precisely this trust is less present among vulnerable groups such as low-educated individuals, job seekers, and non-Western immigrants (Fledderus, 2015).

While changing these feelings is challenging, fostering a broader civic identity and a shared sense of citizenship cultivates an environment that encourages people to engage (Lowndes et al., 2006). Moreover, municipal workers should show how participating in climate adaptation policies can be informative, constructive and rewarding (Few et al., 2007).

#### Enabled to

The concept of 'enabled to' relies on the idea that group involvement is crucial for engagement, as political participation in isolation is less effective (Lowndes et al., 2006). Tonkens & Verhoeven (2019) argue in their framework that the focus should be on the link between citizens, organisations, institutions and networks.

To establish and support these links, municipalities should support civic networks and create an environment where various participation platforms can flourish by aiding group formation, providing networking opportunities, and easing access to decision-makers (Soares Da Silva & Horlings, 2020).

#### Asked to

The condition 'asked to' highlights the importance of mobilization in driving participation. People are more likely to engage when they are personally approached and asked to participate (De Graaf et al., 2015). This is seen as a crucial factor in deprived neighbourhoods, as mobilizing non-active citizens necessitates an intensive approach that recognizes the value of people's aspirations and perspectives (Tonkens & Verhoeven, 2019).

Diverse invitation methods increase participation as various engagement options cater to different preferences (De Graaf et al., 2015). Municipalities should diversify their approaches and match them to the needs of vulnerable citizen groups.

## Responded to

The notion of 'responded to' relies on participants believing that their opinions are valuable and taken into account. It is about ensuring that people feel their voices are heard, even if their

opinion is not always agreed with (Evans & Pratchett, 2013). This is especially important to vulnerable groups (Lister, 2007). The absence of feedback, common in many participatory activities, is often perceived by vulnerable citizens as insincere participation. This lack of acknowledgement can delegitimize the process and leave participants feeling as if they and their views do not count. To address this, municipalities must prioritize communication during and after the participation processes and manage conflicting views from consultations (Bakker et al., 2012).

#### 2.4 From CLEAR to vulnerable citizen involvement

So, for a citizen participation strategy to be successful in involving vulnerable citizens, the conditions should be met (Lowndes, et al., 2006). It is, however, not always necessary that all five conditions are met. A notable feature of the CLEAR framework is its non-hierarchical and non-sequential structure among its five factors (Evans & Pratchett, 2013). The existence of one factor is not dependent on the others, and effective participation does not necessarily require all components to be present, although, in an ideal situation, they would be (Lowndes et al., 2006).

What is striking about these five elements is that they are all verbs which establish conditions for participation. The components imply a certain level of interaction between the municipality and citizens (De Graaf et al., 2015). Furthermore, the acronym CLEAR suggests that the five components should offer 'clarity' and 'transparency' regarding participation (Evans & Pratchett, 2013). Hence, the framework provides a chance to reflect upon the relative strengths and gaps in participation, while acknowledging that participation strategies must be attuned to local contexts and be adaptable over time (De Graaf et al., 2015).

## 2.5 Does involving vulnerable citizens lead to less vulnerability?

The framework of Lowndes et al. (2006) provides conditions for engaging vulnerable citizens in the decision-making process. It does not, however, imply whether or not this involvement of vulnerable citizens also leads to better policies or more equality for this group. There are different opinions in literature on whether the inclusion of (vulnerable) citizens in climate adaptation policy is actually beneficial to them (Brink et al., 2016; Ferreira et al., 2020; Frantzeskaki et al., 2019; Hügel & Davies, 2020; Kabisch et al., 2016; Lister, 2007; Newig et al., 2023; Wamsler et al., 2020).

This research will not explicitly examine the relation between vulnerable citizen involvement and the outcomes of this participation in detail, since the focus lies on *how* to

include vulnerable citizens and time prevents further in-depth research. Moreover, this research has an explorative rather than an evaluative nature. Evaluating the benefits of citizen participation remains a challenging task for which a standardized method still is to be developed (Burton & Mustelin, 2013; Rowe & Frewer, 2000; Serrao-Neumann et al., 2015). However, one of the main criticisms of citizen participation is uneven participation and the non-inclusion of vulnerable citizens (Hügel & Davies, 2020; Mees et al., 2019; Toxopeus et al., 2020; Van De Wetering & Groenleer, 2023; Wamsler et al., 2020). It is therefore likely that by including vulnerable citizens, this criticism no longer holds, as the process is more fair.

## 2.6 Analytical framework

This research focuses on the causal mechanism between the objectives set by the municipality for citizen participation and the extent to which vulnerable citizens are engaged (figure 2). Whether or not the involvement of vulnerable citizens leads to better policies and increased equality for this group will not be part of this research and is therefore indicated in grey.

## 2.6.1 Key assumptions

#### Objectives determine the strategy

It is expected that the objectives set determine the citizen involvement strategy of a municipality. Since, for citizen participation the objectives set often determine if and how citizens are approached to take part (Evans & Pratchett, 2013; Glaas et al., 2022; Glucker et al., 2013; O'Faircheallaigh, 2010; Sarzynski, 2105; Uittenbroek et al., 2019; Van De Wetering & Groenleer, 2023). For example, in order to 'harness local knowledge' which is an objective in the substantive rationale, it would be sufficient to consult a selected number of people through online surveys whereas 'enhancing democratic capacity', in the normative rationale, requires actively involving the general public into the decision-making process, for example through multiple resident meetings (Glucker et al., 2013). The first strategy requires citizens themselves to be capable and motivated to participate, whereas for the latter strategy, this responsibility lies with the municipality.

#### Strategy determines the conditions met

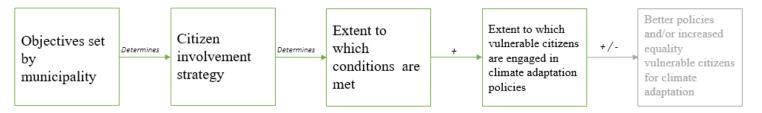
The strategy, in turn, determines how many of the conditions of Lowndes et al. (2006) are met. When coming back to the previous example, only using an online survey may exclude all

citizens who do not have access to a computer. The condition 'can do' will then not be met for this citizen group. On the other hand, a municipality wanting to enhance democracy and therefore actively tries to involve (vulnerable) citizens might be more inclined to think about possible hampering factors for citizens to participate and act upon them. For example, multiple resident meetings could be hosted at different times and places. The condition 'can do' will then be met to a greater extent.

## Conditions influence the engagement of vulnerable citizens

The more conditions that are met, the more likely vulnerable citizens will engage in participation (Lowndes et al., 2006). Or even better said, the more conditions met, the less hampering factors there are for vulnerable citizens to participate.

Figure 2
Analytical Framework



## 2.6.2 Hypothesis

When looking at how and to what extent objectives set by municipalities for citizen participation lead to the engagement of vulnerable citizens in urban green policies, it is expected that, in general, the more conditions met by a citizen participation strategy, the more successful the municipality will be in involving vulnerable citizens (Lowndes et al., 2006). Therefore, the objectives set by a municipality should lead to a citizen participation strategy in which the municipality makes sure that citizens can, like to, are enabled to, and asked to participate and in which they are responded to.

It is expected that to meet the conditions 'can do', 'like to', and 'enabled to' an involvement strategy is required that considers the point of view of (vulnerable) citizens (Lowndes et al., 2006; De Graaf et al., 2015). When looking at the objectives of Glucker et al. (2013), this citizen's point of view seems more present in the objectives in the normative rationale compared to the substantive or instrumental rationale (See Appendix A). Quite literally, only in the objectives in the normative rationale are the participants themselves

mentioned. This is because, for instrumental and substantive objectives, citizen participation is a tool to help municipal workers, respectively for generating legitimacy for their actions or harvesting information (Glucker et al., 2013). For normative objectives, citizen participation is meant to help (vulnerable) citizens, which makes it likely that municipal workers design a participation strategy with these (vulnerable) citizens in mind.

To my knowledge, there has not yet been a paper that shows that normative rationales indeed lead to more conditions met and/or more vulnerable citizen engagement. However, some papers suggest at least the opposite, indicating that an instrumental rationale does *not* lead to vulnerable citizen engagement. For example, Michels & De Graaf (2010) found in their research on citizen participation in two Dutch municipalities that citizen participation was driven by an instrumental rationale and participation was not regarded as a value in itself. They concluded that this may have contributed to the absence of some groups, minority groups and young people in particular, from active participation. Moreover, De Graaf et al. (2015) found in their policy document analysis that currently most municipalities have objectives in the instrumental or substantive rationale and that the conditions 'can do', 'like to' and 'enabled to' are missing in many of the citizen participation policy documents.

## 3. Methods

This chapter will first delve into the research strategy. Subsequently, it will outline the criteria used for selecting case studies and provide descriptions of the four chosen cases. Finally, the research materials utilized will be described.

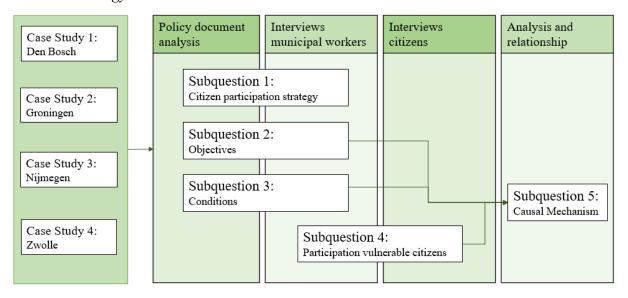
## 3.1 Research Strategy

The research strategy that was applied for this study is a case study analysis, following an interpretivist approach. This study aimed to unravel the causal mechanism between objectives set by the municipality for citizen participation for urban green spaces and the extent to which vulnerable citizens are involved. Hence, the extent to which vulnerable citizens are involved, determined by the number of conditions for citizen participation met, is the dependent variable. The independent variable is the objectives for citizen participation set by the municipality. The case study is a comparative case study between four different municipalities.

The decision to employ a case study analysis as a research strategy was made because this study aims to comprehensively analyse a complex real-world phenomenon. All factors that explain the relationship between the objectives set by the municipality and the extent to which vulnerable citizens are involved in urban green policies will be studied and reported in detail.

For each municipality, the strategy to involve vulnerable citizens was determined through a policy document analysis and interviews with municipal workers (figure 3). This provided the answer to subquestion 1. The objectives and conditions for citizen participation were also determined through interviews with municipal workers and a policy document analysis. This answered subquestions 2 and 3. The perceived success of the involvement of vulnerable citizens by a municipality was determined by interviewing municipal workers and citizens. This answered subquestion 4.

**Figure 3**Research Strategy



Furthermore, this research followed a hierarchic method (Verschuren et al., 2010).

Hence, the research project proceeded in two stages. Initially, the individual cases were examined as if they were part of a series of single case studies. Subsequently, the findings from the first stage were utilized for comparative analysis. So, the objectives, conditions and perceived success of the engagement of vulnerable citizens were analysed for each separate case and the causal mechanisms between the factors were determined. This provided the answer to subquestion 5.

## 3.2 Case Study Selection

This case study focuses on municipalities in The Netherlands. The Netherlands was chosen for multiple reasons. Firstly, in The Netherlands, public participation has an increasing role in spatial planning. All municipalities are required to write a spatial vision document in which they should elaborate on how citizens will be involved in decision-making (Ministerie van Binnenlandse Zaken & Koninkrijksrelaties, 2020). However, there are no strict guidelines for the design of this participation. Therefore, large differences between municipalities can arise. Secondly, since municipalities in the Netherlands lack the mandate to address issues like climate adaptation and flood risk alone, citizens are increasingly expected to bear responsibility for these challenges (Uittenbroek et al., 2019). Therefore, citizen participation (including citizenled initiatives) will have an increasing role in Dutch climate adaptation policies.

This study tries to unravel the causal mechanism between the independent variable (the objectives), the intermediate variable (the conditions), and the dependent variable (vulnerable citizen engagement). Therefore, this case study has a 'most similar' design, in which the selected cases are most similar in contextual factors, and most different on the independent variable. To get as much variety on the independent variable, four municipalities were chosen that have different objectives set for citizen participation, either in the normative, instrumental, or substantive rational. The number of cases was restricted to four due to time and resources limitations. Because the objectives for citizen participation in a municipality are difficult to determine beforehand, and also part of this research itself, the municipalities were selected based on a quick scan of the objectives for citizen participation in the spatial vision documents of the municipalities. This will be elaborated on in section 3.3: case study description.

The municipalities were also selected based on commonalities. When it comes to the similar contextual factors, all selected municipalities have a strategy or ambition for climate adaptation that includes involving vulnerable citizens in the decision-making process (Table 1). More specifically, the climate adaptation policy focuses on urban green spaces. This is of importance because citizens' willingness to participate hinges on the potential impact that an adaptation project may have on their everyday lives. (Nesbitt et al., 2018; Zuniga-Teran & Gerlak, 2019). Consequently, more citizens are inclined to contribute to a project focused on creating a new park rather than one centred on monitoring biodiversity. The choice for urban green spaces was made because in Western societies, affluent white neighbourhoods generally have greater access to green spaces compared to other areas (Nesbitt et al., 2018). This means that socio-economically vulnerable citizens also have a higher chance to live in a climate-vulnerable area.

Moreover, the cities selected should be of a similar size so that the governing capacities of those municipalities are comparable. The focus is on middle-sized cities since they lack the capacity to install special task forces to optimize citizen participation like bigger cities such as Rotterdam and Utrecht do (Uittenbroek et al., 2019). All selected municipalities are in the Netherlands because of language issues and travelling time. Moreover, the national government has to be the same for all municipalities to ensure similar laws and policies. Additionally, the cases are spread out over the Netherlands to avoid certain place-based biases. Based on the abovementioned criteria, Den Bosch, Groningen, Nijmegen and Zwolle were chosen as cases.

**Table 1**Case study Criteria - commonalities

Nr	Criterium	Den Bosch	Groningen	Nijmegen	Zwolle
1	Climate adaptation policy	's Hertogenbosch Groen en Klimaatbestendig	Groenplan Groningen: Vitamine G	Regionale adaptatiestrategie	Community building strategy
2	Focus on Green spaces	Yes	Yes	Yes	Yes
3	Size (inhabitants)	158.000	238.000	182.000	132.000
4	Location	Netherlands- South	Netherlands- North	Netherlands- East	Netherlands- Middle

## 3.3 Case Study Description

#### Den Bosch

Den Bosch (also called 's-Hertogenbosch) is a historic city located in the southern part of the Netherlands. It is the capital of the North Brabant province. Den Bosch is situated about 80 kilometres south of Amsterdam and is strategically located along the river Dieze. In January 2023, the population of 's-Hertogenbosch was around 158,000 people.

According to the municipality of Den Bosch, the city of the future is a green city (Gemeente 's-Hertogenbosch, 2021). Its goal is for the city itself to be capable of managing excess water and heat. The municipality aims to create a diverse urban nature close to residents and strengthen the connection between the urban and rural areas. Residents will be involved in measuring and collecting data. It is expected that this enhances the understanding of climate adaptation by citizens and contributes to the willingness to take necessary measures. This hints at an instrumental and substantive rationale as both the input of citizens is required as well as using that input as a way to legitimize the decisions the municipality will make.

#### Groningen

Groningen is located in the northern part of the Netherlands and is the capital of the province of Groningen. The population of Groningen was around 238,000 people in January 2023.

The municipality of Groningen states that public green spaces, such as parks and gardens, can make an essential contribution to a climate-adaptive municipality (Gemeente Groningen, 2020). The municipality sees its role as inspiring and facilitating. By raising awareness among stakeholders, the municipality hopes to increase their willingness to take action. They state that: "We value resident participation and intend to continue facilitating and promoting it in the coming years". This intrinsic value of citizen participation hints at a normative perspective and objectives.

