

# Strategies to navigate barriers of citizen participation in Environmental Education Centres



## Master Thesis

Environmental Policy Group  
Wageningen University

Rik Timmers  
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# Strategies to navigate barriers of citizen participation in Environmental Education Centres

**Rik Timmers**

Registration number: 1034725

MSc Management, Economics and Consumer Studies

**MSc Thesis Environmental Policy Group**

Wageningen University

Netherlands

**In collaboration with the research project of Wetenschapswinkel,**

**Wageningen Economic Research and GDO:**

Van educatie naar burgerparticipatie: leren van ervaringen van lokale organisaties  
voor natuur- en duurzaamheidseducatie

Supervisor

Dr. Ir. CSA (Kris) van Koppen

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## Voorwoord

Voor u ligt de masterscriptie “Strategies to navigate barriers of citizen participation in Environmental Education Centres”. Deze scriptie is onderdeel van het onderzoeksproject van de Wetenschapswinkel, Wageningen Economic Research en GDO genaamd “Van educatie naar burgerparticipatie: leren van ervaringen van lokale organisaties voor natuur- en duurzaamheidseducatie”. Deze thesis is geschreven als onderdeel van mijn masterstudie Management, Economics and Consumer studies aan de Wageningen Universiteit.

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## Abstract

Over the past years, several developments in the environmental education sector can be recognised as a result of governmental and societal changes, including amongst others the implementation of new public management and a shift from a narrow focus on environment towards a broader focus on sustainability. Moreover, citizen participation plays an increasingly important role in society and participation is often considered as an important aspect in the transition towards a more sustainable society. Environmental Education Centres (EECs) recognise this importance and want to shift their focus from formal education to citizen participation. As part of a larger research project on this shift of focus, this study aims to identify the barriers that centres can encounter in this process and propose strategies that centres can use to navigate these barriers. In this thesis, I use a mixed method approach including two explorative interviews, a literature review, six expert interviews, a survey and four in-depth interviews. This study will use a theoretical lens based on both the multi-level perspective on transitions developed by Geels as well as the small-wins governance framework developed by Termeer and Metze. My findings indicate that there are five barriers that are often encountered by EECs. These barriers include: difficulties measuring and communicating impact, the lack of mandate or space from municipalities, financial barriers, a lack of free space in the organisation of EECs for knowledge development and innovation related to citizen participation, and difficulties in reaching all target groups. I propose nine strategies that centres can use to navigate these barriers, including: the use of SDG impact tools, the use of citizen science, be a connecting factor between citizens and municipalities, lobby at municipalities when new policies are designed, build a trust relation with the municipality, collaborate more with other EECs, collaborate more with other partners, focus more on the social part of sustainability, and finally, make deliberate and strategic choices on the positioning of centres.

**Key words:** Environmental education, citizen participation, multi-level perspective on transitions, small-wins governance framework

## Dutch executive summary

Een belangrijke missie van veel centra voor natuur- en duurzaamheidseducatie (NDE) en van Gemeenten voor Duurzame Ontwikkeling (GDO), een netwerkorganisatie van 140 NDE centra in Nederland, is het versnellen van duurzame ontwikkeling op lokaal niveau [1]. Zoals uitgelegd door het Planbureau voor de Leefomgeving zijn de meeste burgers in Nederland zich bewust van de noodzaak van deze duurzame ontwikkeling en zijn ze vaak bereid, en ook in staat, om te helpen deze doelen te bereiken. [2]. De NDE centra herkennen het belang van het betrekken van burgers en van het erkennen van burgers als belangrijke stakeholders bij de transitie naar een duurzamere samenleving [3]. Dit betekent dat steeds meer centra hun focus willen verbreden naar het stimuleren en begeleiden van burgerparticipatie. Binnen dit onderzoek wordt burgerparticipatie gedefinieerd als: de actieve betrokkenheid van burgers bij duurzaamheidsprojecten. NDE centra hebben vaak een goede en hechte relatie met burgers en bevinden zich daardoor in een veelbelovende positie wanneer zij besluiten zich te richten op burgerparticipatie. In de praktijk blijkt echter dat veel centra problemen ondervinden wanneer ze de stap naar burgerparticipatie maken [1]. Deze scriptie maakt deel uit van een groter onderzoeksproject naar NDE centra in Nederland die de eerdergenoemde transitie naar burgerparticipatie ten behoeve van duurzaamheid willen maken. GDO wil de centra helpen in deze transitie door het aanbieden van een leertraject. Daarom hebben zij de Wageningse Wetenschapswinkel gevraagd hen te begeleiden in de ontwikkeling van dit leertraject en de benodigde informatie te leveren over barrières die NDE centra kunnen tegenkomen waar het leertraject zich op zou moeten richten. Naar aanleiding van deze uitvraag is in juni 2022 een onderzoeksproject gestart van de Wageningse Wetenschapswinkel en Wageningen Economic Research. Eén van de kenniskloven die daarbij naar voren is gekomen, betreft de vraag tegen welke praktische barrières NDE centra aanlopen en wat veelbelovende strategieën zijn die ze kunnen gebruiken om deze barrières te overwinnen. Deze studie heeft als doel deze kenniskloof op te vullen en nieuwe inzichten en inspiratie te bieden aan de NDE centra in Nederland. Daarbij zal ook onderzocht worden of er verschillen zijn in barrières tussen centra van verschillende groottes en tussen gemeentelijke centra en centra die geprivatiseerd zijn.

Als leidraad voor dit onderzoek zijn de volgende onderzoeksvragen geformuleerd:

### **Hoofdonderzoeksvraag:**

Welke strategieën kunnen NDE centra in Nederland gebruiken om de barrières te overwinnen die ze tegenkomen als ze kiezen voor het verleggen van hun focus van educatie naar burgerparticipatie?

### **Deelvragen:**

Welke barrières komen NDE centra tegen in de transitie van formele educatie naar focussen op burgerparticipatie?

Welke kenmerken van NDE centra zijn van invloed op de barrières die ze ervaren?

Welke strategieën zijn veelbelovend om deze barrières te overwinnen, rekening houdend met de kenmerken die hierop van invloed zijn?

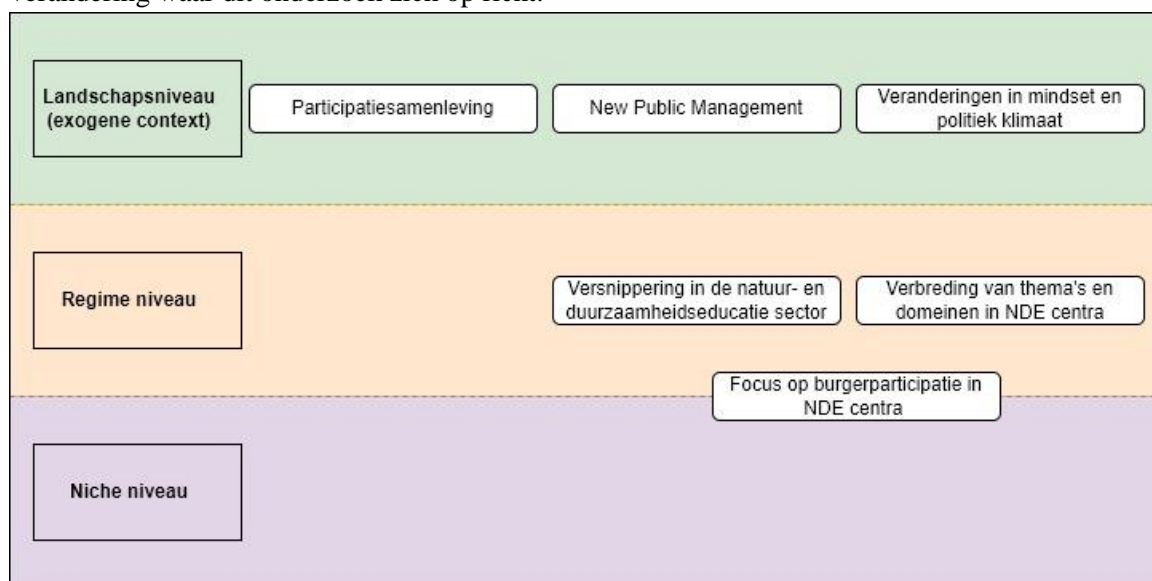
Om deze onderzoeksvragen te beantwoorden heb ik gebruik gemaakt van een mixed-methods aanpak, een aanpak die bestaat uit zowel kwalitatieve als kwantitatieve componenten die elkaar versterken en beiden bepaalde inzichten opleveren. Om te beginnen heb ik twee verkennende interviews uitgevoerd om een eerste beeld te krijgen van het onderzoek en de NDE sector. Vervolgens heb ik vijf interviews met experts uitgevoerd om zowel de belangrijkste transities en ontwikkelingen binnen de NDE sector

te bespreken als ook om een eerste overzicht van de barrières die NDE centra ervaren in de transitie naar burgerparticipatie te verkrijgen. Daarna is een enquête verstuurd naar NDE centra binnen het netwerk van GDO om een meer kwantitatief beeld te schetsen van het NDE werkveld, barrières die centra ervaren en strategieën die ze mogelijk kunnen toepassen. Daaropvolgend heb ik vier diepte-interviews afgenomen met respondenten van de enquête om meer in detail bepaalde barrières en veelbelovende strategieën te bespreken. Ten slotte heb ik nog één extra expert interview gedaan. Naast deze eerdergenoemde methodes heb ik op verschillende momenten van het onderzoek een literatuurstudie uitgevoerd.

### Ontwikkelingen in de NDE sector

Het is belangrijk om te realiseren dat de transitie van focussen op formele educatie naar focussen op burgerparticipatie in NDE centra niet in een vacuüm plaatsvindt. Het is slechts een van de veranderingen die momenteel plaatsvinden op het gebied van milieu- en duurzaamheidseducatie. Daarom is het van groot belang om zowel een historisch overzicht van milieueducatie te geven als een overzicht van het huidige dynamische veld waarin de NDE sector zich bevindt met behulp van één van de belangrijkste theoretische perspectieven van dit onderzoek, het zogeheten multi-level perspective on transitions van Geels [4]. Dit perspectief laat zien hoe transitie kunnen plaatsvinden op drie verschillende niveaus: het landschapsniveau met de exogene context, het regime niveau en het niche niveau. Daarnaast laat het perspectief zien hoe gebeurtenissen op de drie niveaus met elkaar in verband staan en hoe de interacties tussen de niveaus kunnen leiden tot een transitie.

Figuur 1 geeft een overzicht van de belangrijkste veranderingen op het gebied van NDE. Op landschapsniveau kunnen drie ontwikkelingen worden onderscheiden: de opkomst van de participatiesamenleving in Nederland, de implementatie van New Public Management als besturingsvorm in Nederland en veranderingen in de mindset van burgers en het politieke klimaat. Op het niveau van het regime zijn twee ontwikkelingen te herkennen: fragmentatie binnen de NDE sector en de verbreding van thema's en domeinen in NDE centra. Tot slot is op het snijvlak van het regime en niche niveau de transitie naar burgerparticipatie binnen NDE centra te herkennen, de belangrijkste verandering waar dit onderzoek zich op richt.



Figuur 1: Overzicht van de belangrijkste ontwikkelingen in de NDE sector rondom burgerparticipatie in de transitie naar een duurzamere samenleving.