## Nijmegen

Nijmegen is a city in the eastern part of the Netherlands, situated on the banks of the Waal River near the German border. In January 2023, Nijmegen had a population of approximately 182,000 people.

The municipality of Nijmegen aims to minimize the negative impacts of climate change and heat stress as much as possible (Gemeente Nijmegen, 2020). The municipality envisions a green city with space for various types of greenery, both within neighbourhoods and in the surrounding areas. Participation is seen as crucial for garnering support and enhancing the quality of plans, as involving citizens and businesses in planning processes generally leads to better outcomes and fosters greater understanding and acceptance. Furthermore, the municipality makes an effort to involve a diverse group of residents, including "those who are not typically reached through standard participation initiatives". This hints at an instrumental, substantive, and normative rationale.

#### Zwolle

Zwolle is a city centrally located in the Netherlands and serves as the capital of the province of Overijssel. It is situated along the banks of the river IJssel. In January 2023, Zwolle had a population of approximately 132,000 people.

The municipality of Zwolle states that not all neighbourhoods and districts in the city face the same climate stress challenges (Gemeente Zwolle, 2019). Therefore, its priority is to make these highly vulnerable areas climate-resilient first. This should be done by increasing green spaces. The city of Zwolle states that it cannot achieve the creation of these green spaces within the city on its own. Therefore, the municipality is actively seeking collaboration with private parties and residents. The fact that the municipality can not achieve its goals alone but needs input from the citizens hints at an instrumental perspective and objectives.

## 3.4 Research materials, data collection and processing

#### Policy documents

The first part of the research consists of a policy document analysis. For this analysis, the so-called 'omgevingsvisie' documents (spatial vision documents) were used as a starting point. This was done because the Dutch government has obliged each municipality to write this document before the end of 2024 (Ministerie van Binnenlandse Zaken & Koninkrijksrelaties, 2020). It is therefore a recent and thorough policy document that is similar for each municipality. Based on this document, and an additional internet search, two other relevant policy documents were discovered per municipality. For example specific climate adaptation strategy documents, implementation strategies, or specific citizen involvement strategy documents. The policy document analysis involved an analysis of the strategy for citizen participation in urban green policy. The documents were screened for objectives to involve vulnerable citizens in the project, as well as the conditions that are met. An overview of the analysed documents can be found in Appendix B.

#### Interviews

Data was also collected through in-depth interviews with relevant stakeholders. The interviews were used to get insights on the strategy, objectives, and conditions met by a municipality for using citizen participation in formulating and executing climate adaptation policies (subquestions 1, 2, and 3), as well as to determine the perceived success of a municipality in involving vulnerable citizens (subquestion 4).

The sample consisted of 12 municipal workers, either policymakers, who develop policies, or neighbourhood coordinators, who are active within a neighbourhood and form the bridge between policymakers and citizens. The municipal workers are active in the area of climate adaptation, citizen participation, or both. Appendix C presents an overview list of the interviewees. To get a broad perspective on the issue, at least two municipal workers were interviewed per municipality. Due to time restrictions, the number of interviewees per municipality could not be higher although this would have improved the quality of this research.

Additionally, for each municipality, one citizen was interviewed to verify if citizens share a similar view as the municipal workers on how well the municipality succeeds in involving vulnerable citizens. Ideally, multiple citizens were interviewed to get a thorough understanding of how all citizens perceive this. However, due to time limitations, only one citizen per municipality was interviewed. The citizens that were interviewed had worked

together with the municipality to improve green spaces within the socio-economically vulnerable neighbourhood they live in. In this way, a citizen was interviewed that has an affinity with the municipality and green spaces but is also in close contact with other (more socio-economically vulnerable) inhabitants of the neighbourhood. Unfortunately, for Den Bosch, no citizen was found willing to take an interview.

The interviews were semi-structured, as this allowed for enough space for the participants to elaborate on the subjects themselves. The interview questions were structured along the components presented in the analytical framework (see Appendix D). Participants were recruited through purposive sampling, which means that they were selected based on their affiliation with the topic at hand (Boeije, 2010). Identification of relevant interviewees was first done by looking for names in policy documents. Next, snowballing was used as a method to identify other relevant municipal workers. Citizens were identified either through recommendations by municipal workers or through the online citizen participation platform 'mijn wijkplan' (my neighbourhood plan).

## Data processing

The software NVivo was used for the data analysis and data processing. The interviews were transcribed, after which they were coded. The policy documents were directly uploaded in NVivo. The codes were based on the analytical frameworks presented previously. A full overview of the generated codes can be found in Appendix G.

#### **Ethics**

To ensure that the research was conducted properly, the guidelines of the Netherlands Code of Conduct for Research Integrity were adhered to. Moreover, this research involved interviews and therefore privacy sensitive information was collected (Mohd Arifin, 2018). Hence, all data collected during this research was solely utilized for the purposes of this research. Any personal information, such as names or other identifying details, was handled with confidentiality. The interviewees were provided with an information sheet (Appendix E) and asked to sign an informed consent form (See Appendix F) or to give recorded oral consent for their participation in this research. Additionally, the data was stored following GDPR regulations.

## 4. Empirical Results

The following chapter presents the empirical findings of this research and provides an answer to subquestion 1, 2, 3, and 4. The empirical analysis is based on the insights from the interviews and policy documents. The results of the four case studies are presented together for each subquestion, to allow for a comprehensive comparison between the cities.

## 4.1 Citizen participation strategies for climate adaptation policies

The following section answers subquestion 1: "What is the municipality's current citizen participation strategy for climate adaptation policies?" For each municipality, first, the strategy in the policy documents is presented and then the strategy mentioned by the interviewees.

#### 4.1.1 Den Bosch

#### Policy documents

In the 'Omgevingsvisie' (spatial vision) of Den Bosch, the necessity of climate adaptation in the city is addressed. However, the role of citizens in making and implementing climate adaptation policies is not discussed. There is also no general chapter on citizen participation in the document. Citizen participation is only mentioned as part of the energy transition: "We aim to be climate-neutral by 2045. To achieve this, we collaborate with residents, social organizations, and businesses to save energy and implement clean energy generation."

In addition to this spatial vision document, the municipality of Den Bosch has created two documents that delve deeper into the climate adaptation challenge. These are 's-Hertogenbosch Groen en Klimaatbestendig – Bouwsteen voor de Bossche omgeving' ('s-Hertogenbosch Green and Climate-Resilient - Building Block for the Bossche Environment) from 2021 and 'Samenwerken aan een duurzaam 's-Hertogenbosch' (Collaborating for a Sustainable 's-Hertogenbosch) from 2019. In these documents, the role of citizen participation in climate adaptation is mentioned. For example, the first document states: "We invite citizens to share their thoughts on where they would like more greenery and where trees can be planted in their neighbourhoods. We encourage and support citizen initiatives for green spaces in neighbourhoods." There is no distinction made between vulnerable and less vulnerable residents, but there is a neighbourhood-oriented approach. In practice, this means that a district passport is developed for each neighbourhood. This district passport will involve detailed

information about the strengths and weaknesses of each district regarding climate vulnerability. This allows for a suitable approach to be chosen for each neighbourhood in terms of climate adaptation.

#### Interviews

In the municipality of Den Bosch, sustainability is divided into several teams, namely circularity, sustainable mobility, energy, and green and climate-resilient. Team green and climate-resilient is not very active when it comes to citizen participation. DB2 stated, "We do consider the citizens in the areas we are working on, but citizens are not always directly involved through participation". There is a belief that executing policies is more efficient when it is just done, rather than always seeking permission from citizens. This is especially the case for vulnerable citizens, who are hard to reach for the municipality. DB2 also noted that the municipality encounters resistance when it comes to participation, particularly from vulnerable residents. This is because these residents are already asked a lot, including isolating their houses, lowering heating, and installing green roofs. It is believed by the municipality that this leads to a sense of overload among citizens. Therefore, DB2 believes that "in many situations, it might be better to just get started. We also have our goals to achieve, and we need to work towards 2025. If we have to stop and explain the potential consequences or effects for every street, it won't be practical. So, with public spaces, we tend to be more proactive. Let's just get going." DB1 noted that there is also a challenge in showing the necessity for climate adaptation measures: "I notice that everyone is struggling to figure out how to make it logical and understandable why it's useful to take climate adaptation measures. There's a kind of scepticism if we can even show vulnerable citizens that this is valuable."

On the other hand, team energy is actively involved in citizen participation. DB3 notes that for team energy this is considered an easier task than for team green and climate-resilient since there is no need for intrinsic motivation as there are financial stimuli to save energy. The team focuses on active participation and energy-saving measures, with a specific effort to involve vulnerable residents. The hope is that by building a good relationship with residents when it comes to energy policies, eventually, they will also be more willing to take climate-adaptive measures.

While team green and climate-resilient is not so much engaged in citizen participation, there are some actions they take. For example, activities like the National Tile-Tossing Championship and the citizen science project 'Pientere tuinen' (Smart Gardens), where

residents can measure soil moisture and temperature with the goal of encouraging greening. There is also a collaboration with housing corporations, which own many houses of vulnerable residents, to green their buildings.

## 4.1.2 Groningen

## Policy documents

In the spatial vision of Groningen, two of the five focus points are making the city more climate-adaptive and involving residents more in the creation and execution of policies. Therefore, both topics receive a lot of attention in the document. Within the topic of 'citizen participation', the vulnerable northern neighbourhoods are designated as a separate focus area. Additionally, the municipality of Groningen emphasizes the importance of delivering customized work when it comes to participation: each situation requires its own approach. They state, "What works in the city centre may not work in the neighbourhoods Bedum or Paddepoel. And what is effective in the spatial domain may be less effective in the social domain and vice versa."

Within the topic 'climate adaptation', the importance of involving residents is specifically mentioned again: "We engage residents, businesses, and collaborative partners in how we can contribute together to keeping our municipality liveable and attractive and enhancing the identity and character of each area with initiatives and ideas from residents, entrepreneurs, and users." However, there is no further specification on vulnerable citizens in this context.

In the policy document 'Klimaat Adaptief Groningen 2020 – 2024' (Climate-Resilient Groningen 2020-2024), there is specific attention given to vulnerable groups when it comes to citizen participation in climate adaptation. The document starts by reflecting on all initiatives taken by residents. It is then noted that these participation projects are effective but predominantly demand-driven. Therefore, consideration will be given to "whether the various greening projects need to be brought to the attention of citizens, especially in neighbourhoods with relatively many 'urgent' and 'undesirable' situations."

#### Interviews

The interviews give a similar view on the strategy for citizen participation in climate adaptation. Groningen has an approach based on radical equality. This approach is established by the city council and means that extra attention and funds are directed towards the disadvantaged neighbourhoods in northern Groningen, with consequently less money and attention allocated

to more affluent neighbourhoods. This applies to all areas, including social, health, and climate adaptation.

Through this municipality-wide strategy, existing networks within the municipality's social domain can be utilized to reach residents who are difficult to engage in climate adaptation projects. As G2 put it: "We (team climate adaptation) could start again from scratch, but in my view, it would be more beneficial if we collaborated instead."

For the climate adaptation team, this means that as of January 1st, 2024, two additional full-time paid staff members will be hired to talk to residents in these northern neighbourhoods. The goal is to understand how residents, together with the municipality, can make their environment more green. The municipality of Groningen has chosen this approach because they noticed a lack of initiatives to green private properties coming from these neighbourhoods. According to G1: "We had concluded that these initiatives do not arise spontaneously, especially because these are people who are somewhat distant from the municipality."

This neighbourhood-focused approach was already longer in place. For example, G3 acts as an intermediary between the municipality and the citizens of a vulnerable neighbourhood in northern Groningen. It is G3's task to talk to both residents and the municipality about their needs so that plans can be executed smoothly and in everyone's interest, leading to 'co-creation'. This is a paid position for 8 hours a week.

## 4.1.3 Nijmegen

#### Policy documents

In the spatial vision of Nijmegen, it is stated that climate adaptation is a crucial topic and must be considered in all decision-making processes in the city. However, no specific role for citizen participation is mentioned within this task of climate adaptation. Nevertheless, citizen participation is considered one of the main points of the overall spatial vision: "We create an attractive, sustainable, social, healthy, and economically resilient Nijmegen together with many parties and our residents." The municipality of Nijmegen sees its role as an initiator, collaborating with other parties, including citizens, as needed. Additionally, the municipality may decide to support initiatives from other stakeholders. It is explicitly mentioned that in participation projects where the municipality is the initiator, efforts are made to involve a representative group of citizens, including those not typically reached in participation processes.

In the 'Regionale Adaptatie Strategie Rijk Maas en Waal' (Regional Adaptation Strategy Rijk Maas en Waal) from 2019, there is a stronger emphasis on collaboration with citizens. Co-creation is explicitly part of the strategy, both in policymaking and implementation. Businesses, residents, governments, and organizations should collaborate in Rijk van Maas & Waal to create a climate-resilient region. This should preferably be done "bottom-up where possible, and top-down where necessary".

#### Interviews

In Nijmegen, several challenges have been identified that need to be urgently addressed. Making the city climate-adaptive is one of these challenges, and that is why a special team has been formed for it. This team is still in its early stages, and there is not yet a very clear policy for citizen participation in this challenge. However, there is a general team for citizen participation in the spatial domain that has established guidelines. One of the key points of this general citizen participation policy is to involve citizens early on in the decision-making process. There is no distinction between vulnerable and less vulnerable citizens, but for each project, an assessment is made of who the stakeholders are and with which citizens collaboration is possible.

This participation policy is widely embraced throughout the municipality, and all employees receive training on it. However, N3 notes that how well citizens are involved depends a lot on the project leader's personal conviction on how important participation is: "Guidelines are, of course, just guidelines. Ultimately, a project leader also needs to believe that these people truly have something to contribute. And there are differences in that belief."

Currently, projects related to greening neighbourhoods are usually initiated by residents themselves. The neighbourhood manager serves as a point of contact and assists with implementation. Collaboration with housing corporations or welfare organizations for greening projects is currently under exploration. Operatie Steenbreek (an organisation that stimulates and helps citizens to remove tiles and replace them with green) is also active in the city.

Additionally, there is a collaboration with the social and health domain. Several neighbourhoods have been designated as priority areas due to excessive heat caused by urbanization. While primarily focused on health, this concern also motivates initiatives aimed at enhancing green spaces in these neighbourhoods.

#### 4.1.4 Zwolle

#### Policy documents

The spatial vision of Zwolle emphasizes that citizen participation is of great importance to achieving goals and ambitions in the living environment. It is stated that it is crucial to involve residents, neighbours, and stakeholders early in policy development. The responsibility for implementing participation lies with the initiator, which can be the municipality or another organization. The goal for the municipality is to encourage more people to participate, by setting a positive example and supporting private initiatives. While specific attention is given to areas vulnerable to the effects of climate change, the document does not explicitly address citizens who are less likely to participate.

In the document "Zwolle maakt zich op voor een nieuw klimaat – Een adaptatiestrategie voor iedere Zwollenaar (Zwolle prepares for a new climate – an adaptation strategy for every Zwollenaar) from 2019, it is explicitly stated that residents and businesses are primarily responsible for making adjustments to counter the effects of climate change. Anyone wishing to take action can expect some form of support from the municipality. Climate adaptation is initially a matter of common sense or good neighbourliness. Where necessary, the municipality provides regulations, such as design requirements for developers.