## **Resultaten enquête**

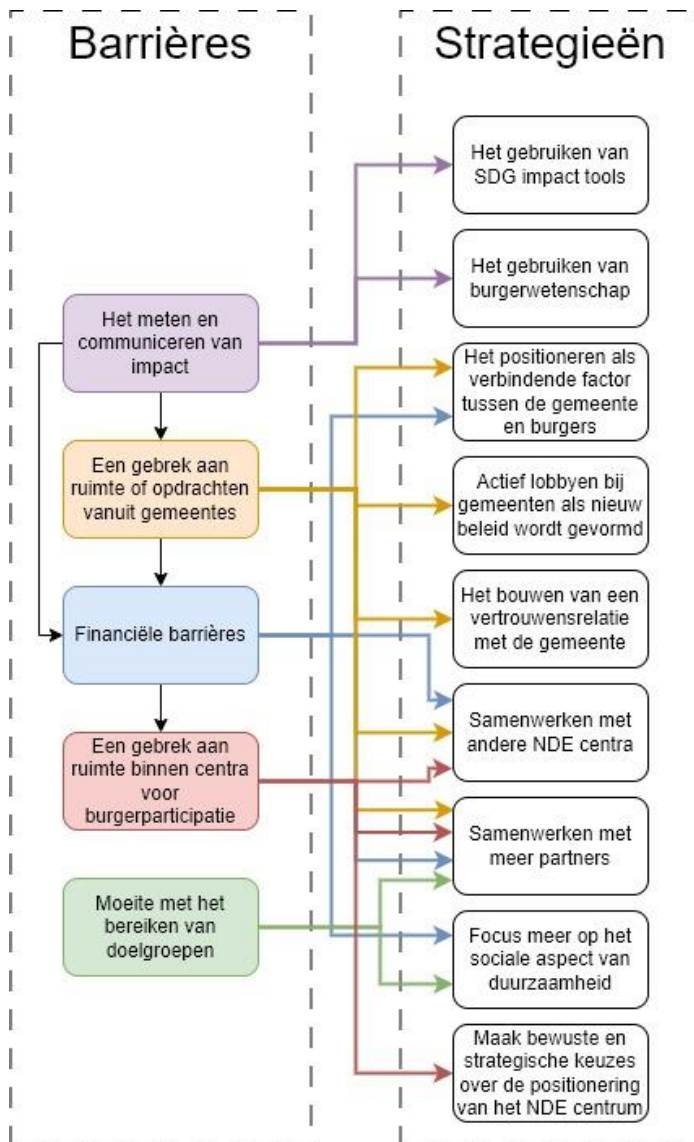
De resultaten van de enquête lieten zien dat de meeste centra denken dat burgerparticipatie in de toekomst een belangrijke taak zal zijn voor NDE centra en dat de meeste centra op dit moment al actief zijn op het gebied van burgerparticipatie. Daarnaast bleek uit de enquête dat veel centra vraaggestuurd en in samenwerking met andere organisaties werken aan burgerparticipatie.

Wat de barrières betreft, gaven de respondenten aan dat ze te maken hebben met financiële belemmeringen, een gebrek aan opdrachten of vrije ruimte vanuit gemeenten, een gebrek aan ruimte binnen hun organisatie, moeilijkheden om alle doelgroepen te bereiken en moeilijkheden om de impact van hun activiteiten en projecten te meten. Andere barrières die in de interviews met experts of in de literatuur werden genoemd, zoals een gebrek aan benodigde competenties, sterke concurrentie van andere partijen, problemen door de harde kant van de overheid en fragmentatie in de NDE sector, bleken daarentegen voor veel respondenten geen probleem te zijn. Daarnaast toonden de resultaten aan dat gemeentelijke afdelingen vaker te maken hebben met een gebrek aan ruimte voor burgerparticipatie binnen hun organisatie dan geprivatiseerde afdelingen. Hiernaast bleek dat kleine centra vaker financiële belemmeringen ondervinden dan grote centra en dat kleine centra vaker denken dat er meer versnippering is in de NDE sector en dat er een gebrek is aan samenwerking tussen NDE centra dan middelgrote centra.

Tot slot kwam uit de enquête naar voren dat respondenten veel mogelijkheden zien voor samenwerking met verschillende gemeentelijke afdelingen en voor verbreding naar verschillende thema's. Daarentegen zien maar weinig respondenten kansen voor nieuwe verdienmodellen met betrekking tot burgerparticipatie.

## **Barrières en strategieën**

Zoals weergegeven in figuur 2 zijn er vijf barrières die veel centra ervaren bij de stap naar burgerparticipatie en negen strategieën die ze kunnen toepassen om met deze barrières om te gaan. De eerste barrière betreft problemen met het meten en communiceren van de impact van activiteiten of projecten, net name het meten van de langetermijneffecten en de sociale impact en doelen blijkt vaak lastig. De tweede barrière bestaat uit een gebrek aan ruimte of opdrachten vanuit gemeentes; niet alle gemeentes zijn zich bewust van de meerwaarde die NDE centra kunnen bieden en hiernaast is in sommige gemeentes onvoldoende aandacht voor thema's rondom duurzaamheid. Een derde belemmering betreft financiële barrières. Deze barrières, die soms versterkt of veroorzaakt worden door de twee eerdergenoemde barrières, spelen met name voor kleinere centra een belangrijke rol. De vierde barrière die geïdentificeerd is in dit onderzoek betreft een gebrek aan ruimte binnen de organisatie van NDE centra om mee te ontwikkelen met nieuwe innovaties en kennisontwikkeling rondom burgerparticipatie. Deze barrière ontstaat vaak als gevolg van financiële barrières of doordat centra te druk zijn met hun huidige activiteiten en projecten. Uit de enquête is gebleken dat dit probleem vaker ervaren worden door centra in de vorm van gemeentelijke afdelingen dan voor geprivatiseerde centra. Ten slotte ervaren veel NDE centra moeilijkheden bij het bereiken van alle doelgroepen, met name burgers met een lager inkomen, lager opleidingsniveau of een migratieachtergrond. Dit gebrek aan inclusiviteit is met name vanuit het oogpunt van klimaatrechtvaardigheid en in context van de Sustainable Development Goals, waarin sterk gefocust wordt op het principe van "leave no-one behind", onwenselijk.



Figuur 2: Overzicht van de vijf barrières en negen strategieën om deze barrières te overwinnen.

Andere barrières die minder vaak ervaren worden door NDE centra maar wel benoemd werden in de interviews of de enquête zijn onder andere:

- De noodzaak om vraaggestuurd in plaats van aanbodgestuurd te werken.
- Concurrentie met betrekking tot burgerparticipatie van andere organisaties.
- Problemen als gevolg van de "harde kant" van de overheid rondom bijvoorbeeld subsidies of vergunningen.
- Verwachtingen managen; ervoor zorgen dat overheidsactoren en burgers gemotiveerd en enthousiast blijven en er tegelijkertijd voor zorgen dat iedereen realistische verwachtingen heeft over projecten of activiteiten.
- Onduidelijkheid over de markt van burgerparticipatie; welke actoren zijn actief en welke acties hebben de meeste kans van slagen.
- De doelgroep van burgerparticipatie is niet zo tastbaar en afgebakend als de doelgroepen voor formeel onderwijs waardoor medewerkers moeite hebben om deze doelgroep te bereiken.
- Het imago van NDE centra; NDE centra worden vaak gezien als een logische partner in projecten gerelateerd aan bijvoorbeeld natuur of biodiversiteit, maar niet voor andere thema's.



- Verschillende benaderingen van burgerparticipatie door overheidsactoren, bijvoorbeeld verschillen tussen de benadering van een gemeente en de provincie.

Ook weergegeven in figuur 2 zijn de negen strategieën die centra kunnen toepassen om de barrières die ze ervaren te verminderen. Zoals te zien in dit figuur kunnen sommige strategieën een uitkomst bieden bij meerdere barrières. Een aantal van de strategieën zal verder besproken worden in de conclusie van deze samenvatting. Voor een meer gedetailleerde beschrijving van de toepassing van de strategieën en de voor-en nadelen die eraan verbonden zijn verwijs ik u graag door naar hoofdstuk 6 van het volledige rapport.

## **Conclusie**

Het voornaamste doel van dit onderzoek was het in kaart brengen van de belangrijkste barrières die NDE centra ervaren als ze hun focus verleggen van educatie naar burgerparticipatie. Hiernaast worden strategieën voorgesteld die centra kunnen gebruiken om deze barrières te overwinnen. Zoals weergegeven in figuur 2, blijkt uit het onderzoek dat centra vijf barrières vaak ervaren als ze hun focus verleggen van educatie naar burgerparticipatie. Deze barrières zijn: het meten en communiceren van impact, een gebrek aan ruimte of opdrachten vanuit gemeentes, financiële barrières, een gebrek aan ruimte binnen centra voor burgerparticipatie en ten slotte moeite met het bereiken van doelgroepen. Er worden negen strategieën geïdentificeerd die centra kunnen gebruiken om deze barrières te overwinnen: het gebruiken van SDG impact tools, het gebruiken van burgerwetenschap, het positioneren als verbindende factor tussen de gemeente en burgers, actief lobbyen bij gemeenten als nieuw beleid wordt gevormd, het bouwen van een vertrouwensrelatie met de gemeente, samenwerken met andere NDE centra, samenwerken met meer partners, focus meer op het sociale aspect van duurzaamheid, maak bewuste en strategische keuzes over de positionering van het NDE centrum.

Zoals de resultaten van de enquête aangeven, hebben kleine centra vaker te maken met financiële barrières dan grotere centra. Daarom zijn voor hen met name strategieën van nut die kunnen worden gebruikt om deze barrières te verminderen. In vergelijkbare zin kunnen NDE centra in de vorm van gemeentelijke afdelingen, die vaker een gebrek aan ruimte voor kennisontwikkeling en innovatie rondom burgerparticipatie binnen hun organisatie ervaren dan geprivatiseerde NDE centra, proberen deze barrière te slechten door het toepassen van de daaraan gerelateerde strategieën.

De belangrijkste aanbeveling van dit onderzoek is om weloverwogen en strategische keuzes te maken. Er vinden veel veranderingen plaats in de sector en centra zouden de tijd moeten nemen om na te denken over hun huidige strategie en positie en een markt- en/of beleidsanalyse uit te voeren. Hiernaast wordt het aangeraden om actief na te denken over problemen en barrières die ze ervaren. Op basis van de uitkomst van deze verrichtingen kunnen centra vervolgens weloverwogen keuzes maken over hun toekomstige strategie en positie. Een positief punt bij het zoeken van een strategie is -zoals veel betrokken aangeven – is de positie van NDE centra als verbindende factor tussen burgers en gemeenten. Centra zijn vaak goed gepositioneerd om te fungeren als een scharnierpunt tussen burgers en gemeenten. Ze zijn een goede partner voor de gemeenten omdat ze kunnen helpen bij het praktisch implementeren van beleidsdoelstellingen en bij het dichten van de kloof tussen beleid en praktijk. Hiernaast genieten centra vaak het vertrouwen van burgers die hen kennen als benaderbare en laagdrempelige organisatie. Bij het invullen van deze positie is het voor de centra belangrijk om een goede balans te vinden tussen bottom-up (vanuit burgers) en top-down (vanuit overheden) benaderingen en tussen verschillende soorten en vormen van burgerparticipatie.

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## Table of contents

Voorwoord .....	ii
Abstract .....	iii
Dutch executive summary.....	iv
1. Introduction.....	1
1.1 Background information.....	1
1.2 Problem statement.....	1
1.3 Research objective and research questions.....	2
1.4 Scope .....	3
1.5 Research approach.....	3
1.6 Outline of the report .....	3
2. Theoretical framework.....	4
2.1 Citizen participation .....	4
2.2 Social learning .....	5
2.3 Transition theory.....	5
2.3.1 General principles.....	5
2.3.2 Application multi-level perspective on transitions to EECs.....	7
2.4 Small-wins governance framework.....	7
2.4.1 General principles.....	7
2.4.2 Application small-wins governance framework to EECs .....	7
3. Methods .....	8
3.1 Explorative interviews .....	8
3.2 Literature study .....	8
3.3 Expert interviews.....	9
3.4 Survey .....	9
3.5 In-depth interviews .....	11
4. Transitions and barriers, according to expert interviews and literature .....	12
4.1 Overview of developments in the field of environmental education .....	12
4.2 Barriers .....	15
4.3 Summary.....	16
5. Results of the survey .....	17
5.1 General information .....	17
5.2 Citizen participation .....	18
5.2.1 Overall results.....	18
5.2.2 Differences between groups .....	21
5.3 Barriers .....	21

5.3.1 Overall results.....	21
5.3.2 Differences between groups .....	25
5.4 Strategies.....	26
5.5 Development of knowledge and expertise on citizen participation .....	29
5.6 Summary.....	29
6. Overview of barriers and strategies .....	31
6.1 The five main barriers that EECs can encounter if they choose to shift their focus from education towards citizen participation.....	32
6.2 Nine strategies to navigate the barriers towards citizen participation.....	34
6.3 Summary.....	41
7. Discussion .....	42
7.1 Reflection on methodology .....	42
7.2 Reflection on theoretical framework .....	42
7.3 Reflection on results and implications of findings .....	43
8. Conclusion .....	46
References.....	47
Appendices .....	51
Appendix A. Interview guide expert interviews .....	51
Appendix B. Survey.....	53
Appendix C. Interview guide expert interviews .....	59

# 1. Introduction

## 1.1 Background information

When it comes to addressing environmental challenges such as climate change or the energy transition, there used to be a strong focus on technological innovations and solutions (van de Ven et al., 2018). However, several studies highlight the importance of behavioural change, arguing that profound behavioural change is needed to successfully address these environmental challenges (van de Ven et al., 2018; Whitmarsh et al., 2021). In achieving this behavioural change, environmental education plays a vital role. A study from Smit et al. (2006) showed that people who received relatively more environmental education in their childhood had a significantly more positive attitude towards the environment as well as more knowledge on environmental themes. According to Stichting Milieu Educatie (SME), there are roughly 200 local organisations in the Netherlands that engage in this environmental education (in Dutch often referred to as NME: natuur- en milieueducatie or as NDE: natuur- en duurzaamheidseducatie) (SME, n.d.). Some of these organisations focus solely on environmental education, often defined as Environmental Education Centres (EECs) whereas for some of these organisations, education is not their most important occupation, including for example botanic gardens or zoos that provide educational activities for their visitors.

## 1.2 Problem statement

Both the overall mission of Gemeenten voor Duurzame Ontwikkeling (GDO), a network organisation of 140 EECs, as well as the mission of many EECs in the Netherlands is “to accelerate sustainable development at the local level” (Wetenschapswinkel Wageningen, n.d.). As explained by Planbureau voor de Leefomgeving (Hajer, 2011), most citizens in the Netherlands are aware of the necessity of this sustainable development and they are often willing and capable of helping to achieve these goals. The importance of involving citizens is highlighted by for example the Sustainable Development Goals of the UN in which they place a strong emphasis on the importance of citizen participation for a successful adoption and implementation of the goals (Fox & Stoett, 2016). Through active participation citizens develop ownership on the issues at stake and the solutions developed and as a result, they are more likely to use these solutions in their everyday life (Fox & Stoett, 2016).

The EECs have recognised the importance of engaging citizens and involving them as stakeholders in the transition towards a more sustainable society (Klein Woolthuis et al., 2023). This means that more and more EECs want to broaden their focus from formal education, often with children as the main target groups towards focusing on citizen participation. Within this study, citizen participation is defined as: the active involvement of citizens and communities in sustainability projects. There are many typologies that describe the broad variety of forms and types of citizen participation, for example those proposed by Arnstein, Pretty and Silverman (Arnstein, 1969; Pretty, 1995; Silverman, 2005). The differences between these types of citizen participation will be explained in more detail in chapter two and the implications of these differences will be further elaborated on in chapter six. The change towards more citizen participation in EECs does not take place in a vacuum. It is only one of the changes that is currently happening in the field of environmental education. Two important changes, the implementation of new public management, leading to for example the privatisation of many EECs, and the broadening of themes and activities in EECs are described by Leussink et al. (2018). However, since these changes have a profound effect on EECs, it is crucial to first identify all relevant changes in the field of environmental and it is this overview that this study will provide.

EECs often have a good and close relationship with citizens and as such are in a promising position when they decide to focus on citizen participation. However, in practice, many EECs encounter difficulties when they make the step to citizen participation (Wetenschapswinkel Wageningen, n.d.). The transition induces several problems and barriers, both internally within the EECs as well as externally in the relationships with their stakeholders and partners. As is shown in figure 1.1, the most important partners include municipalities, businesses, citizens and other EECs.

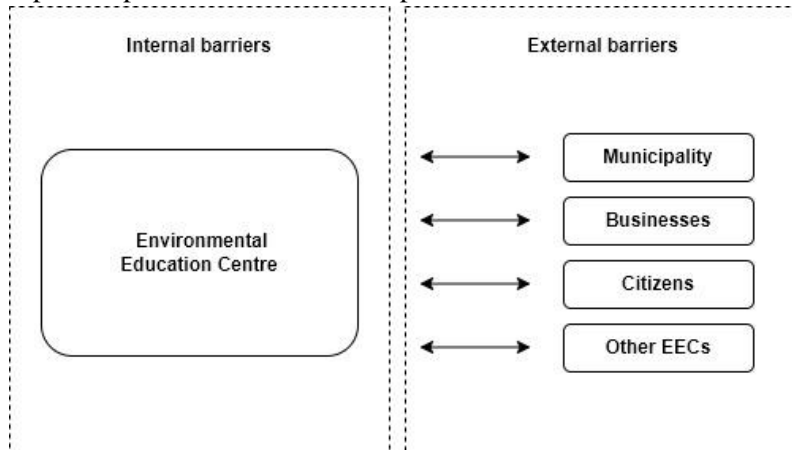


Figure 1.1: Conceptual overview of barriers that EECs encounter.

### 1.3 Research objective and research questions

This thesis is part of a larger research project on EECs in the Netherlands that studies the transition of these centres from focusing on formal education towards focusing on citizen participation. GDO aims to help the EECs in this transition by providing a learning trajectory and they have asked the Wageningse Wetenschapswinkel to help guide them in the development of this trajectory, and to provide the required information on barriers that EECs can encounter that the trajectory should focus on. As a result, a research project was started in June 2022 (Wetenschapswinkel Wageningen, n.d.). At the initial stage of this project, a group of students from Wageningen University studied five innovative EECs as part of an ACT (Academic Consultancy Training) course to provide inspiration for other centres by identifying their best practices. However, this project still left a knowledge gap on the practical barriers that EECs encounter and on promising strategies that EECs can implement to navigate these barriers. This study aims to fill this knowledge gap and provide new insights and inspiration to the EECs. Moreover, no information is currently available on which characteristics of EECs affect these barriers. This study will explore if there are differences in barriers that are encountered between centres of different sizes as well as between municipal centres and centres that are privatised organisations.

Finally, the insights that are gained in this thesis will be used by two other components of the research project. It will be used by a second ACT project that focuses on the development of the learning trajectory for EECs as well as by two interns of GDO that focus on learning tools for EECs. They can use the barriers and strategies that were identified in this thesis as input for their projects. Important to highlight is the explorative nature of this thesis, the study aims to provide a first overview of the barriers and strategies but more in-depth research on specific barriers or strategies might still be required.

To guide this study, the following research questions are formulated:

**Main research question:**

What strategies can Environmental Education Centres in the Netherlands use to navigate the barriers that they encounter if they choose to shift their focus from education towards citizen participation?

**Sub research questions:**

What barriers do Environmental Education Centres encounter in the transition from education to focussing on citizen participation?

Which characteristics of Environmental Education Centres affect the barriers that these centres encounter?

What strategies are promising to navigate these barriers, considering the characteristics of centres?

#### 1.4 Scope

Although all internal and external barriers are highly relevant for EECs, this thesis will focus mainly on both internal barriers as well as barriers related to municipalities and citizens as these barriers are the most important in the transition towards citizen participation. However, this demarcation does not mean that barriers related to businesses and collaboration between EECs are neglected. If interesting insights arise in these areas that are relevant for the transition towards citizen participation, they will be included in this thesis. Next to this, it is important to note that this thesis will only focus on EECs that are part of the GDO network, entailing roughly 140 centres (Gemeenten voor Duurzame Ontwikkeling, n.d.), thereby excluding some other organisations in the Netherlands that focus on environmental education.

#### 1.5 Research approach

To identify the barriers that EECs encounter in the transition from focusing on formal education towards focusing on citizen participation and possible strategies to navigate these barriers, I will use a mixed method approach consisting of both qualitative and quantitative components. In chronological order, I will conduct two explorative interviews, five expert interviews, a survey, four in-depth interviews, and finally one more expert interview. Next to this, I will conduct a literature study on several stages in this study. This study will use a theoretical lens based on both the multi-level perspective on transitions developed by Geels (Geels, 2011), as well as the small-wins governance framework developed by Termeer and Metze (Termeer & Metze, 2019) to highlight the opportunities for EECs to strategically position themselves within the dynamic field of environmental education. These theoretical perspectives will be further elaborated on in chapter two.

#### 1.6 Outline of the report

The remainder of this report has the following structure: chapter two will elaborate further on the theoretical concepts and perspectives that were used in this study. After this, chapter three describes the methods that were used as part of the mixed-methods approach of this research. In chapter four, an overview of the dynamic field of NDE and the developments that are taken place in this sector are provided. Chapter five will explain the results of the survey. The last chapter on the results of this study, chapter six, will provide an overview of the main barriers that EECs encounter in the transition towards citizen participation and several strategies that they can use to navigate these barriers. Chapter seven will discuss the methods and theoretical framework that were used in this study. Moreover, the most important findings and implications of this research will be discussed. Finally, in chapter eight, the research questions will be answered and conclusions will be drawn on the results of this study.

## 2. Theoretical framework

This chapter will discuss the key theoretical concepts of this study. Firstly, the concept of citizen participation will be explained by using a variety of academic typologies of citizen participation. Secondly, the concept of social learning, that plays an important role in citizen participation in EECs, will be explained. Lastly, I will dive into the two main theoretical frameworks that will be used in this research; in section 2.3 I will talk about the multi-level perspective on transitions that was developed by Geels (Geels, 2011) and in section 2.4 I will elaborate on the small-wins governance framework of Termeer and Metze (Termeer & Metze, 2019).

### 2.1 Citizen participation

Over the past decades, citizen participation has become an umbrella term (Bidwell & Schweizer, 2021), or perhaps even a buzzword (Cornwall, 2008), that can have different meanings and can signify many different processes and mechanisms that involve citizens in some manner. To better understand the different forms of citizen participation, several typologies have been developed that divide participation in ideal types based on the characteristics of citizen participation.

The first typologies were based on the types of actions that are undertaken in participation process and the degree of participation of citizens. They involve amongst others Arnstein's ladder of participation that was developed in 1969 and Pretty's typology of participation from 1995. In Arnstein's typology, this axis ranges from citizen control (good) to manipulation (bad) and is divided into three different sections: genuine participation or citizen power, tokenism and non-participation (Arnstein, 1969). In Pretty's typology the axis ranges from self-mobilization (good) to manipulative participation (bad) (Pretty, 1995). Both typologies "carry with them implicit normative assumptions as they place these forms of participation along an axis of good to bad" (Cornwall, 2008, p. 270). Both typologies provide interesting insights into citizen participation and especially Arnstein's typology has greatly influenced the development of other typologies.

A typology developed by Silverman in 2005, takes a somewhat different perspective as it focuses on the actors that are involved and drive participation to distinguish between types of citizen participation. Silverman developed the Citizen Participation Continuum that ranges from grassroots participation to instrumental participation (Silverman, 2005). In many ways, this typology is very similar to the distinction that is often made between bottom-up and top-down participation (Læssøe, 2010). It is this binary division that can be recognized in the typologies of Arnstein, Silverman and Læssøe, in which participation is placed on a continuum ranging from respectively token, instrumental, and top-down participation on the one hand to genuine participation, grassroots or bottom-up participation on the other hand that is highly important in this study. EECs have to carefully consider the goals and characteristics of a project to find the right type of citizen participation that matches with these goals and characteristics.