#### Interviews

In Zwolle, the Climate Active Team (Team Klimaatactief) has been established. This team serves as a catalyst for citizens who want to make their environment more climate-adaptive. The team assists them in implementing these plans, such as creating facade gardens or organizing tile-flipping days. The municipality does not actively approach residents to engage them in green projects but encourages initiatives to come from the residents themselves. The underlying idea is to convert the energy from citizens into action. With this strategy, the municipality primarily supports the frontrunners in climate adaptation, hoping that, eventually, the general public and more vulnerable groups will also be motivated to take action. The Climate Active Team operates under the umbrella of the organisation 'Climate Campus', which is a deliberate choice to avoid communication solely from the municipality of Zwolle.

In addition to the Climate Active Team, there are active neighbourhood coordinators who assist citizens in greening their surroundings. This assistance occurs when citizens take the lead. The neighbourhood coordinator also closely collaborates with housing cooperatives to green the environment of vulnerable residents, for instance, by creating green meeting spaces.

Finally, there was a climate adaptation program that focused on the internal structure of the municipality. The goal was to ensure that climate adaptation is on the agenda of all other departments within the municipality and is considered in decision-making processes.

## 4.1.5 Summary

The following table presents an overview of the current citizen participation strategy for climate adaptation policies of the four municipalities:

 Table 2

 Overview of citizen participation strategies in urban green policies

Municipality	Policy	Vulnerable citizens
Den Bosch	<ul> <li>Citizens not always directly involved through participation</li> </ul>	<ul> <li>No specific policy.</li> </ul>
	<ul> <li>It is considered more important to reach climate adaptation goals.</li> </ul>	
Groningen	<ul> <li>Citizen participation is seen as an important factor in climate</li> </ul>	<ul> <li>Strategy based on radical equity.</li> </ul>
	adaptation.	<ul> <li>Special team to encourage</li> </ul>
	o Each situation requires a	citizen participation
	customized approach.	for climate adaptation in vulnerable neighbourhoods
Nijmegen	<ul> <li>Special team for climate</li> </ul>	<ul> <li>No specific policy for</li> </ul>
	adaptation, but no clear policy for	
	<ul><li>citizen participation.</li><li>The general citizen participation</li></ul>	climate adaptation policies.
	policy focuses on early	
	involvement of citizens.	
Zwolle	<ul> <li>Climate Active Team has been established. This team serves as a catalyst for citizens who want to</li> </ul>	<ul> <li>With this strategy, the municipality primarily supports the frontrunners</li> </ul>
	make their environment more	in climate adaptation
	climate-adaptive.	hoping that eventually,
	o The municipality does not actively	
	approach residents to engage them in green projects but	n more vulnerable groups will also be included.
	encourages initiatives to come from	
	the residents themselves.	•••

## 4.2 Objectives

Section 4.2 answers subquestion 2: What are the objectives of the municipality for citizen participation in climate adaptation?

#### 4.2.1 Den Bosch

#### Instrumental

Currently, the climate adaptation team is not extensively involved in citizen participation. DB1 indicated that the current goal of participation primarily lies in informing citizens about the municipality's plans in various locations. This is partly because some municipal employees view citizen input as a necessary task rather than something useful.

DB2 highlighted that a fundamental objective of citizen participation is to cultivate support, aiming for the implemented measures to be utilized as intended. This is an instrumental rationale. DB2 also mentioned the importance of inspiring residents to take action themselves: "To show that we are working towards our 2025 goals and trying to make progress, but we can't do it alone." By taking action, the municipality hopes to inspire residents to green their own gardens.

The instrumental rationale is evident in the documents as well. Making the municipality climate-resilient is deemed a collective responsibility of the municipality, institutions, businesses, and residents. It is reiterated multiple times that the municipality cannot achieve its climate resilience goals alone and that the cooperation of residents is essential, especially considering that the majority of the land is privately owned.

#### Other

For the energy team, which is seen as a front-runner and example when it comes to citizen participation in the municipality of Den Bosch, the aims are to create support (instrumental) and gather information from residents (substantive). But there is also the belief that it is a democratic duty of a government to facilitate participation. DB3 says, "Citizens naturally expect their government to be involved ... It may not yield anything for the municipality, but that's just how it is." This can be classified as a normative rationale. However, this does not yet specifically reflect the current goals of the climate-adaptive theme but rather an overarching vision of the municipality.

## 4.2.2 Groningen

#### *Instrumental*

In Groningen, both G1 and G2 emphasized as a primary concern for the involvement of citizens in climate adaptation that they own the majority of the city's land. The sentiment of 'we cannot do it alone' is emphasized in this context. Additionally, G2 mentioned the importance of building support for other municipality projects in public spaces.

Generating support for the decision outcomes is also mentioned in the policy documents as one of the goals of citizen participation. Moreover, in the documents it is also stated that the municipality alone can not reach its climate adaptation goals and needs the support of its citizens.

#### Normative

Furthermore, both G1 and G3 stated that the municipality has a very clear normative perspective on citizen participation in climate adaptation. G1 emphasized the importance of involving less privileged citizens, stating that across all programs, they strive to make additional investments in the more vulnerable northern neighbourhoods. The goal is to ensure that these people do not get left behind and can actively participate in society. She stressed a crucial reason for participation as ensuring that "people truly know and recognize the municipality as an organization that they can benefit from."

G3 also mentioned that individuals who are not usually at the forefront with their opinions and those who may experience opposition from the government are the ones that should be involved. Additionally, G3 expresses a personal vision that people should have control over what happens in their own living environment, especially those with lower incomes who are often more tied to their place of residence.

This normative perspective can also be found in 'Groenplan Groningen: Vitamine G'. There it is stated that participation in greening projects can contribute to broader social involvement of the participants.

## 4.2.3 Nijmegen

#### Instrumental

In Nijmegen, the goal was mentioned to involve citizens in climate adaptation considering the significant amount of private land they own. Additionally, creating support for the decisions

made was cited as an argument for citizen participation. Both can be classified as an instrumental rationale.

#### Substantive

In addition to an instrumental rationale, a clear substantive rationale emerges in the participation objectives of the municipality of Nijmegen. Both N1 and N3 stated that involving citizens in policy-making and implementation is primarily aimed at improving the policy. N3 stated, "Residents have local knowledge. They know what happens on that street every day. So, ensure that you gather that input so you can improve your plan." N1 mentioned, "What I always say at a citizens' meeting is, this is the project we have in mind. But it's your environment. You know how things are there. I only come there occasionally." Additionally, N3 emphasized the importance of residents' skills. For instance, they can contribute to decision-making in procurement processes, or residents with expertise in biodiversity can participate in deciding which greenery is placed where.

The spatial vision of Nijmegen aligns with both the instrumental and substantive rationale: "Participation is important for the support and quality of plans. By involving citizens and businesses in plans, they usually improve, and there is more understanding and acceptance."

The participation policy for the spatial domain mentions various goals that can be classified under all three rationales. The first goal mentioned is that participation should improve trust in the government, which is an instrumental goal. The second goal is to enhance the involvement of residents in decision-making, thereby increasing their engagement with the city. This can be seen as a normative goal. The third goal is that participation improves the quality of policies. This is a substantive objective.

### 4.2.4 Zwolle

## Instrumental

The goals of the Municipality of Zwolle regarding citizen participation in climate adaptation predominantly have an instrumental character. There is a belief that citizens themselves must be willing to green their surroundings, and the municipality cannot achieve this on its own. Both Z1 and Z2 see the role of the municipality primarily as stimulative, especially since there are no laws or other tools for the municipality to enforce certain measures in the context of

climate adaptation. Additionally, Z2 mentioned the example of greening a parking lot. In this case, citizens were mainly asked for their opinions to create support for the municipality's plans.

This instrumental rationale is also underscored by the policy documents 'Community Building Strategy West-Overijssel' and 'Zwolle maakt zich op voor het nieuwe klimaat – een adaptatiestrategie voor iedere Zwollenaar'. In the first mentioned, it is stated that "half of the city is private land. It is therefore not only the authorities that are faced with this task, it requires residents, authorities, entrepreneurs, educational and knowledge institutions to work together".

#### *Normative and substantive rationale*

In the spatial vision, however, there is also a more normative and substantive rationale regarding the objectives for citizen participation. For example, it is stated that "the value of citizen involvement has been evident in the creation of this spatial vision. The input, critical perspectives, and good advice have made a significant contribution to the content of this spatial vision. These lessons learned will guide us in the future." This suggests that participation improves the outcomes of the policy and thus aligns with a substantive rationale. It is also mentioned that participation is important for strengthening the social structure and self-reliance of the area, fitting within the normative rationale.

It should be noted, however, that the spatial vision does not specifically focus on climate adaptation but rather on spatial planning in general. When specifically examining citizen participation for climate adaptation, there is still a prevailing instrumental rationale.

## 4.2.5 Summary

The following table presents an overview of the objectives for citizen participation in climate adaptation policies of the four municipalities:

**Table 3**Overview of objectives for citizen participation in urban green policies

Municipality	Objectives
Den Bosch	Instrumental rationale
Groningen	Instrumental and normative rationale
Nijmegen	Instrumental and substantive rationale
Zwolle	Instrumental rationale

## 4.3 Conditions

Section 4.3 answers subquestion 3: Which of the five conditions for citizen participation of Lowndes (2006) are met by this strategy?

### 4.3.1 Den Bosch

### Can do

In Den Bosch, there is currently no specific consideration given to whether vulnerable groups are enabled to take part. DB2 said, "Whoever can, will come. But I do think there is some thought beforehand that, of course, you shouldn't host a resident meeting at 11.00 in the morning on a Tuesday or organize it on a Friday evening. Those are, of course, the logical things you take into account. But ultimately, a date is chosen when colleagues are available to facilitate it." DB1 expressed the same sentiment: "I'm afraid it's still often a case of whoever comes, comes, and if not, then not."

#### Like to

In terms of motivation, the municipality of Den Bosch puts in effort to cultivate this among its citizens. This is primarily based on the belief that citizens need to be inspired to take action themselves, as the municipality cannot achieve all its goals alone. DB2 said, "I do think that some responsibility lies with us, certainly. But there will always be a group that you won't convince. But it should never be the case that you haven't tried." She also noted that motivation can be approached in various ways, even in extreme cases by prohibiting certain actions.

DB1 indicated that cultivating motivation plays a role within the team, but there are no significant overarching goals or specific programs established yet. She mentioned that this falls partly within the social domain.

She also mentioned that a behaviour campaign is being developed, scheduled to launch in 2024. This campaign will specifically target sustainability, greening, and making one's own home and garden more climate-adaptive. She thinks that motivation will also be an aspect of the campaign, but it is still quite abstract in its setup.

The importance of motivation is also highlighted in policy documents. The municipality sees its role as a catalyst for motivation by setting a good example. In communication with citizens, the aim is to achieve behavioural change. However, there is not yet a specific consideration for vulnerable residents.

### Enabled to

The municipality of Den Bosch deploys district managers to establish a direct connection between the municipality and its residents. These managers essentially serve as points of contact when residents want to address something or organize an event. When there are problems, they are the ones who handle the issues and then internally communicate the feedback to the policymakers. Whether vulnerable residents can also easily reach out to the district managers remains a question. In practice, residents in more affluent neighbourhoods tend to have better access to the municipality. DB1 mentioned "If you are dealing with a neighbourhood that, for example, has a lower income, then the priority is simply more focused on the energy transition."

DB2 further indicated that within the team, discussions are ongoing about establishing a separate point of contact for greening and climate adaptation. This is because there are indications that when seeking contact with the municipality, people are often directed to various offices and might not immediately reach the right person. However, she acknowledges that this may vary depending on the subject. When specifically considering climate-related matters, she does not think that residents would easily find the right person to contact.

### Asked to

Citizens are approached by sending letters. Although this is a traditional method, the interviewees said that it is still an effective way to reach all residents: "I mean, when you receive a letter from the municipality, you almost always open it" (DB2). However, DB1 noted: "But when I look at the letters I receive from the municipality, I don't get the impression that they are understandable for everyone."

Additionally, neighbourhood newspapers and neighbourhood social media platforms are used. This includes a Facebook group, which seems an effective method to reach vulnerable citizens. Furthermore, the district managers are often well-informed about the ways citizens in the area can be reached.

In the document 'Collaborating for a Sustainable 's-Hertogenbosch,' it is also mentioned that the municipality proactively engages in conversations with its citizens. The municipality responds to ideas that arise when businesses or citizens identify new opportunities.

## Responded to

When it comes to providing feedback, the interviewees found that there is still room for improvement. Right expectations must be set beforehand about the process and the feedback.

However, DB2 noted that the team climate adaptation does not have much experience with this, partly because there has not been much involvement in citizen participation, but also because there is seldom resistance from residents when it comes to their climate adaptation policies. DB1 mentioned that for the 'Pientere Tuinen' (Smart Gardens) project, a summary of the key points discussed is always sent after a meeting.

In the document 'Samenwerken aan een duurzaam 's-Hertogenbosch', it is stated that when involving residents, explicit attention will be paid to expectation management.

## 4.3.2 Groningen

#### Can do

The interviewees expressed that they believe that not enough is happening from the municipality when it comes to enabling vulnerable citizens to participate. G1 mentioned that this aspect is given the least consideration, mentioning an example where, for choosing a location and time for a public input meeting, the first consideration is colleagues' schedules rather than whether all citizens can attend. Additionally, no financial assistance is provided for attending a meeting. G3 said that, as a result, those with other concerns on their minds may be unable to participate.

However, efforts are made to accommodate residents in a nearby venue and to schedule input meetings at different times. G3 also highlighted that the community meeting place in the central shopping centre of a disadvantaged neighbourhood serves as an easily accessible space for citizens to come and voice their opinions.

### Like to

All interviewed policymakers in Groningen indicated that the city puts in significant effort to foster motivation among its citizens, including the more vulnerable ones. As G2 stated: "That's why we focus so much on informing and encouraging." To achieve this, they have established 'Duurzaam Groningen', which is both a website and social media channel providing information and featuring citizens who are already engaged in greening initiatives. Additionally, in each new residential area, one of the houses is provided with an 'example garden', which is fully greened. In this way, the municipality hopes that it inspires the neighbours to also choose for a green garden.

G3 mentioned that, for motivation, having a clear physical meeting place in the heart of a vulnerable neighbourhood makes people more likely to be motivated to participate. However,

G3 emphasized that cultivating motivation should not turn into coercion. The municipality must ensure that there are no barriers preventing someone from participating, but ultimately, the motivation should come from the individual.

The importance of fostering motivation among citizens to green their surroundings is mentioned in all three analysed policy documents. In Groenplan Groningen: Vitamine G, it is stated that "The importance of a green and attractive living environment is not equally recognized in all neighbourhoods and villages. We will focus more on communication and participation to inform our residents about why green in your immediate living environment is important and encourage them to make use of it." This is also the goal of the 'Climate Adaptation Week', a week organized by the municipality full of accessible public activities, such as a tour of the region highlighting good examples, lectures, workshops, and various cultural activities related to the theme of climate adaptation. The objective is to raise awareness among residents about the challenges and inspire them to take action.

### Enabled to

According to all three respondents, the municipality of Groningen is easily accessible for its (vulnerable) residents. However, recognizing that there often remained a significant distance between residents and the municipality, the city has appointed neighbourhood- and climate ambassadors. These individuals, that are residents of a neighbourhood, contemplate how to make the neighbourhood more climate-adaptive. Starting from January 1, 2024, two full-time paid staff members will be appointed for these roles in the more vulnerable neighbourhoods. They will actively engage with the community to develop plans and identify areas where they can provide assistance.

Moreover, citizen organizations such as 'Co-creatie Paddepoel' ensure that citizens have a direct line to the municipality. These initiatives aim to bridge the gap and establish effective communication channels between the community and the local government.