The next typologies of citizen participation use the different reasons for citizen participation as demarcation criterium. In 1996, White developed her typology of interest, in which she focuses on different interests at stake in various forms of participation and reasons for undertaking participation. In this typology she distinguishes four types of participation: "nominal, instrumental, representative, and transformative" (White, 1996). In another typology developed by Reed, some of these categories are combined as he distinguishes only two categories of arguments: pragmatic arguments -including the nominal and instrumental categories of White - and normative arguments -including the representative and transformative categories of White. Pragmatic participation focuses on the results of participation, participation is considered to be a means to an end (Reed, 2008). Following this



reasoning, participation should be used as an instrument to reach certain goals, defined as instrumental participation by White (White, 1996) or to legitimise decisions, defined as nominal participation by White (White, 1996). Participation can “increase long-term public support for decisions, it can enhance the implementation of decisions and the rate of adoption and diffusion among target groups, and the quality of decision can improve as they can be based on more complete information” (Reed, 2008. p.2420). On the other hand, normative participation focuses on the nature of the process instead of the outcomes of participation. Within this category, White distinguishes between representative participation and transformative participation (White, 1996). The former is often “based on philosophical principles” (Bidwell & Schweizer, 2021, p.259), highlighting the importance of participation for “democratic society, citizenship and equity” (Reed, 2008. p.2420). The latter concerns participation that aims for transformative change for the citizens involved in participation. Participation can lead to a higher consciousness about the issue at stake (White, 1996) and it can increase social cohesion and a sense of ownership (A. Wals, personal communication, March 132023). Furthermore, it is argued that normative participation is important because it often entails social learning, a process that will be further elaborated on in the next section of this chapter.

## 2.2 Social learning

Social learning is defined as a process in which “stakeholders and the wider society in which they live, learn from each other through the development of new relationships, building on existing relationships and transforming adversarial relationships as individuals learn about each other’s trustworthiness and learn to appreciate the legitimacy of each other’s views” (Reed, 2008. p.2420). Reed et al. (2010) argue that in order to be considered social learning, “a process must: demonstrate that a change in understanding has taken place in the individuals involved; demonstrate that this change goes beyond the individual and becomes situated within wider social units or communities of practice, and occur through social interactions and processes between actors within a social network” (Reed et al., 2010, p.1). Social learning can be seen as a goal in itself within this study project as it can help citizens to learn more about sustainability and it can help to motivate and inspire citizens to change their daily practices and live in a more sustainable manner. However, from a pragmatic perspective, it can also be used as a means to an end, with citizens developing more creative solutions for issues related to sustainability through this reflective deliberation (Reed, 2008).

## 2.3 Transition theory

### 2.3.1 General principles

The third theoretical concept that will be used in this study is the multi-level perspective on transitions that was developed by Geels (Geels, 2011). Geels developed this multi-level perspective to better understand long-term and complex socio-technical transitions. In the multi-level perspective, there are three levels, which are different in size and stability and provide different elements and components of transitions. It explains how the alignment of trajectories within these three levels, as well as the alignment between the levels will produce transitions. The three levels and the interactions between these levels are shown in figure 2.1 on the next page.

Increasing structuration  
of activities in local practices

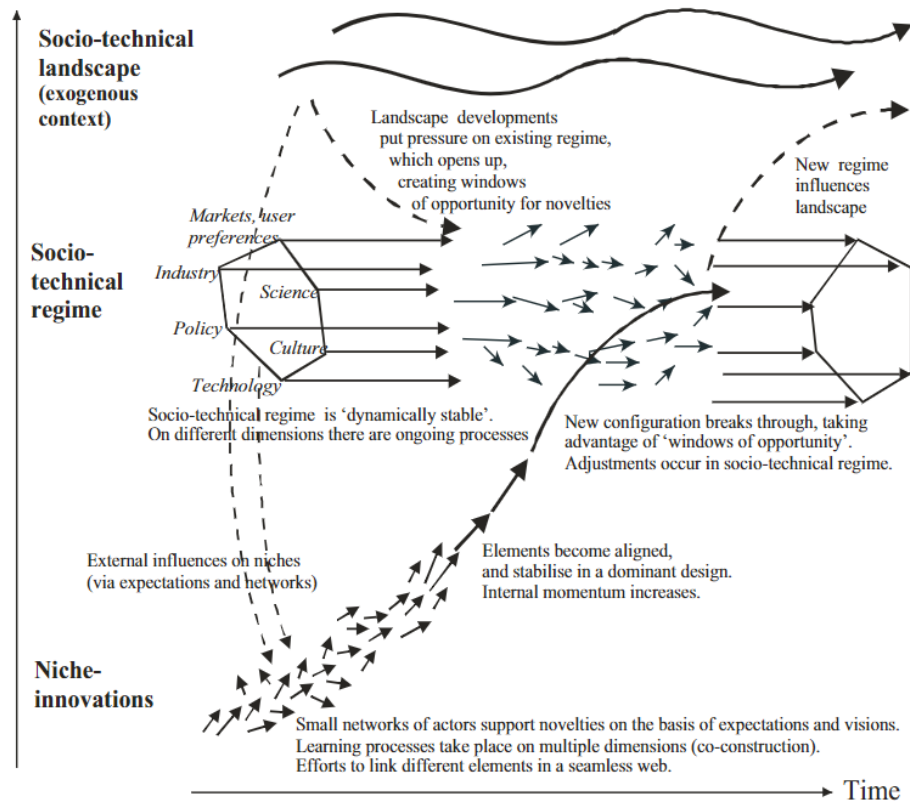


Figure 2.1: A multi-level perspective on transitions (Geels, 2011).

The first and highest level is the socio-technical landscape which “forms a broad exogenous environment that as such is beyond the direct influence of regime and niche actors in the short run” (Geels, 2011, p.28). The landscape metaphor is used to emphasise the large size and high stability of the systems and factors within this level. It includes factors that do not change at all and factors that only change very slowly.

The middle level is the level of socio-technical regimes. Regimes contain cognitive, regulative, and normative rules which stabilise the current socio-technological systems. However, within the regime, innovations still occur, leading to technological trajectories. These trajectories often take place within different social groups but because these social groups are connected and sometimes overlap trajectories can co-evolve. Changes in trajectories are often counteracted and stabilised by other trajectories, but when the changes are large enough, tension can arise within regimes, creating windows of opportunity for transitions.

The lowest level within the multi-level perspective is the level of niches. These niches are small and unstable areas where innovations emerge and where these innovations are protected from external treats such as for example mainstream market selection. There are three important processes that take place within niches: the building of social networks, heterogenous learning processes and managing or creating visions and expectations.

What is most important in the multi-level perspective on transitions is not just the processes within the three levels but the interactions between these levels. The multi-level perspectives highlights that there is no such thing as linear causality within transitions: “there is no simple cause or driver in transitions. Instead, there is co-evolution within and between levels, i.e., processes at multiple dimensions and levels simultaneously” (Geels, 2011, p.29).

### 2.3.2 Application multi-level perspective on transitions to EECs

The multi-level perspective on transitions is used as a background theory to describe the context and situation of EECs in the Netherlands and to highlight the dynamic nature of the environmental education sector. The theoretical perspective is applied in chapter four to provide an overview of the most important developments that are currently taking place in this sector. It is used to categorise these developments in the three levels of the multi-level perspective as well as to explain the interactions between them. Within this study, the landscape level is defined as the exogenous context which the actors on the regime level cannot directly influence. The regime level is defined as the space in which the everyday practices of EECs take place, containing actors such as the EECs, GDO, municipalities and citizens. Finally, the niche level is defined as the space in which small-scale innovations take place.

As will be explained further in chapter four, many developments are taking place on the landscape level and the multi-level perspective highlights the importance of these development as they put pressure on the existing regime of environmental education and as such can create opportunities for new developments on this regime level. Finally, the perspective is used to emphasise the importance of making deliberate and strategic decisions on the positioning of EECs, as will be explained in more detail in chapter six.

## 2.4 Small-wins governance framework

### 2.4.1 General principles

The final theoretical perspective that will be used in this study is the small-wins governance framework that was developed by Termeer & Metze in 2019. This framework, originally applied to the transformative change from the current linear economy to a circular economy, explains how transformative change can be accomplished by the accumulation of small wins, which are defined as “concrete, completed in-depth changes” (Termeer & Metze, 2019, p.2). The accumulation of small wins can best be achieved by using three sets of interventions. The first intervention entails setting a provocative ambition, which is defined as an ambition that involves the following characteristics: “it represents a desired future; it helps people to stay on track without hindering innovativeness; it should stretch, challenge, and disrupt the status quo; and it should be grounded, meaning that the ambition is more convincing when available examples show that change is already happening” (Termeer & Metze, 2019, p.4). The second intervention involves identifying and appreciating small wins. These small wins are often not recognised or overlooked and therefore they might not contribute with their full potential to the transformative change (Termeer & Metze, 2019). The third intervention involves activating mechanism through which small wins accumulate in transformation. These so-called propelling mechanism include: energising, learning by doing, logic of attraction, bandwagon effect, coupling, and robustness (Termeer & Metze, 2019).

### 2.4.2 Application small-wins governance framework to EECs

The small-wins governance framework is used to help identify promising strategies that EECs can use to navigate the barriers that they encounter in the transition towards focusing more on citizen participation. It is used to highlight important actions or interventions that the EECs should consider.

### 3. Methods

To reveal the barriers that EECs encounter in the transition from focusing on formal education towards focusing on citizen participation and possible strategies to navigate these barriers, I used a mixed method approach consisting of both qualitative and quantitative components. As shown in figure 3.1, in chronological order, I conducted two explorative interviews, five expert interviews, a survey, four in-depth interviews, and finally one more expert interview. Next to this, I conducted a literature study on several stages in this study.

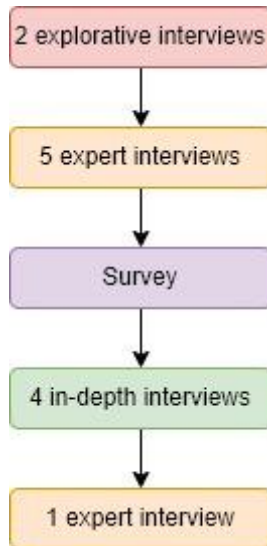


Figure 3.1: Chronological overview the components of the mixed-method approach.

#### 3.1 Explorative interviews

As can be seen in figure 3.1, the first method that I used in this study involved two explorative interviews with René Munsters of GDO, the commissioner of this research project, and Jolanda van den Berg of Wageningen Economic Research, the main researcher of the research project. These interviews, that took place roughly a month after I started this thesis, helped to demarcate the main focus and objectives of this thesis. Moreover, they were used to get a first indication of the current situation of the environmental education sector in the Netherlands.

#### 3.2 Literature study

The second method that I used in various stages of this research entailed a literature study. The two most important literature reviews took place between the explorative interviews and the expert interviews, and around the in-depth interviews. In this first period, I focused on literature related to the dynamic field of NDE, providing an overview of the current situation of this sector and identifying the most important developments and changes that are currently taking place in this sector. Moreover, this literature study was used to get a first overview of the barriers that EECs encounter in their daily practices. I also reviewed literature to identify the barriers that EECs encounter specifically related to citizen participation, but no studies on this subject were found. In the second period, I did a literature review on the barriers and strategies that were mentioned in the survey and in the in-depth interviews as an academic addition to the statements and opinions of the survey respondents and the interviewees.

I conducted the literature studies by using search queries in scientific literature databases such as the WUR Library and Google Scholar as well as using the snowball research method, in which I found new literature using the reference list of previously found literature.

### 3.3 Expert interviews

The third method involved conducting five expert interviews roughly halfway this research and one expert interview in the final stage of this study. The first five expert interviews were used to identify and get a better understanding of the developments that are taking place in the environmental education sector. Next to this, the theme of citizen participation was discussed. The last part of the interview focused on the barriers that centres can encounter when they shift their focus to citizen participation. The one expert interview that took place at the final stage of this research with René Munsters from GDO was used to discuss the barriers and strategies that were identified in the previous stages of this study.

A broad diversity of experts had to be included in this study to get a complete and representative overview of the themes that were discussed in the interviews. Therefore, I used purposive expert sampling, a sampling method in which the researcher selects interviewees who can provide the best information to achieve the objectives of the study (Bryman, 2012). The interviewees were selected with the guidance of René Munsters from GDO, Jolanda van den Berg of Wageningen Economic Research and my thesis supervisor Kris van Koppen. The five interviewees included: Roel van Raaij, senior policy officer of the Ministerie van Landbouw Natuur en Voedselkwaliteit, Monique Verstraten, director of Natuurcentrum Arnhem, Hak van Nispen, director of SME, Brigit Kuypers, coordinator of CNME Amersfoort, and Arjen Wals, personal professor of Transformative Learning for Socio-Ecological Sustainability at Wageningen University.

I used semi-structured interviews because they are versatile, flexible, and enables reciprocity between the interviewer and participant, enabling the interviewer to improvise follow-up questions based on participant's responses and allowing space for participants' individual verbal expressions (Kallio et al., 2016). Most interviews took place in a face-to-face setting, but some interviews were conducted online. This has not affected the results of the interviews as research has shown that the data quality of interviews is unaffected by the mode of data collection (Shapka et al., 2016). I conducted the expert interviews with the help of an interview guide; the interview guide that was used for the first five expert interviews can be found in Appendix A. After the interviews, a transcript was made. Thereafter, I analysed the transcript using a thematic analysis, following the method of Braun & Clarke (2006) as explained in a practical guide by Maguire & Delahunt (2017). This method consisted of six steps, which contain both inductive and deductive elements:

1. Familiarizing myself with the data by reading the transcriptions, noting down initial ideas and summarising the interviews.
2. Collecting and listing relevant fragments from the interviews.
3. Searching for themes and sub-themes in the interview data as well as drawing up themes based on the theoretical perspectives that were explained in chapter two.
4. Gathering relevant fragments that belong to a certain theme.
4. Reviewing themes by checking if the themes work in relation to the interview fragments.
5. Defining and naming themes.
6. Producing the report.

### 3.4 Survey

The fourth method entailed a survey that was distributed to EECs by using the network of GDO after the results of the expert interviews were analysed. It was used to obtain a more quantitative and representative overview of the barriers that EECs encounter and the strategies that they use to navigate these barriers. To develop the questions of the survey, input from the expert interviews and the

literature study were used. I made the survey using the software package Qualtrics. After the survey was developed, a pilot test took place in which several managers of EECs filled in the survey and provided feedback on for example questions or answers that were not completely clear.

The survey contained five different themes: 1) general information on the respondents and characteristics of the EECs they work for; 2) views on citizen participation and current involvement in citizen participation; 3) barriers to citizen participation that EECs might encounter; 4) strategies and opportunities related to citizen participation; 5) development of knowledge and expertise on citizen participation. The complete survey can be found in Appendix B. Important to note is that the survey was in Dutch to avoid language barriers that could affect the results.

### **Data analysis**

The first step of the data analysis involved the preparation of the data set. I deleted respondents that did not completely answer at least the first two themes of the survey from the data set. After this step, the total data set consisted of 30 respondents. Of these 30 respondents, 23 respondents completed the questionnaire and 7 respondents answered only a part of the questions. The second step in preparing the data, entailed the grouping of two variables. This grouping was necessary for answering the research question on differences in barriers that are encountered by centres with different characteristics. Since the sample size was relatively small, the number of respondents per answer was too small for statistical testing and therefore some answers were grouped together. The first variable, the employment size of centres, was grouped as follows: small (answers 1fte and 2-5fte), medium (answer 5-10fte), and large (answers 10-20fte and more than 20fte). The second variable, the type of organisation was grouped into two categories: municipal departments and not-municipal departments (private organisations, public-private organisations and other organisations).

After the preparation of the data set and the grouping of variables, the actual data analysis took place. For this analysis I used the statistical software package of SPSS Statistics. In the first part of the data analysis, I provided an overview of descriptive statistics on all multiple-choice questions, listing the number of answers that were chosen as well as the percentages corresponding with these numbers. Secondly, I did a qualitative analysis of the open questions of the survey by exploring and summarising the results.

Finally, I conducted several statistical tests to establish whether there are significant differences between centres of different sizes and between different types of organisations regarding the barriers that they encounter. For multiple choice answers with two or three possible answers I used the Fisher's exact test. This Fisher's exact test is the exact version of a chi-squared test. "These tests can assess for independence between variables when the comparing groups are independent and not correlated" (Kim, 2017, p.152). Whereas the chi-squared test applies an approximation assuming the sample is large, the Fisher's exact test runs an exact procedure (Kim, 2017) which is better suited for small-sized samples such as the survey sample in this thesis. If the p-value was small enough to conclude that there is a significant difference between EECs with different characteristics, I used pair-wise comparisons - again using the Fisher's exact test - to see which groups differed significantly from each other. For survey questions with an ordinal variable such as the questions that used a Likert-scale, I conducted a Kruskal-Wallis test. This is a "nonparametric method for testing whether samples are originated from the same distribution" (Xia, 2020, p.399), with a null hypothesis that the mean ranks of the Likert scale answers of the different groups of centres are equal. As such it is the nonparametric equivalent of one-way ANOVA (Xia, 2020) that had to be used as the data was not normally distributed, which was tested with Shapiro-Wilk and Kolmogorov-Smirnov tests. If the p value was small enough to conclude that there is indeed a difference in mean rank between the different groups,

the Mann-Whitney U test -a test that is similar to the Kruskal-Wallis test but designed for only two groups - was used to do a pair-wise comparison and test which groups differed significantly from each other.

### 3.5 In-depth interviews

The final method that I have used involved conducting four in-depth interviews with respondents from the survey. Respondents could indicate in their surveys whether they were willing to participate in these interviews and from these respondents four interviewees were selected based on their answers in the survey. As such this sampling method can be classified as a combination of volunteer sampling and convenience sampling. The interviewees included: Séverine Louf of Stichting de Rollen in Born, Anne Marie van der Veen of the municipality Schiedam, Judith Zuiderwijk of Westland Natuur en Techniekweb in Naaldwijk, and Liesbeth Bronkhorst of Stad en natuur in Almere.

In the interviews, three themes were discussed, as can be seen in the interview guide in Appendix C. The first questions of the interviews were used to get an understanding of the current situation and position of the EEC. The second theme focused on the barriers that the centres encountered. Based on their answers in the survey, follow-up questions were asked to get a more detailed and thorough description of these barriers. In the third theme, the attention shifted towards the strategies that they can use to navigate these barriers. In this theme, the survey questions on strategies were discussed as well as other strategies that were sometimes mentioned by the respondents in the survey. In this part of the interviews, I focused on: the practical application of the strategies, which strategies could be used for which barriers, and finally the benefits and drawbacks of the strategies.

For analysing the in-depth interviews, I used a similar approach that I used for analysing the expert-interviews, as was discussed in section 3.3.

## 4. Developments and barriers, according to expert interviews and literature

Section 4.1 will provide an overview of the most important developments in the field of environmental education. It is based on both the expert interviews as well as scientific literature. Section 4.2 highlights the barriers that EECs most often encounter according to the expert interviews. A short summary of the main results of this chapter can be found in section 4.3.

### 4.1 Overview of developments in the field of environmental education

The change towards more citizen participation does not take place in a vacuum. It is only one of the changes that is currently happening in the field of environmental education. Therefore, it is of great importance to provide an historical overview of environmental education as well as an overview of the current dynamic field of environmental education. Looking at environmental education from a historical perspective, it becomes clear that the field of environmental education has always been susceptible to change. Figure 4.1 provides an overview of the most important developments in the field of environmental education.

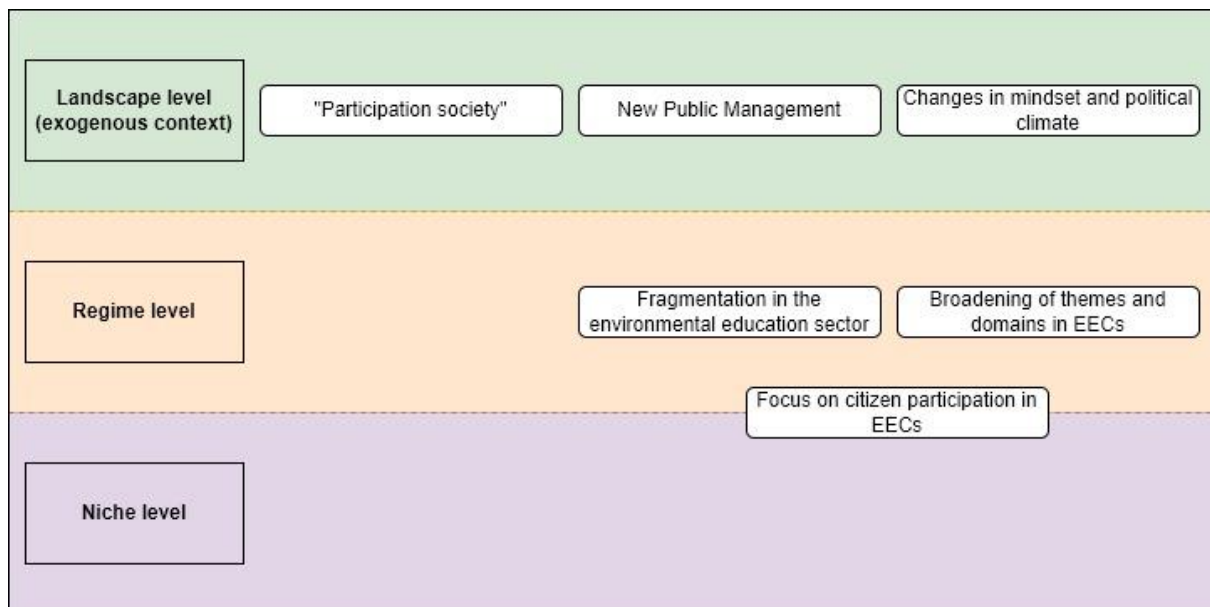


Figure 4.1: Overview of the most important developments related to citizen participation in the field of environmental education.

Following the multi-level perspective on transitions from Geels that was explained in chapter 2, this section will start with changes that take place predominantly on the highest level, the landscape level. This level entails the exogenous context, containing changes that fall outside the scope of the environmental education sector and cannot be directly influenced by actors on the regime and niche level, for example EECs or GDO. Firstly, at the landscape level, several developments have taken place in the last couple of decades which involve the changing relationships between government, market and society as is visualised in figure 4.2.



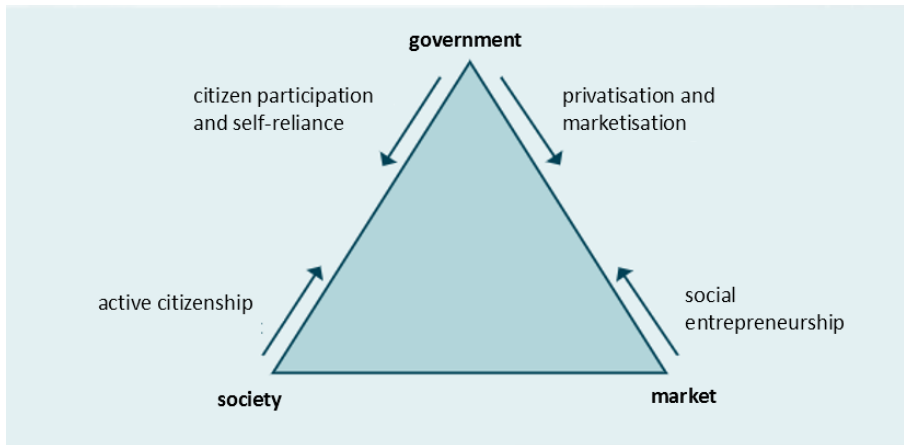


Figure 4.2: The changing relationships between government, market and society (translated from Van Der Steen et al., 2014).

One important change is the emergence of the “participation society” (*participatiesamenleving* in Dutch) in the Netherlands. Citizen participation plays an increasingly significant role in governance and public society in all public domains (Fung, 2015; Hurenkamp & Tonkens, 2020) and the national government in the Netherlands strongly promotes the active citizenship that is key in this participation society (Van Houwelingen et al., 2014).