### Asked to

The concept of being 'asked to' aligns closely with being 'enabled to' in Groningen. This is because the individuals serving as points of contact in the neighbourhoods are also the ones actively seeking citizens' opinions when necessary. For instance, the two new staff members for the northern neighbourhoods will engage in conversations with vulnerable residents. Community centres are also utilized to reach out to vulnerable residents. As G2 put it: "If a

letter comes from the municipality, people are less inclined to respond compared to when it comes from, for example, Co-creatie Paddepoel."

However, both G1 and G2 noted that language barriers are not currently being addressed. While letters are written at a B1 level of readability, they are not yet available in different languages.

In the policy documents, it is mentioned more than once that the municipality should exert greater effort to reach out to vulnerable citizens and not solely rely on citizens themselves to approach the municipality. In 'Klimaatbestendig Groningen 2020-2024' it is stated that, "These participation projects prove to be effective but are primarily demand-driven. Therefore, based on this implementation agenda, we will assess whether we need to highlight various projects further, especially in neighbourhoods with relatively many 'urgent' and 'undesirable' situations."

### Responded to

The policymakers in Groningen acknowledge that providing timely responses remains a challenge. Both G1 and G3 mentioned that due to time constraints, it is difficult to always respond quickly to residents and provide thorough feedback. To address the high volume of questions and requests received by the green coordinator, the decision was made to hire two new permanent staff members. It is therefore expected that in the future, the municipality will do a better job of responding to vulnerable citizens.

Another crucial point raised is managing expectations beforehand. G1 mentioned that there have been instances where residents come with a fully developed plan and become disappointed when they realize it does not fit precisely within the established guidelines. This can lead to a loss of motivation, causing people to disengage. Therefore, it is essential to clarify in advance which areas residents can contribute to and where limitations exist. This is currently addressed by clearly indicating on the website that if someone has an idea, they should promptly engage with the green coordinator to discuss the possibilities.

# 4.3.3 Nijmegen

# Can do

In Nijmegen, consideration is given to the varying degrees of citizens' ability to participate within the municipality, but to a certain extent. For instance, participation events are organized at different times, days, and locations, and there is always the option to join digitally if physical

attendance is not feasible. Additionally, each neighbourhood has its own neighbourhood coordinator who possesses knowledge about the residents of the area and how they can best be enabled to participate. However, in terms of specific skills and competencies, there is currently not much consideration given to differences between various groups of residents.

### Like to

N4 observed a significant difference between neighbourhoods regarding the motivation for greening initiatives. Citizens from wealthier neighbourhoods in Nijmegen-Noord often approach the municipality with their own plans, while citizens of less affluent neighbourhoods have rejected the idea of greening a square multiple times. Concrete plans to foster motivation are still in the early stages. According to the interviewees, this will naturally involve a different approach for each neighbourhood, but they do not differentiate between vulnerable and less vulnerable residents. Both N1 and N2 noted that the municipality might not be the best entity to motivate citizens, especially as vulnerable groups can be more sceptical of the government. Therefore, Operatie Steenbreek was initiated by the municipality but executed by Museum De Bastei. Moreover, collaboration with welfare organizations and housing corporations should also make the role of the municipality less visible.

N3 saw motivating citizens as a task for the social domain, as social workers from that domain actively encourage residents to participate in society. N1 pointed out, "If you're just trying to survive every day and you have nothing in terms of money, you're not going to get involved with the whole street and surroundings. You need peace of mind for that. So, we don't reach those vulnerable residents. They are reached by outreach workers. And maybe we can get involved in one of their projects."

N1 concluded, "You just shouldn't try to flog a dead horse ... We tried it. €50,000 was invested over two years. But the results were meagre. And that just confirms the image. Yes, some people don't want to. So you shouldn't pursue that."

### Enabled to

The neighbourhood coordinators and project staff are positioned as the primary points of contact for citizens. They are often the ones approached when people have ideas or want to get involved, although they may not always have direct authority over the content. They act more as intermediaries. However, residents still find it challenging to identify the right individuals to approach. N4 mentioned, "I have also heard feedback from citizens that they find it difficult to

figure out exactly who to contact. We have a pretty extensive municipal website, for example. And if you're a bit unlucky and have different things on your mind or different search terms in your head, you might not find the neighbourhood coordinator. I think that can be improved, that we could centralize those channels a bit more."

Various neighbourhood councils are active and serve as established partners for the municipality because they are able and willing to participate. N3 noted, "You can sometimes have doubts about how well they fulfil that intermediary position, how well they are in contact with their constituency. Questions are raised about that. At the same time, they are always people who can and want to contribute, and there is a lot of benefit in that."

N3 emphasized that a crucial point in the participation policy is a thorough exploration: "Start early. Talk to people. What do they need to get involved? If they want and can participate, what do they need from us so that we can enable them in a good way? You gather all that information right at the beginning, and then you can incorporate it into your participation plan."

#### Asked to

Citizens are invited to participate in various ways, both digitally and analogously. On the digital front, there is 'mijn wijkplan'. This platform showcases projects in their initial phases, providing people with the opportunity to observe and offer feedback. Additionally, for all projects, a letter is sent to the homes of the immediate neighbours, ensuring that everyone who wishes to be involved can be reached in this way.

Project leaders are given considerable flexibility in determining the precise manner in which residents are invited. At the project's outset, the project leader engages in discussions with stakeholders, collectively deciding the most effective ways to involve them.

It is also intended that residents with an initiative first approach their neighbours to invite them to participate. This can be done online through the 'mijn wijkplan' website or by physically going door-to-door.

All communication is designed to be at a B1 level, considering the readability for a broad audience. The use of drawings is intentionally incorporated to clarify certain projects. However, communication is currently conducted only in the Dutch language. Efforts are made to address this by involving organizations like the 'Wijland Bureau', an organization run by an Afghan man that specifically focuses on engaging individuals with a migration background in public spaces.

The spatial vision also indicates that in participation projects where the municipality is the initiator, efforts should be made to involve an representative group of residents, including those not typically reached in participation processes. When another party takes the initiative, it is also necessary to ensure that other potential stakeholders are engaged by this party. This should be done in a way that is understandable to all involved.

## Responded to

In the participation policy of the municipality of Nijmegen, it is explicitly stated that there must always be feedback on what has been done with the results of a citizen participation project. This report is always published on the same website as the invitation and the participation plan. This allows people to follow such a participation process from start to finish.

In practice, N4 noted that although there is an attempt to provide feedback, it does not always succeed. "I think that has to do with many factors, including capacity. We also receive feedback sometimes that people feel that responses from the municipality take too long or are sometimes forgotten. So, that can definitely be improved." An important point here is that better expectation management is needed. N4 stated, "Sometimes we may not be entirely clear upfront about what people can expect in that regard. So, I think we can really make improvements there."

N3 underscored this but also pointed out the complication that when you start early, the boundaries are not always clear: "So, there is a kind of grey area where you already have to talk to people. You already have to find out what interests they have and how they want to be involved. While you don't yet have a very clear idea of what the boundaries will be."

### 4.3.4 Zwolle

#### Can do

Regarding the aspect of being able to participate, the interviewees felt that the Municipality of Zwolle is not doing enough, especially in delivering tailor-made solutions in this area.

An example is given of a climate day organized where residents can visit various 'good examples' of climate adaptation in the city. There, no consideration was given to transportation for people who wanted to attend but did not have their own means of transportation. Additionally, some subsidies, such as those for a rain barrel, prove challenging to apply for in practice for vulnerable groups. The subsidy is highly individual-focused and can only be applied

for online. Thus, digital proficiency and having a digital identification document are prerequisites to obtaining this subsidy.

Z2 said that the ability to participate is closely linked to the willingness to participate. "It is challenging, for example, to enter someone's home if they do not want that. Even with well-designed flyers in different languages, it won't change anything if the person is not willing to engage".

### Like to

The motivation of citizens to make the city more climate-adaptive is considered a crucial point. The Municipality of Zwolle aims to ensure that its residents understand the need to make the city more resilient to climate change. Various activities are organized to achieve this goal, targeting different audience groups. Examples include a website with a climate atlas, serious games such as an escape room and a garden battle game, and citizen science projects. Efforts are made to reach people "from different intrinsic motivations" (Z1). The municipality envisions working towards an inspirational garden, similar to a visitor centre. A physical location where visitors can see what Zwolle is doing in terms of climate adaptation. Additionally, there is a dream to occasionally take Zwolle residents on a bus tour to showcase climate adaptation initiatives of which the city can be proud.

Notwithstanding, the municipality of Zwolle primarily focuses on individuals who are already motivated to take action — the frontrunners. In recent years, extra attention has been given to ensure that initiatives from this group are supported, especially when a citizen approaches the municipality with a plan. Instead of rejecting proposals outright, the municipality looks for possibilities to ensure that the energy and enthusiasm of these residents are sustained. They, in turn, can inspire other (more vulnerable) residents in their neighbourhoods. Z2 mentioned that in his neighbourhood, some residents easily approach him with ideas for greening. However, more effort is needed to motivate residents who are not yet enthusiastic about such initiatives.

### Enabled to

When it comes to enabling, each neighbourhood has an active district coordinator who serves as a contact person for residents. The district coordinator acts as an intermediary between residents and the municipality. Additionally, close collaboration with housing corporations is established, which also serve as contact points.

Furthermore, the Climate Adaptive Team aims to enhance the self-sufficiency of residents, reducing the need for municipal intervention over time. Initially, efforts were made to encourage residents to self-organize and create a network of various parties. Now, the municipality is only involved when other network partners cannot resolve issues themselves, serving as a constant factor to fall back on.

These networks facilitate actions such as applying for subsidies for an entire street at once, ensuring that vulnerable groups are also included. Additionally, the Municipality of Zwolle has a website called 'mijn wijkplan'. On this platform, residents can share their plans for green initiatives. The intention is that more people from the neighbourhood can join these initiatives or find inspiration for their projects.

This is also stated in the spatial vision: "We have the necessary 'antennas' in the neighbourhoods and rural areas of Zwolle, allowing us to assist initiators in making contact and facilitating connections. The municipality always emphasizes to initiators the importance and necessity of this timely involvement."

# Asked to

Both municipal employees are convinced that the municipality is putting in a lot of effort to invite citizens, including vulnerable ones, to participate. An example given was the greening of parking spaces at Griegplein. The municipality sent letters to all residents living nearby and also set up an information booth in the street.

Furthermore, when frontrunners undertake a specific initiative, such as adding more greenery to the street, they are obligated to ask other nearby residents to participate in the project. This approach aims to ensure that the frontrunners also involve more vulnerable residents and encourage them to participate actively.

### Responded to

This is considered a crucial point, especially when it comes to the motivation of citizens. Residents who bring ideas to the municipality must be heard. It should not be the case that when a citizen reaches out with an idea that is not completely in line with municipal vision, no reaction is given. Instead, the municipality should think along and offer different possibilities to participate. Otherwise, all energy and enthusiasm is lost. "Even when it comes to something small, like a planter around a lamppost, it can increase motivation in the whole neighbourhood

to engage in greening. They get enthusiastic together". There are, however, no specific guidelines regarding responding to (vulnerable) citizens.

# 4.3.5 Summary

The following tables present an overview of the extent to which conditions for vulnerable citizen engagement for climate adaptation policies are met for the four municipalities:

 Table 4

 Conditions met for vulnerable citizen participation in Den Bosch

Den Bosch	General policy	Vulnerable citizens
Can do	<ul> <li>More consideration is given to whether municipal workers can attend a meeting rather than citizens.</li> </ul>	<ul> <li>There is currently no specific consideration given to whether vulnerable groups can easily take part.</li> </ul>
Like to	<ul> <li>Efforts are made to cultivate motivation among citizens but there are no significant overarching goals or specific programs established yet.</li> </ul>	<ul> <li>There is no specific consideration given to vulnerable residents when it comes to fostering motivation for climate adaptation.</li> </ul>
Enabled to	<ul> <li>There are district managers to establish a direct connection between the municipality and its residents</li> </ul>	<ul> <li>Whether vulnerable residents can also easily reach out to the district managers remains a question.</li> </ul>
Asked to	<ul> <li>Citizens are approached by sending letters. Although this is a traditional method, the interviewees noted that it is still an effective way to reach all residents.</li> </ul>	<ul> <li>Social media platforms are used.         This includes Facebook groups for all neighbourhoods. This is seen as an effective method to reach vulnerable citizens.     </li> </ul>
Responded to	<ul> <li>Team climate adaptation does not have much experience with giving response because there has not been much involvement in citizen participation.</li> </ul>	<ul> <li>There is no specific consideration given to vulnerable residents when it comes to giving a response.</li> </ul>

**Table 5**Conditions met for vulnerable citizen participation in Groningen

	•	1 1				
Groningen	General pol	icy	Vu	Vulnerable citizen		
Can do	residen schedu	are made to accommodate ts in nearby venues and to le input meetings at nt times.	0	Interviewees believe that not enough is happening from the municipality when it comes to enabling vulnerable citizens to participate		
Like to	signific motiva	unicipality puts in cant effort to foster tion among its citizens a different activities	0	This also includes vulnerable citizens, for example by facilitating a physical meeting place in the heart of a vulnerable neighbourhood		
Enabled to	munici	ewees believe that the pality is easily accessible residents.	0	Two full-time paid staff members will actively engage with the vulnerable citizens to develop plans and identify areas where they can provide assistance.		
Asked to	readabi	are written at a B1 level of ility, but they are not yet le in different languages.	0	The individuals serving as points of contact in the neighbourhoods, are also the ones actively seeking vulnerable citizens' opinions when necessary.		
Responded to		ing timely responses s a challenge.	0	To address the high volume of questions and requests received by the green coordinator, the decision was made to hire two new permanent staff members.		

**Table 6**Conditions met for vulnerable citizen participation in Nijmegen

Nijmegen	General	Vulnerable citizens		
Can do	<ul> <li>Consideration is given to the varying degrees of citizens' ability to participate within the municipality to a certain extent.</li> </ul>	O However, in terms of specific skills and competencies, there is currently not much consideration given to differences between various groups of residents.		
Like to	<ul> <li>Concrete plans to foster motivation for climate adaptation are still in the early stages.</li> </ul>	<ul> <li>No differentiation between vulnerable and less vulnerable residents.</li> <li>Belief that the municipality might not be the best entity to motivate citizens, especially as vulnerable groups can be more sceptical of the government.</li> </ul>		

Enabled to	0	The neighbourhood coordinators and project staff are positioned as the primary points of contact for citizens.	0	However, (vulnerable) residents still find it challenging to identify the right individuals to approach.
Asked to	0	Citizens are invited to participate in various ways, both digitally and analogously.	0	All communication is designed to be at a B1 level, considering the readability for a broad audience. However, communication is currently conducted only in the Dutch language.
Responded to	0	It is explicitly stated in policy plans that there must always be feedback on what has been done with the results.	0	But the municipality gets feedback that people feel that responses from the municipality take too long or are sometimes forgotten.

**Table 7**Conditions met for vulnerable citizen participation in Zwolle

Zwolle	General policy		Vu	Ilnerable citizen
Can do	doing enoug	h, especially in ilor-made solutions in	0	For different forms of participation, digital proficiency and having a digital identification method are prerequisites.
Like to	to ensure that understand the city more res	pality of Zwolle aims at its residents he need to make the silient to climate agh various activities.	0	But most focus is on individuals who are already motivated to take action rather than vulnerable citizens.
Enabled to	district coord	ourhood has an active dinator who serves as son for residents.	0	Efforts were made to encourage residents to self-organize and create a network of various parties, that also includes vulnerable citizens.
Asked to	lot of effort t	pality is putting in a to invite citizens to a nrough different	0	When the frontrunners undertake a specific initiative, they are obligated to ask other nearby (vulnerable) residents to participate in the project.
Responded to	especially w motivation. should alway	dered a crucial point, hen it comes to The municipality ys answer and think citizens come to them	0	However, no specific measures are taken to encourage this, also not for vulnerable citizens.