This trend also applies to the environmental domain, with for example the Sustainable Development Goals of the UN putting a strong emphasis on the importance of citizen participation for a successful adoption and implementation of the goals (Fox & Stoett, 2016). This change had a profound impact on the EECs; the change on the landscape level provided new windows of opportunity for the regime of the environmental education sector to shift their focus from formal education towards citizen participation, a shift that will be addressed more thoroughly later in this section.

Another change related to the changing relationships between government, market and society entails the implementation of new public management. As with other changes at the landscape level, the environmental education sector cannot directly influence this change. However, it is important to highlight that through lobbying, networking and profiling, the sector can affect the consequences of new public management, meaning that regime actors to some extent influence the implementation of new public management. New public management is defined as “the attempt to implement management ideas from business and private sector into the public services” (van de Walle & Hammerschmid, 2011, p.3). New public management is often described as an umbrella concept as it includes many doctrines and characteristics, such as: a strong focus on productivity and efficiency, accountability based on results, decentralisation, and marketisation and privatisation (Hood, 1991; van de Walle & Hammerschmid, 2011). The implementation of new public management has a profound impact on the environmental education sector as: “The changing roles of government, government retreating and the belief in marketisation are leading to more and more governments (especially municipalities) to privatise NME services” (Leussink et al., 2018, p.41). According to Monique Verstraten, the effects of new public management cannot be classified as being good or bad for the sector: “if I had to give an opinion on that, I am not necessarily in favour of, or opposed to, privatisation, it's really about, what suits the organisation and the city and under what conditions do you privatise?” (M. Verstraten, personal communication, February 23 2023).

A third development that is taking place at the landscape level was emphasised by Roel van Raaij. He highlighted how the mindset of many citizens as well as the political climate has changed in favour of sustainability and climate, which puts a lot of pressure on the existing regime and provides new

opportunities for the environmental education sector. Next to this, he argued how the Covid pandemic has highlighted the need for a more integral and collaborative approach in politics and policies: “Yes, the Zeitgeist. If you were focused on the climate, 20 years ago you were a bit weird, and that urgency is significantly different. And the political climate is different. So everybody sees, especially after Covid, how intertwined also health and biodiversity and livability, economy, how all of that is connected. Two years of Covid and half the system collapses. Not even to mention the climate crisis or the biodiversity crisis. So I think there does seem to be a kind of new urgency emerging” (R. van Raaij, personal communication, February 21 2023).

Moving on to the regime level then, a broadening of themes and domains is taking place within environmental education; a development that was recognised by all experts in the expert interviews and that takes places predominantly on this level. It is a development that is policy-driven and not based on the lower level of niches or innovations (Jickling & Wals, 2008). Brigit Kuypers explained how the broadening of themes is a result of both national policy programs on environmental education as well as policies on the municipal level (B. Kuypers, personal communication, March 8 2023). From a historical perspective, in the Netherlands, the field started in the middle of the 20<sup>th</sup> century with education on the subject of nature, focusing on “darkgreen” subjects such as ecology and biology. In the 1970’s, the attention shifted towards education on the environment, reflected by the emergence of “grey” environmental organisations (A. Wals, personal communication, March 13 2023). Thereafter, in the 1980’s, both types of education merged, resulting in the concept of Natuur- en Milieueducatie (nature and environmental education – a typical Dutch term) (Leussink et al., 2018). The next step within this development is reflected by the emergence of Education for Sustainable Development (ESD) (known as Natuur- en Duurzaamheidseducatie in Dutch). According to Hesselink et al. (2000), there is no consensus on the difference between environmental education and Education for Sustainable Development: “Many view ESD as the next generation of environmental education, which includes issues of ethics, equity and new ways of thinking and learning. Others say ESD should be a part of good environmental education and there is no need to do away with environmental education as an umbrella. Again others suggest that environmental education is a part of ESD. They argue that ESD is more comprehensive than environmental education by including issues of development, North-South relationships, cultural diversity, social and environmental equity” (Hesselink et al., 2000, p.12). Leusink et al. (2018), recognises another step in this development, entailing the broadening regarding different types of education, meaning that EEC’s no longer focus only on formal education but also on non-formal and informal learning, thereby embracing social learning and social innovation.

Although all experts recognised the broadening of themes as an important development in the environmental education sector, Monique Verstraten provided some nuance by emphasising that the broadening of themes is heavily influenced by societal changes: “The themes that EECs focus on is always somewhat subject to what is happening in society. Whether that is really a broadening. I don’t know about that, I see it more as moving with what is going on in society at that moment; what themes are there at that moment” (M. Verstraten, personal communication, February 23 2023). Next to this, Arjen Wals indicated that there is also a opposite movement happening in which centres and other organisations realise that some basic knowledge on “darkgreen” topics related to nature and ecology is needed for people to understand and appreciate other themes better (A. Wals, personal communication, March 13 2023).

A next change is the increasing fragmentation within the environmental education sector, a change that is taking place on the regime level directly within the sector without being affected by exogenous factors from the landscape level or niche innovations. According to Roel van Raaij, in the sector,

many policy levels are involved as well as a large number of NGO's or similar organisations (R. van Raaij, personal communication, February 21 2023). This fragmentation is amplified by the broadening of themes as even more organisations and actors are now involved in the sector. Next to this, more and more freelancers are working in the sector, which exaggerates the fragmentation even further. Hak van Nispen agreed to this high level of fragmentation by stating: "well, we see that there are indeed many parties that are all working on their own interests, and I think it is very important that we work together on this. You see that there is a lot of envy and a lot of parties are only busy with their own little thing" (H. van Nispen, personal communication, February 28 2023).

The final development entails the step towards citizen participation in the environmental education sector. This development is strongly influenced by the increasing focus on participation on the landscape level, as explained earlier in this section. The expert interviews revealed that there is no consensus among the experts about the magnitude of this development. Hak van Nispen stated that only a small proportion of EECs focuses on citizen participation (H. van Nispen, personal communication, February 28 2023), thereby positioning the change towards citizen participation primarily on the niche level. A small number of actors support this opportunity, but it has not caused any major adjustments on the regime level and focusing on citizen participation has not become commonplace in EECs. On a contrast, Monique Verstraten explained that especially in the larger centres, the shift towards citizen participation is widespread by stating: "We don't do much of that as a nature centre and I am kind of the odd one out so to speak. I think I am one of the few of the larger centres" (M. Verstraten, personal communication, February 23 2023).

### **Implications of the developments in the environmental education sector**

EECs in the Netherlands have to find a way to balance the beforementioned changes that are taken place on the niche, regime or landscape levels. They have to be aware of these developments and make conscious and deliberate decisions on their strategy and on their position in this dynamic field. This positioning, and strategies to successfully use the possibilities that the developments provide, will be discussed in more detail in chapter six.

## **4.2 Barriers**

In the expert interviews, the following barriers emerged that EECs might encounter regarding citizen participation:

- Financial barriers: many centres experience to at least some extent financial barriers, both in a general sense but also regarding citizen participation (H. van Nispen, personal communication, February 28 2023; A. Wals, personal communication, March 13 2023).
- A lack of space or mandate from municipalities: Roel van Raaij described that: "The first barrier is the political or policy mandate that such a centre has. Because the fact that a particular EEC deals with, for example, only primary education and only nature topics, that often comes about because the responsible alderman or the responsible department where they work has that as its focus" (R. van Raaij, personal communication, February 21 2023).
- Competencies: New competencies are needed when centres focus on citizen participation, which might not be present now. These competencies include for example communication (H. van Nispen, personal communication, February 28 2023; R. van Raaij, personal communication, February 21 2023), conflict management (A. Wals, personal communication, March 13 2023) and an entrepreneurial mindset (B. Kuypers, personal communication, March 8 2023; M. Verstraten, personal communication, February 23 2023).
- Working demand-driven instead of supply-driven: Although many authors suggest that centres should work more based on the demand of clients (Haffmans et al., 2013; Leussink et al.,

2018), Roel van Raaij stated that most centres still work based on their own supply instead of providing activities and projects that fulfil a certain demand (R. van Raaij, personal communication, February 21 2023).

- Reaching the complete target group of citizens and being inclusive: EECs might experience barriers regarding inclusivity and reaching the entire target group of citizens. Brigit Kuypers highlighted this barrier by stating: “And reaching certain target groups also remains very difficult for us, but some things are just very difficult. For example, if you want to reach people who are in rented housing owned by a housing association about making their housing more sustainable, that is just very complicated” (B. Kuypers, personal communication, March 8 2023).
- Measuring and communicating the impact of citizen participation projects: Arjen Wals indicated that it can be difficult for EECs to measure the impact of their activities and projects regarding citizen participation. Especially the social impact, which are often softer results such as for example social cohesion can be difficult to measure (A. Wals, personal communication, March 13 2023).
- Competition regarding citizen participation from other organisations: there are many other organisations that focus on citizen participation in the Netherlands, meaning that EECs can experience strong competition on this subject, as was explained by Arjen Wals: “In that sense, one challenge, perhaps, is that there are many more organizations working on these themes and they may be passed by when it comes to expertise in this area” (A. Wals, personal communication, March 13 2023).
- A lack of free space (both financially as well as employee-wise) within the EECs organisations (especially in smaller EECs) for making the change towards citizen participation or for knowledge development regarding citizen participation (H. van Nispen, personal communication, February 28 2023; M. Verstraten, personal communication, February 23 2023).
- Problems due to the “hard side” of the government: Brigit Kuypers indicated how EECs might encounter barriers regarding citizen participation because of the “hard side” of the government, for example barriers related to strict legislation, permits, and subsidies (B. Kuypers, personal communication, March 8 2023).

### 4.3 Summary

This chapter described the main developments that are taking place in the environmental education sector and the barriers that EECs can encounter in the step from formal education to citizen participation according to the expert interviews and literature study. On the landscape level, three developments can be recognised: the rise of the participation society, the implementation of new public management, and changes in mindset and political climate. On the regime level, two developments were found: fragmentation in the environmental education sector and the broadening of themes and domains in EECs. Finally, on the intersection of the regime and niche level, the shift towards citizen participation - the main transition that this study focuses on - was identified.

The barriers that were identified include: financial barriers, a lack of space or mandate from municipalities, competencies, working demand-driven instead of supply-driven, reaching the complete target group of citizens and being inclusive, measuring and communicating the impact of citizen participation projects, competition regarding citizen participation from other organisations, a lack of free space (both financially and employee-wise) within the EECs organisations, and problems due to the “hard side” of the government.

## 5. Results of the survey

In this chapter, the results of the survey will be described. The chapter is divided into 5 sub-sections corresponding with the 5 different themes in the survey: 1) general information on the respondents and the EECs they work for; 2) citizen participation; 3) barriers to citizen participation that EECs might encounter; 4) strategies and opportunities related to citizen participation; 5) development of knowledge and expertise on citizen participation. Each sub-section will start with a description of the overall results of the questions. Next to this, the differences between respondent groups will be analysed, as was described in the methodology chapter. The chapter will end with a short summary of the main findings of the survey in section 5.6.

### 5.1 General information

The first theme within the survey consisted of questions providing descriptive information on the respondents. Firstly, respondents were asked about their function in the EEC. Although most of the respondents had a function as either coordinator, director, or advisor, there was a large variety of functions with for example team leaders, policy officers and account managers. As table 5.1 shows, the respondents' organisations are mostly municipal departments or private organisations (mostly foundations) and they often have a relatively small employment size, with most centres having an employment size smaller than 5 fte.

Table 5.1: Type of organisation and employment size.

Variable	Results
<b>Type of organisation (n=30)</b>	
Municipal department	33% (10)
Private organisation	47% (14)
Public-private organisation	13% (4)
Other	7% (2)
<b>Grouped type of organisation (n=30)</b>	
Municipal department	33% (10)
Not municipal department	67% (20)
<b>Employment size (n=30)</b>	
1 fte	17% (5)
2-5 fte	43% (13)
5-10 fte	17% (5)
10-20 fte	20% (6)
More than 20 fte	3% (1)
<b>Grouped employment size (n=30)</b>	
Small (1-5 fte)	60% (18)
Medium (5-10 fte)	17% (5)
Large (More than 10 fte)	23% (7)

Figure 5.1 provides an overview of the activities of EECs, highlighting that although most centres undertake activities related to formal education, especially teaching kits and excursions or field lessons, there are also many centres that undertake activities related to citizens.

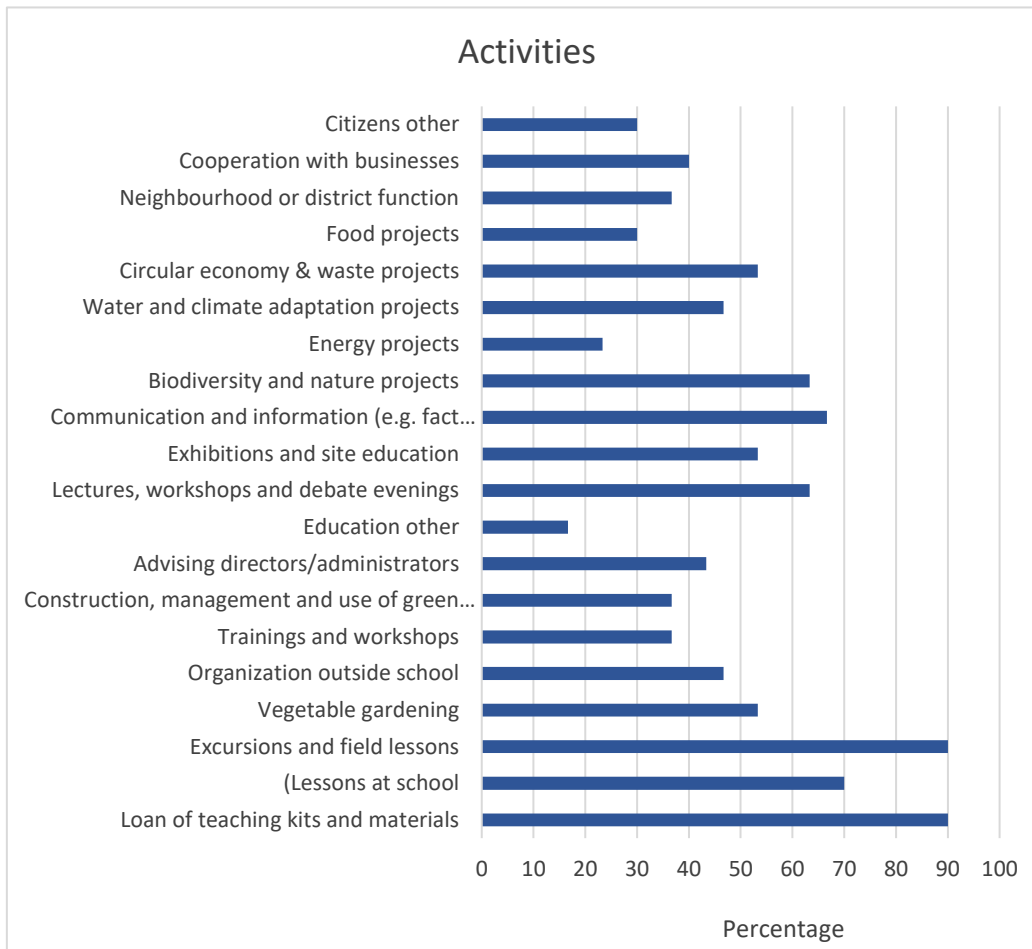


Figure 5.1: Overview of the activities of EECs.

## 5.2 Citizen participation

### 5.2.1 Overall results

#### Expectations regarding citizen participation

As can be seen in table 5.2, a large majority of the respondents expect that citizen participation will be an important task for EECs in the Netherlands, highlighting the importance of this thesis and the larger research project it is part of.

Table 5.2: Expectations on the importance of citizen participation in EECs.

Do you expect that citizen participation will be an important task of EECs in the Netherlands? (n=30)	Results
Yes	80% (24)
No	20% (6)

Not only these expectations are relevant, but perhaps even more important is the opinion of EECs on this transition; do they see the increasing role of citizen participation in EECs as a positive development? Starting with the 80% of the respondents that expect citizen participation will be an important task, the answers to this question can be grouped into six categories. The first four categories offer a positive perspective on this development:

- Some centres believe that focusing on citizen participation will mean that they gain more (political) support and that their impact will increase.
- Many centres indicate that citizen participation is important because citizens are very important stakeholders in the transition towards a more sustainable society; all actors, including citizens have a role to play in this transition.
- Some centres emphasise the expertise and knowledge on citizen participation that is present within most EECs; it is a positive development that citizen participation becomes an important task of EECs because these centres can provide a lot of added value on this theme.
- Two respondents describe how most EECs have easily accessible locations and how they are easy to approach by citizens, making the centres the perfect actors to organise activities and projects on citizen participation.

The last two categories offer a negative perspective:

- Some centres emphasise how this development can lead to a situation in which there are too many actors involved in citizen participation, leading to conflicts or other problems.
- One of the centres explains how focusing on citizen participation can lead to too much pressure for the EECs.

For the 20% of the respondents that do not expect citizen participation to become an important task, there is less of a consensus with roughly equal numbers of respondents that do or do not see this as a missed opportunity. Starting with those respondents that do not see it as a missed opportunity, the answers can be grouped into three categories:

- One of the centres provides a similar answer as discussed earlier, stating that it is too unclear who is responsible for citizen participation.
- Two centres explain how they do not have the organisational capacity to focus also on citizen participation. However, this answer can perhaps be viewed better as a barrier to citizen participation than a reason why it is good that citizen participation will not be an important task for EECs.
- One centre answers that they do not see the development as a missed opportunity because they made a deliberate choice to focus only on education and not on participation.

Moving on to the respondents that see the lack of citizen participation as a missed opportunity, two different answers were given:

- One centre explains how EECs could be the missing link between governmental actors and citizens.
- One centre explains how it is a missed opportunity that citizen participation will not be important in EECs since EECs have a lot of expertise and knowledge in this field.

### **Current situation of citizen participation activities**

Most of the experts indicated in their interviews that citizen participation has become an important task within most of the EECs in the Netherlands. As can be seen in table 5.3, the results of the survey indeed confirm that a large majority of the centres (70%) is already active in citizen participation.

*Table 5.3: Percentage of respondents that is currently active in citizen participation.*

<b>Are you currently active in citizen participation? (n=30)</b>	<b>Results</b>
Yes	70% (21)
No	30% (9)

Reasons why centres are active in citizen participation, entail amongst others: a) citizen participation is needed to make society more sustainable, a goal or vision on which many EEC’s focus; b) it provides new opportunities for business plans or to expand the impact of an EEC; c) there are many governmental policies that focus on citizen participation. EECs that are a municipal department are often required to organise projects on citizen participation and private EEC’s can use these policies to acquire new tasks or directives from governmental actors. Reasons why some centres are not yet active in citizen participation include amongst others: a) there is no capacity or budget to focus on citizen participation; b) the centres choose to focus completely on formal education; c) there is no mandate or tasks from the municipality of other governmental actors.

Almost all centres work together with other parties on projects and activities around citizen participation; only one of the nineteen centres that answered this question indicated that they work independently on citizen participation.

Table 5.4: Percentage of respondents working independently or collaborative on citizen participation.

<b>Do you work independently on projects and activities around citizen participation, or do you collaborate with other parties? (n=19)</b>	<b>Results</b>
Independently	5% (1)
Collaborating with other parties	95% (18)

The organisations that EECs collaborate with are shown in figure 5.2. The results show that most centres collaborate with civil society organisations, followed by municipalities, and nature and environmental organisations. Centres work least often together with businesses and provinces, although still roughly 50% of centres collaborate with these partners.

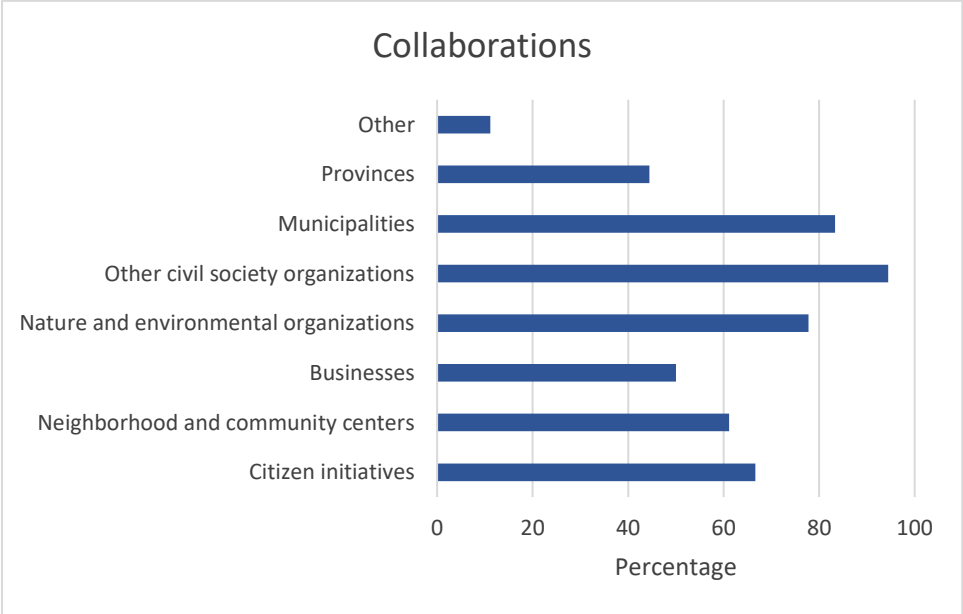


Figure 5.2: Overview of collaborations related to citizen participation.

As can be seen in table 5.5, the results indicate that a vast majority of centres already work primarily demand-oriented when it comes to citizen participation, with only 28% working based on the own supply of the EEC. This result differs from the results of the expert interviews which indicated that many EECs still work supply-driven, as was described in the previous chapter.



Table 5.5: Percentage of respondents that work demand-driven and supply-driven.

<b>Do you work primarily demand-driven or supply-driven regarding citizen participation? (n=21)</b>	<b>Results</b>
Driven on the demand of citizens	14% (3)
Driven on the demand of municipalities	57% (12)
Driven on the supply of the EEC	29% (6)

### 5.2.2 Differences between groups

No significant differences were found between centres with a different employment size or type of organisation within the theme of citizen participation. This means that based on the results, the conclusion cannot be drawn that the size and type of organisation of centres affects the expectations and opinions on citizen participation. Furthermore, the results provide no evidence that larger centres are in general more active in citizen participation, which was expected based on the expert interviews.

## 5.3 Barriers

### 5.3.1 Overall results

#### **Financial barriers**

A small majority of the respondents indicate that they encounter financial barriers related to citizen participation, as can be seen in table 5.6. These results align with the results from the expert interviews that indicated that there are many centres that experience financial barriers regarding citizen participation. The respondents that encounter financial barriers explain that these barriers arise mostly as a result of the temporary nature of their activities or projects on citizen participation. In contrast to formal education, most centres have no, or few, long-term programs on citizen participation but instead organise these projects for a shorter period of time, meaning that they have to acquire new finances for each individual project. Especially since some centres indicate that they do not receive any tasks from the municipality, it is often a challenge to find enough financial resources to organise projects on citizen participation. Next to this, some respondents emphasise the difficulties that citizens have regarding the acquisition of finances for their projects or activities.

Table 5.6: Percentage of respondents that encounter financial barriers related to citizen participation.

<b>Do you encounter financial barriers regarding citizen participation? (n=27)</b>	<b>Results</b>
Yes	59% (16)
No	41% (11)

#### **Lack of space from municipalities**

As mentioned in the previous section, EECs might encounter barriers due to a lack of tasks or mandate from municipalities to focus on citizen participation. As can be seen in table 5.7, the results show that this is indeed a barrier that some centres encounter.