# 4.4 Policy evaluation

Section 4.4 answers subquestion 4: "How do municipal workers and citizens perceive the municipality's success in engaging vulnerable citizens in participation for climate adaptation?"

### 4.4.1 Den Bosch

## Evaluation municipal workers

Both interviewed individuals from the municipality of Den Bosch agree that it is not always easy to involve vulnerable citizens in the development and implementation of climate-adaption policies. Several reasons are mentioned for this. Firstly, the current priority is to involve residents in the energy transition. DB3 mentioned that they have had some success in reaching (vulnerable) residents in this regard, and they hope that this will foster a connection so that these residents will also undertake climate adaptation measures.

Additionally, there is a belief, particularly with DB2 and to a lesser extent with DB1, that involving residents does not always lead to better policies but is sometimes an obligation. DB2 repeatedly stated that, although ideally residents should be involved, in practice, it is often a lengthy process that causes unnecessary delays because there is always someone who disagrees with certain plans. Therefore, since the municipality of Den Bosch has to achieve goals for greening by 2025, this cannot always be done in consultation with residents.

### Evaluation citizens

Unfortunately, for Den Bosch, it was not possible to find a citizen willing to be interviewed for this research in time. Attempts were made to reach a citizen from a vulnerable neighbourhood by contacting the neighbourhood councils of these areas. They conveyed the request to their citizens, but there was no response. In addition, the interviewed policymakers were unable to connect me with citizens from these neighbourhoods. Furthermore, the municipality of Den Bosch does not have an open online citizen platform, which was for example used to reach the interviewed citizen of Nijmegen.

# 4.4.2 Groningen

# Evaluation municipal workers

In general, the three municipal employees of the municipality of Groningen are satisfied with how well the municipality succeeds in involving vulnerable citizens in participation related to climate adaptation. They acknowledged that the process may not always proceed smoothly at every moment, and there are certainly areas where improvements can be made. Nevertheless, concerted efforts are being made, particularly for vulnerable groups. G3 added the observation that there always remains a group of vulnerable individuals who, due to circumstances, cannot voice their opinions, underscoring the importance for municipal employees to always consider their interests, whether they participate or not.

Importantly, all three interviewees emphasized the significance of participation as a theme and its crucial role in the development and implementation of policies. As G2 stated: "I believe you shouldn't aim to do without participation at all,, and indeed, you cannot do without it."

#### **Evaluation Citizens**

A citizen from Groningen, involved in the neighbourhood council and residing in one of the northern neighbourhoods in Groningen, believes that there is still much room for improvement in terms of capability and willingness. He observes that predominantly older white men are the ones making their voices heard in the neighbourhood centre. Addressing this challenge requires efforts from both the municipality and the residents themselves. He acknowledges that accessibility is generally satisfactory. Particularly for vulnerable residents, having an informal space to express concerns without immediately entering a formal process is beneficial, as many of them might be hesitant to do so.

However, he noted that the connection from the neighbourhood centre to the municipality can be somewhat challenging. While the local team is willing to support various initiatives and brainstorm on their development, the entire municipal organization is not yet at the same level. Therefore, he emphasized the need for a different mindset across the entire municipality, where employees in such a municipal structure recognize that they are serving the community, not just the municipality.

# 4.4.3 Nijmegen

### Evaluation municipal workers

The employees of the municipality of Nijmegen share the same opinion that, in general, residents are well-involved, but specifically, the more vulnerable residents are not as much. N3 stated, "Regarding residents in general, I would say it's going quite well. There are many excellent examples where residents are genuinely involved and satisfied with it. But there is

definitely room for improvement. So, there are also examples where it's not going well at all. And specifically, concerning hard-to-reach citizens, that is not going well. And no one has a clear answer on how to improve that."

This raises the question of whether vulnerable citizens always need to be involved. Although everyone agrees to this to a certain extent, some suggest that time and energy would be better invested in residents who are already motivated to contribute to greening initiatives. Involving citizens (who may not want to be involved) can also prolong the process, which may not always be desirable.

#### Evaluation citizens

The interviewed citizen lives in a socio-economically vulnerable neighbourhood and initiated a greening project in her neighbourhood in 2018. She believes that the municipality is not putting in enough effort to involve residents in greening initiatives. "We had to take this initiative entirely on our own. And we also had to advocate for our say in the matter." Especially for more vulnerable residents, it is not sufficient that they can only proactively submit an idea themselves.

She also believes that when an idea is submitted, there is often unclear and negative feedback. "A response should not only focus on the content of what someone thinks. But there should be a much better response to the process. And further process guidance should be clear as well. There have been many initiatives, I think, submitted about greenery over the past years. But nothing has happened at all."

However, she was positive about the contact with the district coordinators when her initiative had gained some traction. There is also potential for the district coordinators to collaborate better with each other and with welfare organizations to support residents.

Lastly, it is important for the municipality to carefully examine the functioning of a neighbourhood council as they are not always representative for the entire neighbourhood.

### 4.4.4 Zwolle

## Evaluation municipal workers

Both municipal employees indicated that they are already quite successful in serving and assisting the frontrunners in implementing their climate adaptation projects. Now, it remains to be seen whether this enthusiasm permeates to the general public and the vulnerable citizens. According to Z1, this is already happening occasionally, but there is room for improvement.

#### **Evaluation Citizens**

The citizen of Zwolle who was interviewed (Z3) took the lead in greening her neighbourhood along with some fellow residents. Overall, she is very satisfied with the accessibility of the municipality. Although it was initially challenging to figure out exactly who to contact within the municipality, she believes that the municipality is making a good effort to assist citizens with their greening initiatives.

It is important to note that citizens need to approach the municipality with their ideas, and the municipality does not actively seek contact with citizens. However, for every initiative, it is a requirement that everyone in the neighbourhood should be informed. In this way, for Z3's initiative, some citizens who were not previously involved or active in greening became engaged.

As a suggestion to the municipality, Z3 proposes organizing an information session in the community centre. This could be an easy way to clarify for citizens how to contact the municipality and the exact role of the district managers.

## 4.4.5 Summary

The following table presents an overview of how municipal workers and citizens perceive the municipality's success in involving vulnerable citizens in their decision-making processes in the four municipalities:

 Table 8

 Perceived success of vulnerable citizen involvement in urban green policies

Municipality	Municipal workers Citizen
Den Bosch	<ul> <li>It is not always easy to involve on the vulnerable citizens in the development and implementation of climate-adaption policies.</li> </ul>
	<ul> <li>It is believed that involving residents does not always lead to better policies</li> </ul>
Groningen	<ul> <li>Municipal workers are satisfied with how well the municipality succeeds in involving vulnerable citizens in participation related to climate adaptation.</li> <li>Citizen is generally satisfied but believes that there is still much room for improvement when it comes to the connection</li> </ul>
	<ul> <li>Participation is seen as a crucial part of policymaking.</li> <li>between the neighbourhood centres and the municipality.</li> </ul>

Nijmegen	<ul> <li>In general, residents are well- involved, but specifically, the more vulnerable residents are not as much.</li> </ul>	0	The municipality is not putting in enough effort to involve (vulnerable) residents in greening initiatives.
Zwolle	<ul> <li>The municipality is already quite successful in serving and assisting the frontrunners in implementing their climate adaptation projects.</li> </ul>	0	Overall, she is very satisfied with the accessibility of the municipality. For vulnerable citizens it
	<ul> <li>Now, it remains to be seen         whether this enthusiasm         permeates to the general public         and the vulnerable citizens.</li> </ul>	O	might be difficult to contact the municipality

# 5. Discussion

In this section, the empirical results from the previous chapter are combined and analysed to find causal mechanisms. These findings are then discussed and compared to academic literature.

### 5.1 Mechanisms

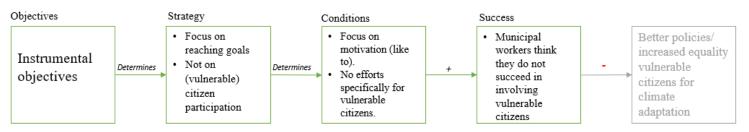
In this paragraph, the empirical results from the previous chapter are combined and analysed to answer subquestion 5: "What causal mechanism is there between the objectives set by the municipality, the conditions met, and the involvement of vulnerable citizens?"

#### Mechanism 1

The first mechanism that was discovered starts with objectives with an instrumental rationale, meaning that public participation may be an instrument to make environmental policies more effective by making the decision process more legitimate (figures 4 and 5). Then, in the municipality of Den Bosch, it was found that these instrumental objectives for citizen participation lead to a strategy in which there is a focus on reaching goals and not on citizen participation. This is described in mechanism 1a (figure 4). Regarding the conditions, most focus is then on creating motivation (like to). For the other four conditions, there are some efforts made, for example by reaching citizens through district coordinators. However, there is no effort made to specifically reach vulnerable citizens. Hence, the interviewees mention that they do not succeed in involving vulnerable citizens in their climate adaptation policies. They however stress that it is not always necessary to involve citizens in policy-making as it is time-consuming and does not necessarily lead to better policies.

Figure 4

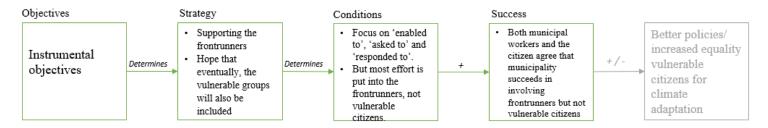
Causal Mechanism 1a



Mechanism 1b, found in Zwolle, is similar to mechanism 1a as both start with an instrumental rationale and lead to municipal workers who are not convinced that they successfully engage vulnerable citizens in participation for urban green policies (figure 5). Similarly to mechanism 1a, there is some effort made to meet the conditions, but not specifically for vulnerable citizens. However, mechanism 1b differs from 1a as for mechanism 1b (in Zwolle) the municipal workers try to help people already willing and motivated to take action (frontrunners) hoping that this will also inspire other (vulnerable) citizens to take action. Citizen participation in this mechanism is seen as important, although there were also drawbacks mentioned.

Figure 5

Causal Mechanism 1b



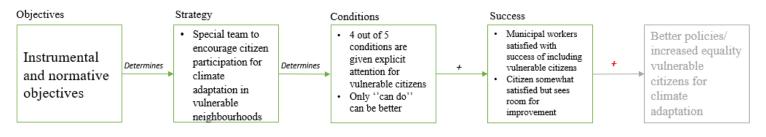
### Mechanism 2

The second mechanism starts with objectives with both an instrumental and normative rationale (figure 6). From a normative point of view, public participation in environmental policies is a (democratic) goal in itself. The municipality puts in much effort to foster motivation among vulnerable citizens, to have community centres in vulnerable neighbourhoods and to actively reach out to them. This matches the conditions 'like to', 'enabled to' and 'asked to'. To become better at responding to vulnerable citizens, new workers are hired. Regarding the condition 'can do' there is still room for improvement. So, 4 out of 5 conditions are given explicit attention for vulnerable citizens in the municipality.

The municipal workers are satisfied with how well they are able to include vulnerable citizens in their climate adaptation policies. Moreover, they explicitly stress the importance of citizen participation for vulnerable citizens and society as a whole. The interviewed citizen is also somewhat satisfied although he sees room for improvement, especially for the connection between the neighbourhood centres and the municipality.

Figure 6

Causal Mechanism 2

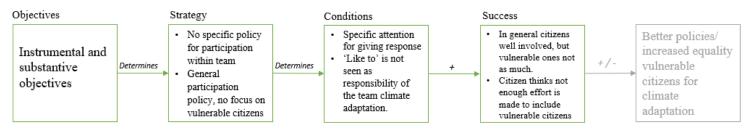


Mechanism 3

For the third mechanism, besides an instrumental rationale, there is also a substantive rationale (figure 7). Objectives in the substantive rationale emphasise the potential of public participation to improve the quality of the decision output. Regarding the conditions, there is specific attention for giving a response. Both in the documents and in the interviews this is seen as an important condition that needs special attention. For 'can do', 'asked to', and 'enabled to' efforts are made but there is still room for improvement, especially when it comes to vulnerable citizens. The condition 'like to' is not seen as the responsibility of team climate adaptation.

The municipal workers believe that, in general, residents are well involved, but vulnerable citizens are not as much. Both advantages and disadvantages of public participation were mentioned when it comes to whether citizen participation leads to better policies or more equality. The interviewed citizen believes that the municipality is indeed not putting enough effort into involving vulnerable citizens. Especially giving responses and guiding citizens in the participation process needs extra attention.

**Figure 7**Causal Mechanism 3



# 5.2 Objectives

The next section describes how the findings on the different mechanisms compare to the literature on citizen participation in climate adaptation.

#### Instrumental rationale

Research on citizen participation (in general) in the Netherlands shows that its development and implementation differs widely from one municipality to another: some municipalities strive for innovation, while others maintain participation measures at the minimum level possible (Van Eijk, 2014). This is in line with the findings of this research that shows mechanism 1 on the one hand, with only limited citizen participation, and mechanism 2 on the other hand, with a more prominent role for citizen participation, including vulnerable citizens.

Van Eijk (2014) also showed that citizen participation is often not seen as a goal in itself but as a means to reach another goal. This was also the conclusion of two other studies on the objectives of citizen participation in The Netherlands (De Graaf et al., 2011; Michels, 2006). These studies found that citizen participation is mainly seen as an instrument to strengthen and support the way representative democracy now functions. Participation is not inherently valued on its own, but rather, it is employed as a means to enhance the broader acceptance of decisions and increase local politics' legitimacy. This can be classified as an instrumental rationale. When specifically looking at citizen participation in climate adaptation, similar objectives are found (Brockhoff et al., 2019; Few et al., 2007). Citizens in the Dutch city of Utrecht are hardly involved in the local decision-making process on pluvial flooding (Brockhoff et al., 2019). The city's current strategy is primarily focused on supplying information about climate adaptation to spur civic action. These residents are, in turn, expected to use this information to implement adaptation measures. Public inclusion in decision-making on climate change adaptation in coastal areas of the UK showed that the goal for community involvement was that "it obtains community consent" and that it likely leads to less-contested outcomes if management plans receive broad local support (Few et al., 2007). This is also an instrumental rationale.

So, these studies all mention instrumental objectives for citizen participation, except for the case study of Utrecht where there is no role for citizen participation at all. These findings match this research as in all studied municipalities at least an instrumental rationale for citizen participation was found. This trend can be attributed to the fact that in the Netherlands citizens are increasingly expected to bear responsibility for addressing issues like climate adaptation

(Uittenbroek et al., 2019). This sentiment of 'we can not do it alone' is mentioned in all studied municipalities multiple times.

When it comes to mechanisms, there is one case study on citizen environmental planning in which there are instrumental objectives for participation (Conrad et al., 2011). This is a case study in the island state of Malta, in which both policymakers as well as citizens involved were asked about their experiences with citizen participation in environmental planning. Planners and policymakers regarded public participation as essential for effective policy implementation, ensuring that policies are successfully implemented on the ground and pre-empting conflicts between various uses. It was also stated that participation provides valuable complementary information to professionals. These arguments can be seen as an instrumental and substantive rationale, respectively. Regarding involving vulnerable citizens, not much effort is put in by the municipality, as researchers found that citizens were responsible for their own involvement. Moreover, participation was only in the Maltese language, whereas the country is officially bilingual. This means that minority groups could not participate in their own language.

So, in this case study there seemed to be a similar mechanism as mechanism 1 or mechanism 3 since there is mostly a functional role for citizen participation according to policymakers, corresponding with an instrumental or substantive rationale. This then also corresponds to low involvement of vulnerable citizens. However, it must be noted that the studies can not be completely compared since there is no specific focus on all conditions for citizen participation in the Maltese case study.

### Normative rationale

Although the instrumental rationale makes up the dominant view in Dutch citizen participation, some municipalities consider citizen participation as essential to democracy (Michels, 2006). This is in line with mechanism 2, in which a normative rationale corresponds to a municipality actively trying to involve (vulnerable) citizens in their policies. Mechanism 2 is in this research present in Groningen. Other research on citizen participation in Groningen from 2010 also found a normative approach to citizen participation in the city (Michels & De Graaf, 2010). The municipality of Groningen opted to grant citizens a greater influence in local matters by allocating a budget directly to residents and local organizations who had devised specific proposals for enhancing their neighbourhoods.

In a Dutch case study on the design and objectives for citizen participation in climate adaptation projects, three municipalities were studied; Rotterdam, Kockengen, and Tiel (Uittenbroek et al., 2019). In all three municipalities, at least a normative rationale for the objectives was found. However, in the study, there is no clear correlation between this normative rationale and the involvement of vulnerable citizens. For the Kockengen case, the municipality put in effort to organise different types of participation meetings. However, no specific efforts were mentioned for vulnerable groups. Moreover, at least in the eyes of some respondents, the voices of the residents were not sufficiently heard when it came to influencing key decisions in the program. For the Rotterdam case, it was concluded that the municipality put in specific effort to involve different (vulnerable) citizen groups. However, in this specific case, the municipality also would obtain a national subsidy if they invested in public participation. It is therefore questionable if the effort was indeed caused by the normative objectives of the policymakers or incentivized by the subsidy. For the Tiel case, the municipality tried to involve all residents (also vulnerable ones) by knocking on doors and by holding a survey.

So not all cases studied by Uittenbroek et al. match the findings of this study that setting normative objectives leads to better involvement of vulnerable citizens. However, as for the Maltese case study, there was no specific focus on all five conditions or vulnerable citizens in this study, but rather a general description of the participation practices.

It is also remarkable that all studied projects involve objectives in the normative rationale whereas in this study that is the exception. A possible explanation for this is that in this study municipalities in general are studied whereas in the research of Uittenbroek et al., the focus is on specific projects. Within these projects, more effort is put into the details of the design of citizen participation, which can lead to the formulation of more objectives, including normative ones. For this current study, the general trends within a municipality regarding objectives for citizen participation were studied. Further research should look into this difference between general objectives for citizen participation in climate adaptation in a municipality and the objectives in adaptation projects.

### 5.3 Conditions

This section will discuss the findings on the conditions met in the four studied cases.

#### **CLEAR**

In the three identified mechanisms, the number of conditions met for vulnerable citizen participation differs. One commonality is that none of the municipalities puts in (enough) effort to meet the condition 'can do'. Moreover, only the municipality of Groningen puts in effort to foster motivation (like to) for their vulnerable citizens. These findings are in line with a study that looked at the participation notes of 31 municipalities in The Netherlands (De Graaf et al., 2011). They also used the CLEAR framework and found that especially the conditions 'can do' and 'like to' remain underexposed. They conclude that this is not surprising, as both strongly emphasize the citizen's perspective.

The condition 'responded to' is considered very important by most interviewees. However, not in all municipalities special measures are taken to adequately respond to (vulnerable) citizens. De Graaf et al. (2011) also found that in many documents, listening and providing feedback are considered very important. However, it is noticeable that although this condition is seen as very important in all cases, not many specific measures are taken to guarantee that all citizens are responded to in a timely manner.

### Can do

As stated in the previous paragraph, the condition 'can do' is not met in any municipality. This is, however, in many studies seen as a very important factor when it comes to equal chances of participation (Few et al., 2007; Fledderus, 2015; A. Michels & De Graaf, 2010; Roberts, 2004; Turnhout et al., 2010). The degree to which meaningful participation is achievable largely hinges on the particular capacities and skills of the participants involved (Few et al., 2007). Effectively expressing your views and representing your interests within dominant frameworks demands not only an understanding of these frameworks but also effective communication skills, creativity, and courage (Turnhout et al., 2010). Furthermore, as a society, we are becoming increasingly reliant on information and computer technology. Consequently, there is a growing gap between those who have access to information and technology (the information-rich and computer-literate) and those who do not (the information-poor and computer-illiterate) (Roberts, 2004). This will lead to self-selection as to who can participate and who not (Fledderus, 2015). Lastly, there is also a vicious circle in place as participating also teaches a

citizen certain skills (Michels & De Graaf, 2017). Citizens excluded from participation will not acquire these and are therefore even less likely to participate in the future.

#### Trust

Besides the CLEAR conditions, there is another prerequisite for the involvement of vulnerable citizens that is often mentioned by the interviewees, which is trust. Previous policy or participation practices have an impact on subsequent participation efforts and can either reinforce positive cycles of trust or negative cycles of distrust (Uittenbroek et al., 2019). This policy feedback can affect whether (vulnerable) citizens want to participate again. Moreover, the experience of other citizens can also influence the willingness to participate of citizens who have not participated before. Distrust arises when citizens have the feeling that they are not being heard. What matters most is that a municipality fulfils its promise to the public regarding participation, rather than solely focusing on achieving the highest level of participation (Fitzgerald, 2022).

This is partly considered in the CLEAR framework under the condition 'responded to'. However, many interviewees of all four studied municipalities mentioned that not only a response afterwards is necessary but, more importantly, clear boundaries on what exactly the citizens can give their opinion on, should be set beforehand. In this case, citizens know what to expect and do not get disappointed when certain decisions are already made (Turnhout et al., 2010).

## Reflection on framework

As mentioned in the theory section, the CLEAR framework states that it is not always necessary that all five conditions are met to involve (vulnerable) citizens (Lowndes et al., 2006). But in this research it does seem the case that the more conditions met, the more satisfied the municipal workers are with how well they involve vulnerable citizens. In general, the hypothesis therefore still holds that, especially for the more vulnerable citizens, municipalities should try to have as many conditions met as possible.

However, in none of the researched municipalities, all five conditions are met. Yet, in Groningen municipal workers are still satisfied with how well they involve vulnerable citizens. Therefore, municipalities could do their own local and context-based research to look at which conditions are essential for their vulnerable citizens to participate specifically (Tonkens & Verhoeven 2019).

A notable aspect of the CLEAR framework is its non-hierarchical and non-sequential nature among its five factors (Evans & Pratchett, 2013). The presence of one factor is not a prerequisite for the others. This is also underscored by this research. In all four cases, the first condition, 'can do', is only met to a certain extent. Nevertheless, other conditions are met to a greater extent.

# 5.4 Perceived success and better policy

Although this research did not explicitly look into whether or not the engagement of vulnerable citizens actually led to better policies and fewer inequalities, the view of municipal workers on this topic was asked in the interviews. From these interviews, it became clear that more effort is put into vulnerable citizen engagement in a municipality where there is a belief among the municipal workers that citizen engagement is essential and leads to better policies and/or a more equal society (mechanism 2). On the other hand, municipal workers less in favour of citizen participation mentioned that it is a time-consuming process that often makes simple decisions unnecessarily complex. In this municipality, less effort is made to include vulnerable citizens (mechanism 1).

### Does citizen participation lead to better policy?

Whether citizen participation actually leads to better policy-making and/or benefits for society is contested in literature (Few et al., 2007; Michels & De Graaf, 2017; Newig et al., 2023; Wamsler et al., 2020). A case-based meta-analysis on how different dimensions of stakeholder participation improve (or diminish) environmental governance outcomes, found that citizen participation did not significantly improve environmental outcomes (Newig et al., 2023). This is, however, not taking into account other positive effects citizen participation may have.

### Benefits

There are different possible positive effects of citizen participation (Michels & De Graaf, 2017; Ohnuma et al., 2022). Citizen involvement in policymaking makes people feel more responsible for public matters and increases public engagement (Michels & De Graaf, 2010). Furthermore, it fosters an environment where individuals are encouraged to listen to a diverse range of opinions, thereby promoting mutual understanding. Furthermore, when implemented correctly, citizen participation holds the potential to enhance equity by incorporating a broader array of

voices, including those from vulnerable citizen groups (Toxopeus et al., 2020). Other benefits include social learning, an enhanced sense of belonging, environmental stewardship, and inclusiveness and equity, in general (Kiss et al., 2022).

However, measuring these potential benefits remains a difficult task (Burton & Mustelin, 2013; Rowe & Frewer, 2000). The main problem in the evaluation of participation methods is the absence of any optimal benchmark against which they might be compared and measured (Serrao-Neumann et al., 2015). Moreover, this research also showed that the evaluation of the interviewed citizen does not always match the evaluation of the municipal workers. This also shows that there are different views on the capabilities of the municipality and that objective evaluation remains a difficult task.

## Citizen participation in climate adaptation

So, although citizen participation may not increase the effectiveness of environmental policies, it is likely that it has benefits for society as a whole and for equality for vulnerable citizens (Kiss et al., 2022; Michels & De Graaf, 2017; Ohnuma et al., 2022; Toxopeus et al., 2020). Moreover, in all four municipalities, it was at least once mentioned that involving citizens in climate adaptation is necessary to reach the climate adaptation goals of the municipality. This is because a large share of municipal land is owned by its residents. Therefore the involvement of citizens, at least in the implementation phase of policymaking, is not a choice but rather an essential part of urban green policies.

Socio-economic vulnerable citizens will probably not own a large share of this land as they do not have the money for it. However, they could be involved in the uptake and maintenance of greening initiatives in their surroundings. Therefore, it is crucial that this is done correctly and that vulnerable citizens are actively involved to ensure that their voices are heard, thereby mitigating further inequality (Irvin & Stansbury, 2004; Mees et al., 2019; Michels & De Graaf, 2017; Wamsler et al., 2020).

### **Beliefs**

Whether or not citizen participation actually has benefits for society, this research shows that there at least might be a correlation between the *perceived* effectiveness of citizen participation and how well vulnerable citizens are involved. In mechanism 1a the objectives for citizen participation are instrumental, not much effort is put in to engage vulnerable citizens and there is also a belief amongst the two interviewees that citizen participation does not necessarily lead

to better outcomes. On the other hand, in mechanism 2, there are instrumental and normative objectives for citizen participation, much effort is put into engaging vulnerable citizens and there is a belief amongst the three interviewees that citizen participation is an essential part of policy-making. Moreover, N3 also specifically mentioned that the success of how well (vulnerable) citizens are involved directly depends on one's personal beliefs of how important citizen participation is. Brink & Wamsler (2019) also stress in their research the importance of personal values and worldviews in climate adaptation policies.

This suggests that the relationship between objectives, conditions and (perceived) effectiveness may not be linear as proposed in the analytical framework, but rather has a circular component in which the perceived effectiveness of citizen participation also influences the objectives. Therefore, further research should look into these possible feedback loops.

It should however be noted that this is not the case for mechanisms 1b and 3, where interviewees were not as outspoken on whether including vulnerable citizens can improve policies and equality. For these municipalities, both advantages and disadvantages were mentioned for including citizens in decision-making processes.

# 5.5 Citizen participation and Co-production

From the interviews, it became clear that participation is a very broad topic that is differently interpreted by everyone. For example, some interviewees immediately thought of citizen-led initiatives. This is, however, in academic literature not seen as citizen participation but rather as co-production (Mees, 2022). As stated in the theory section, this research looks at all forms of policy-making in which citizens are involved, so also co-production. Notwithstanding, differentiating between co-production and citizen participation yields interesting insights.

#### **Terms**

Firstly, it shows that, on average, municipal workers are not aware of the differences between citizen participation and co-production. Uittenbroek et al. (2019) also found that for public participation, there is still conceptual and empirical confusion about what public participation entails. The aforementioned Maltese case study found that the definition of participation in public policy is too broad, leaving room for variable interpretation, and involvement of the public in many different ways and at different levels (Conrad et al., 2011).

### *More co-production*

What became clear from the interviews was that co-production is of importance for each municipality. This is because adaptation measures can not be taken by the municipality alone since a large share of land is private property. To reach climate adaptation goals, it is necessary that citizens also take steps to place more green on their property.

Increasing co-production implies a shifting role for the municipality, gradually transitioning towards more networking, stimulation, and facilitation (Mees et al., 2019; Rosol, 2010). Municipalities have to adapt their internal operations to the wishes and needs of the public (Fledderus, 2015). This shift may result in organizational uncertainty regarding costs, working methods, and outcomes. This might explain the difference in why citizen participation is further integrated in certain municipalities compared to others.

Mees et al. (2019) mention that co-production potentially increases inequity among citizen groups, since highly educated wealthy citizens are more inclined to start (greening) initiatives. The CLEAR framework therefore remains useful to ensure equal chances of participation for all citizens, also when it comes to citizen initiatives (Bakker et al., 2012).

## 5.6 Limitations

This section presents some limitations to this research.

## Representability

Firstly, only a few interviews are conducted with municipal workers to get a view of how the municipality operates. Although there are always at least two interviews per municipality to get a somewhat more objective view, it remains questionable whether this is representable for the view of the team as a whole. Moreover, as argued in section 5.4, citizen participation depends on *individual beliefs*. It is therefore questionable if there is one general view of the municipality on citizen participation at all. This is also underscored by the fact that policy documents and interviews were sometimes contradictory on the policy for citizen participation. It remains questionable which data source then gives a better insight into the actual way of operating of the municipality.

### Causality

Another limitation is the causality. This research only showed that there seems to be a correlation between the objectives set and the extent to which vulnerable citizens are tried to be

involved. However, to determine if these objectives indeed result in increased citizen involvement, additional research should be conducted to validate this finding. Moreover, other possible explaining factors should be ruled out, for example, the individual beliefs of the effectiveness of citizen participation by municipal workers.

#### Resources

Lastly, the municipality of Groningen puts in the most effort to include vulnerable citizens. However, this is also the case because the municipal board has decided to allocate extra money to vulnerable neighbourhoods. It is therefore questionable if other municipalities are capable of including vulnerable citizens only by setting normative objectives and without these extra resources. Furthermore, even with normative objectives, if a municipality prioritizes other aspects such as achieving specific goals over including vulnerable citizens, it is probable that citizens will not be included.

# 6. Conclusion

This research tried to answer the question:

"How and to what extent do the objectives set by municipalities for citizen participation lead to the engagement of vulnerable citizens in urban green policies, and what lessons about citizen participation policies can be drawn from this for policymakers?"

It was hypothesized that the objectives set by the municipality should be broad enough to cover all five conditions for citizen participation by Lowndes et al. (2006). The conditions 'can do', 'like to', and 'enabled to' require a more normative approach. It was therefore also expected that a normative rationale for the objectives of citizen participation contributes to better involvement of vulnerable citizens.

To answer this question, four case studies were performed in Dutch municipalities. Based on semi-structured interviews with municipal workers, three causal mechanisms were discovered. These causal mechanisms show that when there are normative objectives set for citizen participation in climate adaptation policies, most effort is made by the municipality to engage vulnerable citizens in policy-making. Furthermore, this municipality expressed the most optimism regarding their success in engaging vulnerable citizens. However, since this research has an explorative nature rather than an evaluative one, no conclusions can be drawn on the actual involvement of vulnerable citizens.

When a municipality only has instrumental and/or substantive objectives, it tries to engage vulnerable citizens to a lesser extent compared to the municipality with normative objectives. Moreover, the municipal workers are less satisfied with how well they involve vulnerable citizens compared to the case with normative objectives. There is no clear difference between the cases with only an instrumental rationale and with an instrumental and substantive rationale.

# 6.1 Recommendations for further research

There are two recommendations for further research to better understand the relationship between the objectives set for citizen participation in climate adaptation and the engagement of vulnerable citizens:

### 1. Perform evaluative research

For the case with normative objectives, the municipal workers believe that they are more successful in engaging vulnerable citizens when compared to the cases with only an instrumental or an instrumental and substantive rationale. However, this is only a description of what the municipal workers themselves believe and no objective evaluation. Moreover, the interviews with citizens show that the judgement of the municipal workers does not always align with the opinion of the interviewed citizens on their experience with citizen participation in urban green policy.

Although evaluation is difficult, more research should focus on this so that the actual involvement of vulnerable citizens becomes clearer. It could for example be the case that with normative objectives the municipal workers have the idea that they are doing much to foster vulnerable citizen participation, whereas in reality, the vulnerable citizens do not feel more engaged when compared to cases with instrumental and/or substantive objectives. This could be investigated by conducting interviews with a broader range of (vulnerable) citizens in the municipality to gain a deeper understanding of their perspectives on the municipality's performance in this area, as well as to uncover their motivations and barriers to participation.

## 2. Research Causality

Secondly, there seems to be a correlation between the extent to which vulnerable citizens are tried to be engaged by municipalities and the belief among municipal workers that citizen participation leads to better policies and less inequality. This implies that the relationship between objectives, conditions, and perceived effectiveness may not follow a linear pattern as suggested in the analytical framework. Instead, there may be a circular component where the perceived effectiveness of citizen participation influences the objectives. Further research should investigate these potential feedback loops.

# 6.2 Recommendations for Policymakers

As described in the paragraph above, the results of this research should be interpreted with care. Notwithstanding, the following three recommendations for policymakers about citizen participation policies in climate adaptation can be made:

### 1. Set normative objectives to engage more vulnerable citizens

Based on the findings of this research it can be concluded that setting normative objectives corresponds to more effort put in by a municipality to engage vulnerable citizens in urban green policies. Although the effectiveness of citizen participation in climate adaptation policies is questioned, most scholars agree that when citizen participation is performed correctly there are democratic benefits for society as a whole and for equality for vulnerable citizens in particular. It is therefore recommended to set normative objectives when it comes to citizen participation in urban green policies.

Moreover, this research also showed that there seems to be a correlation between the belief in the benefits of citizen participation, the (normative) objectives set and the extent to which vulnerable citizens are involved. Therefore, it is also important to educate municipal workers on these benefits for society. In daily practice, citizen participation can be a time-consuming and at some points frustrating process in which the added value is not always evident. So, when municipal workers know the long-term benefits of involving vulnerable citizens, they might be more willing to do so.

### 2. Focus on resources and skills needed for participation

All four municipalities mention that only limited efforts are made to ensure that vulnerable citizens 'can' participate. The condition 'can do' means that citizens have the right resources and skills to participate. This is for example time, money, or transport, but also communication and public speaking skills. This condition is of great importance to ensure equal chances of participation between vulnerable and non-vulnerable citizens. It is therefore recommended that municipalities should pay specific attention to this condition when designing public participation practices.

## 3. Prepare the municipality for co-production

The findings of this research show an increasing role for co-production in municipalities. More co-production implies a changing role for the municipality. This role has a more supporting, and networking nature. Municipalities should prepare for this new role, where citizens have more influence To ensure that vulnerable citizens are not left out of co-production initiatives, municipalities should put in effort to stimulate and enable vulnerable citizens to take part in greening initiatives.

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# Appendix A – Nine objectives by Glucker et al. (2013)

Each rationale contains several different objectives.

Based on the normative rationale, the following four objectives are mentioned:

### 1. *Influencing decisions*

Public participation will enable those who are affected by a decision to influence that decision.

2. Enhancing democratic capacity:

Public participation will enable participants to develop their citizenship skills (such as interest articulation, communication and cooperation) and, at the same time, provide participants with an opportunity to actively exercise citizenship.

3. Social learning

Public participation will enable deliberation among participants and thus lead to social learning.

4. Empowering and emancipating marginalized individuals and groups

Public participation will alter the distribution of power within society, thus
empowering formerly marginalized individuals and groups.

Based on the substantive rationale, the following three objectives are mentioned:

- Harnessing local information and knowledge
   Public participation will enhance the quality of the decision output by providing decision-makers with environmentally and/or socially relevant information and knowledge.
- Incorporating experimental and value-based knowledge
   Public participation should improve decision quality by providing decision-makers with experiential and value-based knowledge.
- Testing the robustness of information from other sources
   Public participation should improve decision quality by verifying the reliability of information from various sources

Based on the instrumental rationale, the following two objectives are mentioned:

# 1. Generating legitimacy

Public participation will legitimize the decision-making process, thus providing legitimacy to the authority and facilitating project implementation.

# 2. Resolving conflict

Public participation in should help identify and resolve conflicts before final decisions are made, easing project implementation.

# Appendix B – Policy Documents

**Table A**Document list of the Municipality Den Bosch

No	Title	Year	Type
1	Koersdocument Omgevingsvisie 's- Hertogenbosch	2022	Spatial vision document
2	's-Hertogenbosch Groen en Klimaatbestendig – Bouwsteen voor de Bossche omgeving	2021	Document on climate adaptation
3	Samenwerken aan een duurzaam 's- Hertogenbosch	2019	Document on climate adaptation and participation

**Table B**Document list of the Municipality Groningen

No	Title	Year	Type
1	Omgevingsvisie Groningen: Levende Ruimte	2021	Spatial vision document
2	Groenplan Groningen: Vitamine G	2020	Document on climate adaptation
3	Klimaatbestendig Groningen 2020-2024: Een uitvoeringsagenda op klimaatadaptatie	2020	Document on climate adaptation

**Table C**Document list of the Municipality Nijmegen

No	Title	Year	Туре
1	Nijmegen stad in beweging – Omgevingsvisie 2020 – 2040	2020	Spatial vision document
2	Participatiebeleid voor het ruimtelijke domein	2022	Participation document for spatial domain
3	Regionale Adaptatie Strategie Rijk van Maas en Waal	2019	Regional climate adaptation document

**Table D**Document list of the Municipality Zwolle

No	Title	Year	Туре
1	Mijn Zwolle van morgen 2030 – Omgevingsvisie	2021	Spatial vision document
2	Community Building Strategy West- Overijssel	2019	Participation document
3	Zwolle maakt zich op voor het nieuwe klimaat – Een adaptatiestrategie voor iedere Zwollenaar	2019	Document on Climate adaption

# Appendix C - List of interviewees

**Table A**Interview list of Municipality Den Bosch

Reference	Actor type	Specification
DB1	Policy maker	Team water and climate
		adaptation
DB2	Policy maker	Team green and climate
		adaptation
DB3	Policy maker	Team energy transition

**Table B** *Interview list of Municipality Groningen* 

Reference	Actor type	Specification
G1	Policy maker	Team climate adaptation
G2	Policy maker	Team climate adaptation
G3	Neighbourhood spokesman	Vulnerable neighbourhood
G4	Citizen	Neighbourhood Paddepoel

**Table C** *Interview list of Municipality Nijmegen* 

Reference	Actor type	Specification
N1	Policy maker	Team climate adaptation
N2	Policy maker	Team climate adaptation
N3	Policy maker	Team citizen participation
N4	District coordinator	Team climate adaptation
N5	Citizen	Neighbourhood Neerbosch-Oost

**Table D**Interview list of Municipality Zwolle

Z1 Policy maker Team climate ac Z2 District coordinator Vulnerable neig	
Z2 District coordinator Vulnerable neig	laptation
	hbourhood
Z3 Citizen Neighbourhood	Holtenbroek

# Appendix D – Interview Guide (in Dutch)

#### Introductie van het interview

Dank voor uw deelname aan mijn onderzoek. Mijn naam is Marloes Belgers, en op dit moment ben ik bezig met mijn master 'Sustainable Development' aan de Universiteit Utrecht. Mijn studie richt zich vooral op het beleid voor de transitie naar een duurzame samenleving. Als onderdeel van mijn afstuderen schrijf ik op dit gebied een master thesis. In mijn thesis richt ik mij specifiek op hoe gemeentes burgers kunnen betrekken bij het maken en uitvoeren van klimaatadaptatiebeleid. Ik focus hierbij op de gemeentes Groningen, Zwolle, Nijmegen, Den Bosch, en Leiden.

#### Achtergrond

Het staat vast dat de effecten van klimaatverandering steeds zichtbaarder worden. Dit is onder andere zichtbaar in dichtbebouwde steden, waar hittegolven en hevige neerslag steeds vaker voor overlast zorgen. Een mogelijke oplossing voor deze uitdagingen is het vergroenen van stedelijke gebieden. Deze aanpak bevordert zowel klimaatadaptatie en verbetert de leefbaarheid van de stad. In deze context streven veel gemeenten ernaar om in samenwerking met burgers na te denken over waar en hoe groene initiatieven kunnen worden gerealiseerd. Het blijkt echter dat vooral welvarende burgers deel nemen aan deze participatie-initiatieven, terwijl de buurten met kwetsbaardere bevolkingsgroepen vaak het meest te lijden hebben onder de gevolgen van klimaatverandering. Het hoofddoel van mijn onderzoek is dan ook om te onderzoeken hoe gemeenten specifiek de meest kwetsbare burgers kunnen bereiken en betrekken bij het ontwerpen van hun klimaatadaptatiebeleid. Door middel van interviews probeer ik de doelen van gemeenten te achterhalen voor het betrekken van burgers bij het maken en uitvoeren van adaptatiebeleid. Daarna kijk ik of deze doelen leiden tot een strategie die voldoet aan vijf voorwaarde voor effectieve burgerparticipatie.

#### Interview Etiquette

- Het interview zal worden opgenomen. Dit vergemakkelijkt het data-analyse proces.
- Er zijn geen "goede" of "slechte" antwoorden op de vragen, ik ben benieuwd naar voorbeelden en ervaringen in de praktijk.
- Laat het mij weten wanneer een vraag onduidelijk is of u het antwoord niet weet of liever niet wilt geven.

# Interview Vragenlijst Gemeentemedewerkers

De vragenlijst is als volgt gestructureerd: eerst zullen er een aantal algemene vragen gesteld worden om een wat beter beeld van u en uw functie te schetsen. Vervolgens zal de focus liggen op de doelen die de gemeente stelt voor burgerparticipatie. Hierna wordt gekeken welke strategie voor het betrekken van burgers hier uit voortvloeit, bijvoorbeeld inspraakavonden of vragenlijsten. Van deze strategie wordt gekeken aan welke vijf voorwaarde voor het effectief betrekken van kwetsbare burgers wordt voldaan. Het interview is semigestructureerd en de vragen zullen dus gebruikt worden als richtlijn voor het interview.

#### Algemeen

- 1. Zou u zich kort even voor kunnen stellen?
- 2. Wat is uw rol binnen de gemeente?
- 3. Heeft u ervaring met burgerparticipatie?

#### Kwetsbare burgers

In dit onderzoek staat het betrekken van kwetsbare burgers in klimaatadaptatie centraal.

"Kwetsbaar" duidt hier zowel op burgers die de effecten van klimaatverandering het hardste treffen én die door hun sociaaleconomische positie lastig hun stem kunnen of willen laten horen in burgerparticipatie initiatieven van de gemeente.

1. Is er binnen uw gemeente een duidelijk beeld van welke burgers "kwetsbaar" zijn en waarom? Zowel op klimaatadaptatie als op participatie vlak?

#### Doelen

- Wordt burgerparticipatie ingezet door de gemeente voor het maken of uitvoeren van klimaatadaptatiebeleid?
- 2. Zo ja, wat wil de gemeente bereiken met deze burgerparticipatie? Gaat het bijvoorbeeld vooral om meer kennis op te doen of om de burgers een stem te geven?
- 3. Wordt er speciale aandacht gegeven aan de kwetsbare, moeilijk te bereiken burgers?
- 4. Is iedereen binnen uw afdeling op de hoogte van deze ambitie?
- 5. Merkt u dat de doelen (of ambitie) die de gemeente voor ogen heeft ook de doelen zijn die in praktijk nagestreefd worden? Zit hier verschil in?

#### Strategie

 Hoe zou u de strategie omschrijven waarmee jullie (kwetsbare) burgers proberen te betrekken bij het maken of uitvoeren van klimaatadaptatie beleid? Denk bijvoorbeeld aan het organiseren van bijeenkomsten of het sturen van online vragenlijsten.

- 2. Kunt u hier voorbeelden van geven?
- 3. Is er bij het kiezen van een bepaalde methode voor het betrekken van (kwetsbare) burgers rekening gehouden met wat de gemeente met de burgerparticipatie wil bereiken?

#### Voorwaarden

De volgende vragen gaan over de voorwaarden voor effectieve burgerparticipatie van Lowndes et al. (2006). Zij stellen dat voor het effectief betrekken van kwetsbare burgers er aan de volgende vijf voorwaarden moet worden voldaan:

- "Kunnen": Dit betekent dat kwetsbare burgers de middelen en kennis moeten hebben om deel te nemen.
- "Willen": Hierbij gaat het erom dat kwetsbare burgers een gevoel van betrokkenheid hebben dat de deelname versterkt. Ze moeten gemotiveerd zijn om deel te nemen.
- "In staat gesteld worden": Dit houdt in dat kwetsbare burgers de gelegenheid moeten krijgen
  om deel te nemen, ondersteund door bestaande netwerken en groepen die deelname
  kunnen faciliteren en een route kunnen bieden naar besluitvormers.
- "Gevraagd worden": Dit betekent dat kwetsbare burgers gemobiliseerd moeten worden via overheidsinstanties en maatschappelijke kanalen. Ze moeten actief worden uitgenodigd om deel te nemen.
- "Reactie krijgen": Dit houdt in dat kwetsbare burgers bewijs moeten zien dat hun standpunten in overweging zijn genomen en dat er op hun inbreng is gereageerd.
- 1. Herkent u zich in deze voorwaarde uit de literatuur?
- 2. Zijn er nog andere belangrijke voorwaarde voor kwetsbare burgers om te participeren die hier nu niet wordt genoemd?

#### "Kunnen"

- 1. Wordt er door de gemeente ingeschat welke kennis en vaardigheden (kwetsbare) burgers hebben (o.a. spreken in het openbaar, het schrijven van brieven, bijeenkomsten organiseren etc.)?
- 2. Wordt er door de gemeente ingeschat welke kennis en vaardigheden (kwetsbare) burgers tenminste zouden moeten hebben om deel te nemen?
- 3. Wordt er door de gemeente de mogelijkheid geboden aan kwetsbare burgers om kennis en vaardigheden te vergroten of gebruik te maken van bepaalde middelen (internet, printers) die nodig zijn om deel te kunnen nemen?

### "Willen"

- 1. Is het duidelijk binnen de gemeente of en zo ja hoe kwetsbare burgers willen participeren? Is daar eerder ervaring mee opgedaan en is er zicht op de motivatie van kwetsbare burgers om deel te nemen?
- 2. Wordt er nagegaan of kwetsbare burgers onderdeel zijn van een gemeenschap die bereid is om deel te nemen aan burgerparticipatie?
- 3. Heeft de gemeente plannen of beleid om zulke betrokken gemeenschappen te stimuleren? "In staat gesteld worden"
  - 1. Is de gemeente op de hoogte van hoe kwetsbare burgers in staat gesteld kunnen worden om te participeren?
  - 2. Is de gemeente op de hoogte van bestaande netwerken en groepen die deelname door kwetsbare burgers kunnen faciliteren en een route kunnen bieden naar besluitvormers?
  - 3. Is er binnen de gemeente beleid over hoe deze netwerken en groepen versterkt kunnen worden?

#### "Gevraagd worden"

- 1. Is het binnen de gemeente duidelijk of en zo ja hoe kwetsbare burgers gevraagd worden om te participeren: is er een externe positieve stimulans tot participatie?
- 2. Hoe worden kwetsbare burgers uitgenodigd om deel te nemen/hun mening te geven?
  Worden hier verschillende strategieën voor toegepast?
- 3. Hoe worden (kwetsbare) burgers aangespoord om deel te nemen? Is dit enkel een uitnodig of worden er extra strategieën toegepast?

#### "Reactie krijgen"

- 1. Is het binnen de gemeente duidelijk of en zo ja hoe er naar (kwetsbare) burgers wordt teruggekoppeld, over zowel de inhoud als het proces?
- 2. Wordt er duidelijk gemaakt hoe er gecommuniceerd wordt? Via welke kanalen (krant, huisaan-huisbrief, internet, e-mail, twitter, buurthuis etc.) vindt dit plaats?
- 3. Hoe wordt er feedback geleverd over de afwegingen die zijn gemaakt en prioriteiten die zijn gekozen om een beslissing wel/niet te nemen?

#### Succes betrekken burgers

- 1. Welke van de voorwaarde zijn naar uw inzicht het belangrijkst om kwetsbare burgers te betrekken? Hoe merkt u dat in de praktijk?
- 2. In hoeverre slaagt de gemeente er in ook de kwetsbare burgers te bereiken in hun burgerparticipatie initiatieven? Zijn hier voorbeelden en/of getallen over bekend?

3. Komt de hoeveelheid kwetsbare burgers die wordt betrokken en de manier waarop dit wordt gedaan overeen met de doelen/wensen van de gemeente?

#### Effectiviteit participatie

1. Denkt u dat het betrekken van kwetsbare burgers er voor zorgt dat hun mening ook daadwerkelijk gehoord en meegenomen wordt in het vormen van klimaatadaptatie beleid? Of is het meer een formaliteit?

### Verdere vragen

- 1. Heeft u zelf nog vragen?
- 2. Kent u collega's die ook met dit onderzoek mee zouden willen doen?
- 3. Kent u (kwetsbare) burgers die mee zouden willen doen aan dit onderzoek?

# Interview Vragenlijst inwoners

Deze vragenlijst behandelt vragen over uw ervaring met burgerparticipatie in uw wijk in de gemeente. Het interview is semigestructureerd en de vragen zullen dus gebruikt worden als richtlijn voor het interview.

#### Algemeen

1. Zou u zich kort even voor kunnen stellen?

#### Burgerparticipatie

- 2. Heeft u ervaring met burgerparticipatie?
- 3. Zo ja, op welke manier bent u wel eens in contact gekomen met de gemeente?

#### Voorwaarden

De volgende vragen gaan over uw ervaring met burgerparticipatie in de gemeente.

#### "Kunnen"

- 4. Kan iedere bewoner in uw wijk gemakkelijk mee participeren? Of zijn daar specifieke vaardigheden of kennis voor nodig (o.a. spreken in het openbaar, het schrijven van brieven, bijeenkomsten organiseren etc.)?
- 5. Heeft u het gevoel dat er door de gemeente rekening wordt gehouden met het geld, tijd en middelen die het inwoners kost om te participeren?
- 6. Wordt er door de gemeente de mogelijkheid geboden aan burgers om kennis en vaardigheden te vergroten of gebruik te maken van bepaalde middelen (internet, printers) die nodig zijn om deel te kunnen nemen?

#### "Willen"

- 1. Zijn de meeste mensen uit uw wijk op de hoogte van participatie initiatieven die de gemeente organiseert?
- 2. Heerst er binnen u wijk het gevoel dat meedoen aan deze initiatieven, of het opzetten van eigen initiatieven en daar de gemeente bij inschakelen, nuttig is en willen mensen daarom dus participeren?
- 3. Sporen inwoners die meedoen met participeren andere bewoners aan om dit ook te doen? "In staat gesteld worden"
  - 1. Denkt u dat het voor alle inwoners van de wijk duidelijk is hoe zij de gemeente kunnen bereiken als zij een idee of initiatief hebben?
  - 2. Is de gemeente op de hoogte van bestaande netwerken en groepen in de wijk die deelname door kwetsbare burgers kunnen faciliteren en een route kunnen bieden naar besluitvormers?
  - 3. Zijn er tussenpersonen of aanspreekpunten in de wijk die in nauw contact staan met zowel de inwoners van de wijk als de gemeente?

#### "Gevraagd worden"

- 1. Wordt u wel eens door de gemeente gevraagd om mee te participeren?
- 2. Op wat voor manier wordt u dan gevraagd? Werkt dit voor alle inwoners?
- 3. Zijn er ook momenten dat u zich juist door de gemeente gepasseerd voelt bij het nemen van beslissingen?

### "Reactie krijgen"

- 1. Is het van te voren duidelijk wat er met de input van de participatie gedaan gaat worden?
- 2. Wordt er naderhand (duidelijk) terug gekoppeld wat er met de input gedaan is?
- 3. Hoe wordt dit gedaan? Werkt dit voor alle inwoners?

De gestelde vragen zojuist gingen over de voorwaarden voor effectieve burgerparticipatie van Lowndes et al. (2006). Zij stellen dat voor het effectief betrekken van kwetsbare burgers er aan de volgende vijf voorwaarden moet worden voldaan:

- "Kunnen": Dit betekent dat kwetsbare burgers de middelen en kennis moeten hebben om deel te nemen.
- "Willen": Hierbij gaat het erom dat kwetsbare burgers een gevoel van betrokkenheid hebben dat de deelname versterkt. Ze moeten gemotiveerd zijn om deel te nemen.
- "In staat gesteld worden": Dit houdt in dat kwetsbare burgers de gelegenheid moeten krijgen om deel te nemen, ondersteund door bestaande netwerken en groepen die deelname kunnen faciliteren en een route kunnen bieden naar besluitvormers.

- "Gevraagd worden": Dit betekent dat kwetsbare burgers gemobiliseerd moeten worden via overheidsinstanties en maatschappelijke kanalen. Ze moeten actief worden uitgenodigd om deel te nemen.
- "Reactie krijgen": Dit houdt in dat kwetsbare burgers bewijs moeten zien dat hun standpunten in overweging zijn genomen en dat er op hun inbreng is gereageerd.
- 1. Herkent u zich in deze voorwaarde uit de literatuur?
- 2. Zijn er nog andere belangrijke voorwaarde voor kwetsbare burgers om te participeren die hier nu niet wordt genoemd?
- 3. Welke van de voorwaarde zijn naar uw inzicht het belangrijkst om kwetsbare burgers te betrekken? Hoe merkt u dat in de praktijk?
- 4. In hoeverre slaagt de gemeente er volgens u in ook de kwetsbare burgers te bereiken in hun burgerparticipatie initiatieven?

### Verdere vragen

- 5. Heeft u zelf nog vragen?
- 6. Kent u (kwetsbare) burgers die mee zouden willen doen aan dit onderzoek?

# Appendix E – Information sheet (in Dutch)

#### Master Thesis -Burgerparticipatie voor Klimaatadaptatie

#### Introductie

Mijn naam is Marloes Belgers, en op dit moment ben ik bezig met mijn master 'Sustainable Development' aan de Universiteit Utrecht. Mijn studie richt zich vooral op het beleid voor de transitie naar een duurzame samenleving. Een belangrijk onderdeel van deze studie is het schrijven van een master thesis. Voor mijn thesis onderzoek ik hoe gemeentes burgers kunnen betrekken bij het maken en uitvoeren van klimaatadaptatiebeleid. Hier voor ben ik op zoek naar beleidsmedewerkers van verschillende gemeenten die werken aan klimaatadaptatie, burgerparticipatie, of een combinatie van beide.

#### Doel van het onderzoek

De effecten van klimaatverandering worden zichtbaarder, met name in dichtbebouwde steden, waar hittegolven en hevige neerslag steeds vaker voor overlast zorgen. Een mogelijke oplossing voor deze uitdagingen is het vergroenen van stedelijke gebieden, een aanpak die de leefbaarheid kan verbeteren en tegelijkertijd klimaatadaptatie bevordert.

In deze context streven veel gemeenten ernaar om in samenwerking met burgers na te denken over waar en hoe groene initiatieven kunnen worden gerealiseerd. Het blijkt echter dat vooral welvarende burgers deelnemen aan deze participatie-initiatieven, terwijl de buurten met kwetsbaardere bevolkingsgroepen vaak het meest te lijden hebben onder de gevolgen van klimaatverandering. Het hoofddoel van mijn onderzoek is dan ook om te onderzoeken hoe gemeenten specifiek de meest kwetsbare burgers kunnen bereiken en betrekken bij het ontwerpen van hun klimaatadaptatiebeleid.

#### Wat wordt er van u verwacht?

Als u geïnteresseerd bent in deelname aan mijn onderzoek, zal ik u uitnodigen voor een interview dat ongeveer een uur in beslag zal nemen. Tijdens dit interview zal ik u verschillende vragen stellen over de strategie van uw gemeente om (kwetsbare) burgers te betrekken bij het vergroeningsbeleid. Het interview kan zowel offline als online plaatsvinden, afhankelijk van wat voor u het meest geschikt is. Uw deelname aan het onderzoek is volledig vrijwillig, en u kunt zich op elk moment terugtrekken als u dat wenst. Om het proces van gegevensanalyse te ondersteunen, zal het interview worden opgenomen.

#### Vertrouwelijkheid en privacy

Alle informatie die wordt verzameld in dit onderzoek zal strikt vertrouwelijk worden behandeld en zal op geen enkele manier onthullen wie u bent. Als u dat wenst, kunt u op elk moment toegang krijgen tot de resultaten van het onderzoek. Tijdens het interview zal er een opname worden gemaakt. Transcripties van de audiobestanden kunnen mogelijk worden gebruikt in gepubliceerde vorm, bijvoorbeeld in een artikel of boekhoofdstuk. Uw naam zal niet worden vermeld, maar in plaats daarvan zal een pseudoniem worden gebruikt (bijvoorbeeld "geïnterviewde 1"). Alle audio-opnames, formulieren en andere documenten die worden gecreëerd of verzameld als onderdeel van het onderzoek, zullen op een veilige locatie worden opgeslagen en zullen binnen 10 jaar na de afronding van het onderzoek worden verwijderd.

#### **Contact**

Mocht u nog vragen hebben dan kunt u mij bereiken via de mail (m.w.belgers@students.uu.nl) of mobiel (06-30859532).

# Appendix F – Informed Consent (in Dutch)

# Master Thesis- Burgerparticipatie voor Klimaatadaptatie

#### Introductie

Mijn naam is Marloes Belgers, en op dit moment ben ik bezig met mijn master 'Sustainable Development' aan de Universiteit Utrecht. Mijn studie richt zich vooral op het beleid voor de transitie naar een duurzame samenleving. Een belangrijk onderdeel van deze studie is het schrijven van een master thesis. Voor mijn thesis onderzoek ik hoe gemeentes burgers kunnen betrekken bij het maken en uitvoeren van klimaatadaptatiebeleid. Hiervoor ben ik op zoek naar beleidsmedewerkers van verschillende gemeenten die werken aan klimaatadaptatie, burgerparticipatie, of een combinatie van beide.

#### Doel van het onderzoek

De effecten van klimaatverandering worden zichtbaarder, met name in dichtbebouwde steden, waar hittegolven en hevige neerslag steeds vaker voor overlast zorgen. Een mogelijke oplossing voor deze uitdagingen is het vergroenen van stedelijke gebieden, een aanpak die de leefbaarheid kan verbeteren en tegelijkertijd klimaatadaptatie bevordert.

In deze context streven veel gemeenten ernaar om in samenwerking met burgers na te denken over waar en hoe groene initiatieven kunnen worden gerealiseerd. Het blijkt echter dat vooral welvarende burgers deel nemen aan deze participatie-initiatieven, terwijl de buurten met kwetsbaardere bevolkingsgroepen vaak het meest te lijden hebben onder de gevolgen van klimaatverandering. Het hoofddoel van mijn onderzoek is dan ook om te onderzoeken hoe gemeenten specifiek de meest kwetsbare burgers kunnen bereiken en betrekken bij het ontwerpen van hun klimaatadaptatiebeleid.

#### Wat wordt er van u verwacht?

Als u toestemt om deel te nemen aan mijn onderzoek, zal ik u uitnodigen voor een interview dat ongeveer een uur in beslag zal nemen. Tijdens dit interview zal ik u verschillende vragen stellen over de strategie van uw gemeente om (kwetsbare) burgers te betrekken bij het vergroeningsbeleid. Het interview kan zowel offline als online plaatsvinden, afhankelijk van wat voor u het meest geschikt is. Uw deelname aan het onderzoek is volledig vrijwillig, en u kunt zich op elk moment terugtrekken als u dat wenst. Om het proces van gegevensanalyse te ondersteunen, zal het interview worden opgenomen.

### Vertrouwelijkheid en privacy

- Alle informatie die wordt verzameld in dit onderzoek zal strikt vertrouwelijk worden behandeld en zal op geen enkele manier onthullen wie u bent.
- Als u dat wenst, kunt u op elk moment toegang krijgen tot de resultaten van het onderzoek.
- Tijdens het interview zal er een opname worden gemaakt. Transcripties van de audiobestanden kunnen mogelijk worden gebruikt in gepubliceerde vorm, bijvoorbeeld in een artikel of boekhoofdstuk. Uw naam zal niet worden vermeld, maar in plaats daarvan zal een pseudoniem worden gebruikt (bijvoorbeeld "geïnterviewde 1").
- Alle audio-opnames, formulieren en andere documenten die worden gecreëerd of verzameld als onderdeel van het onderzoek, zullen op een veilige locatie worden opgeslagen en zullen binnen 10 jaar na de afronding van het onderzoek worden verwijderd.

## Toestemmingsverklaring:

#### Hierbij verklaar ik dat:

- Ik heb dit formulier gelezen of een derden heeft dit aan mij voorgelezen;
- Ik heb voldoende informatie ontvangen over mijn deelname aan dit onderzoek en mijn vragen zijn voldoende beantwoord;
- Ik ga ermee akkoord dat de voor het onderzoek verzamelde onderzoeksgegevens mogen worden gepubliceerd of beschikbaar gesteld, mits mijn naam of andere identificerende informatie niet wordt gebruikt.
- Ik begrijp dat de onderzoeksgegevens, zonder enige persoonlijke informatie die mij zou kunnen identificeren (niet aan mij gekoppeld), met anderen mogen worden gedeeld.

Naam	
Datum	1
Bij dez	en bevestig ik mijn deelname aan het onderzoek:
0	Ja
0	Νρο

# Appendix G - Coding Scheme

### 1) Information

- i. Role in municipality
- ii. Network
- iii. Documents mentioned

# 2) Subquestion 1: strategy

- i. City-specific policy
- ii. Examples of climate adaptation projects including citizens
- iii. Are vulnerable citizens considered as a separate group?

# 3) Subquestion 2: Objectives

- i. Normative
- ii. Substantial
- iii. Instrumental
- iv. Other

# 4) Subquestion 3: Conditions

- i. Can do
- ii. Like to
- iii. Enabled to
- iv. Asked to
- v. Responded to
- vi. Other conditions
- vii. Most important conditions

# 5) Subquestion 4: Success

- i. Perceived success of municipal policies
- ii. Suggestions of citizens