Table 5.7: Percentage of respondents that is granted free space by the municipality to focus on citizen participation.

<b>How much space does the municipality grant you for projects and activities around citizen participation? (n=27)</b>	<b>Results</b>
The centre receives tasks for activities or projects around citizen participation from the municipality	30% (8)
The centre is granted space for activities or projects around citizen participation from the municipality	33% (9)

The centre does not receive tasks nor space for activities or projects around citizen participation from the municipality	37% (10)
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### Competencies

As can be seen in table 5.8, the results show that a large majority of centres thinks that the competencies that are required for focusing on citizen participation are already present within their organisation. Out of the centres that currently do not have the required competencies for citizen participation, a majority indicates that it is not possible to develop these competencies with the current employees through knowledge development. Which competencies are the most important to focus on citizen participation according to the centres is shown in figure 5.3. The results indicate that connecting and networking, and having an awareness for opportunities are considered the most important and that acquisition skills or commercial thinking and creativity are considered to be the least important competencies.

Table 5.8: Overview of the presence and development of competencies for citizen participation.

Are the required competencies already present within your organization? (n=27)	Results
Yes	74% (20)
No	26% (7)
<b>Is it possible to develop these competencies with the current employees through knowledge development? (n=7)</b>	
Yes	29% (2)
No	71% (5)

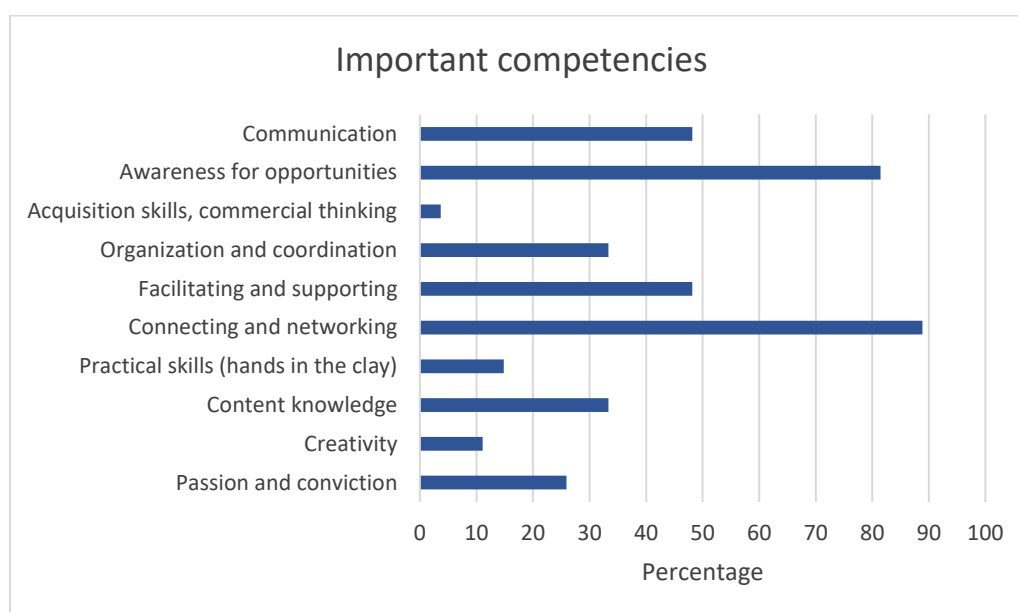


Figure 5.3: Overview of the importance of competencies for citizen participation.

Hak van Nispen and Monique Verstraten stated that many centres do not have enough space (both financially and employment-wise) for knowledge development and being able to keep up with developments and innovations regarding citizen participation (H. van Nispen, personal communication, February 23 2023; M. Verstraten, personal communication, February 23 2023). As can be seen in figure 5.4, the results on this question in the survey are rather evenly distributed, with 52% stating that they indeed experience this barrier (with 15% choosing none, 11% choosing highly

insufficient and 26% choosing insufficient) and 48% stating that they do not experience this barrier (with 4% choosing sufficient and 44% choosing highly sufficient).

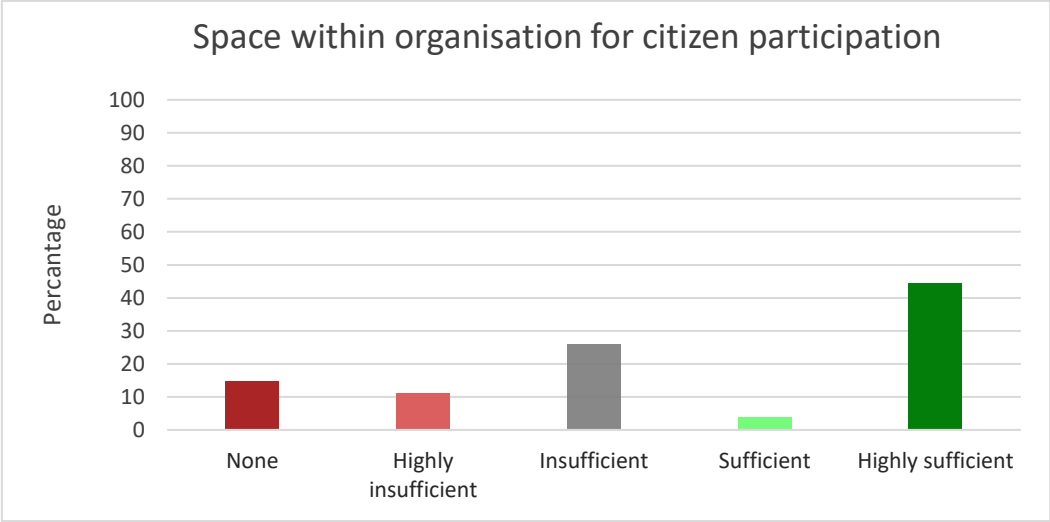


Figure 5.4: Overview of the space within EECs to focus on citizen participation.

The next section will explain the results of the statements regarding further barriers that EECs might encounter according to the expert interviews. The results are shown in figure 5.5.

Firstly, it can be difficult for EECs to reach certain target groups with participation projects and activities. Many centres agree to some extent with this statement, with 48% choosing agree and 4% choosing completely agree, compared to only 4% choosing completely disagree and 8% choosing disagree.

The second statement explains how centres can experience barriers in visualising and demonstrating the impact and the results of their citizen participation projects. The results indicate that there is no strong consensus on this barrier within the respondents but that this barrier does play a role for centres, with centres choosing disagree (40%), neutral (24%) and agree (36%).

Thirdly, EECs can experience strong competition from other parties regarding activities and projects on citizen participation. However, most respondents either disagree with this statement (44%) or choose neutral (28%), although there are also centres who indeed encounter this barrier with 8% of the centres choosing for agree and 8% choosing completely agree.

Fourthly, centres might encounter difficulties with citizen participation as a result of the “hard side” of government, for example related to legislations, permits, zonation plans etc. The results of the survey indicate that only few respondents encounter this barrier, with 40% of the respondents choosing disagree, 40% choosing neutral and only 12% choosing agree.

Finally, barriers might arise due to the fact that the environmental education sector is highly fragmented at the moment with a lack of cooperation between EECs. However, the results show a mixed opinion on this statement with 4% choosing completely disagree, 36% choosing disagree, 32% choosing neutral, 20% choosing agree and 8% choosing completely agree.

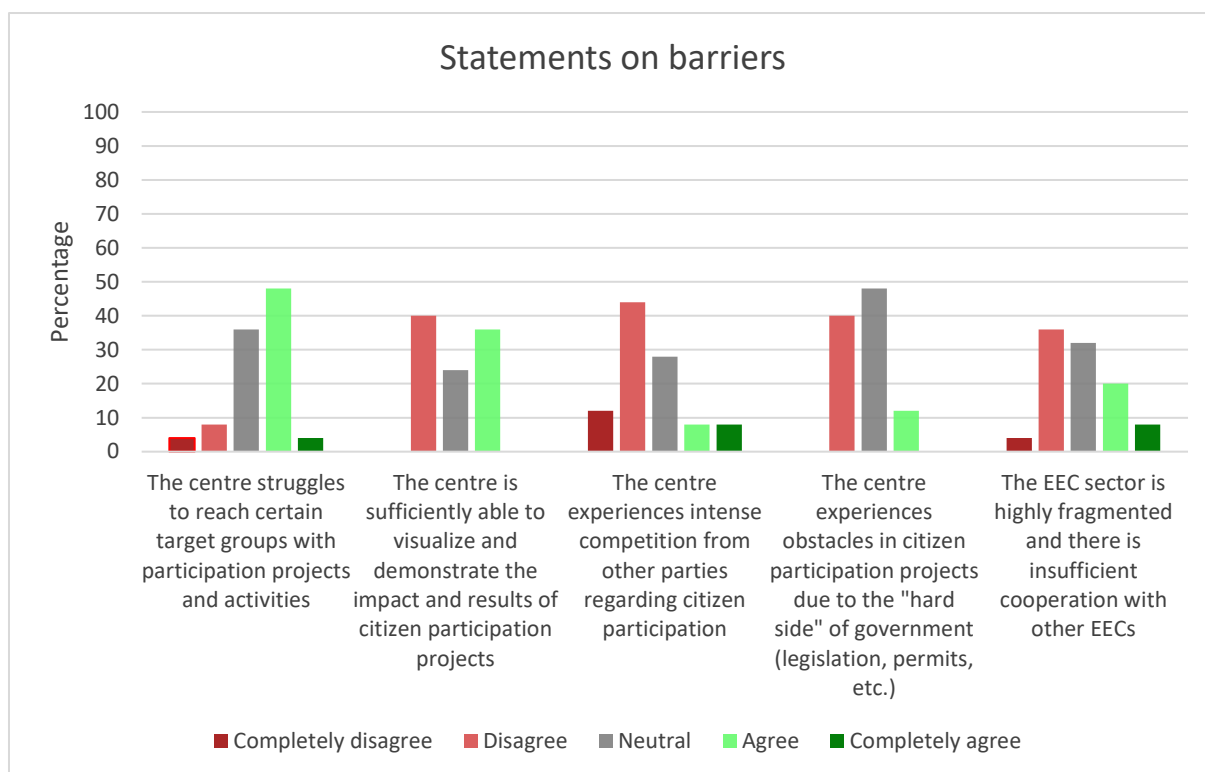


Figure 5.5: Overview of the opinions of respondents on statements related to barriers to citizen participation.

### Additional barriers

The final question of this section deals with additional barriers that EECs encounter. As can be seen in table 5.9, 56% of the respondents state that they indeed encounter some additional barriers. These barriers include amongst others:

- Managing expectations; making sure that governmental actors and citizens stay motivated and enthusiastic while also ensuring that everyone has realistic expectations about projects or activities.
- Ambiguity about the market of citizen participation; which actors are active and which actions have the highest chance of being successful.
- The target group of citizen participation is not as tangible and demarcated as the target groups for formal education which causes difficulties for employees in reaching this target group.
- The image of EECs; EECs are often seen as a logical partner in projects related to for example nature or biodiversity but not for themes such as the energy transition.
- Different approaches regarding citizen participation by governmental actors, for example differences between the approach of a municipality and a province.
- A lack of employees or volunteers to organise projects or activities related to citizen participation.

Table 5.9: Percentage of respondents that encounter additional barriers to citizen participation.

Do you encounter any additional barriers?	Results
Yes	56% (15)
No	44% (12)

### 5.3.2 Differences between groups

The results of the survey show that there are indeed some significant differences between groups related to this section of the survey on barriers that EECs encounter. Firstly, there is a significant difference ( $p$  value = 0.027 (1-tailed)) on space within the organisation for citizen participation between municipal departments and not-municipal departments. As can be seen in figure 5.6, a large share of municipal departments has either no space or insufficient space (both financially and employment-wise) for knowledge development and being able to keep up with developments and innovations regarding citizen participation. On a strong contrast, the answers of not-municipal departments indicate that some centres indeed encounter this barrier, but that most centres (58%) state that the space is highly sufficient.

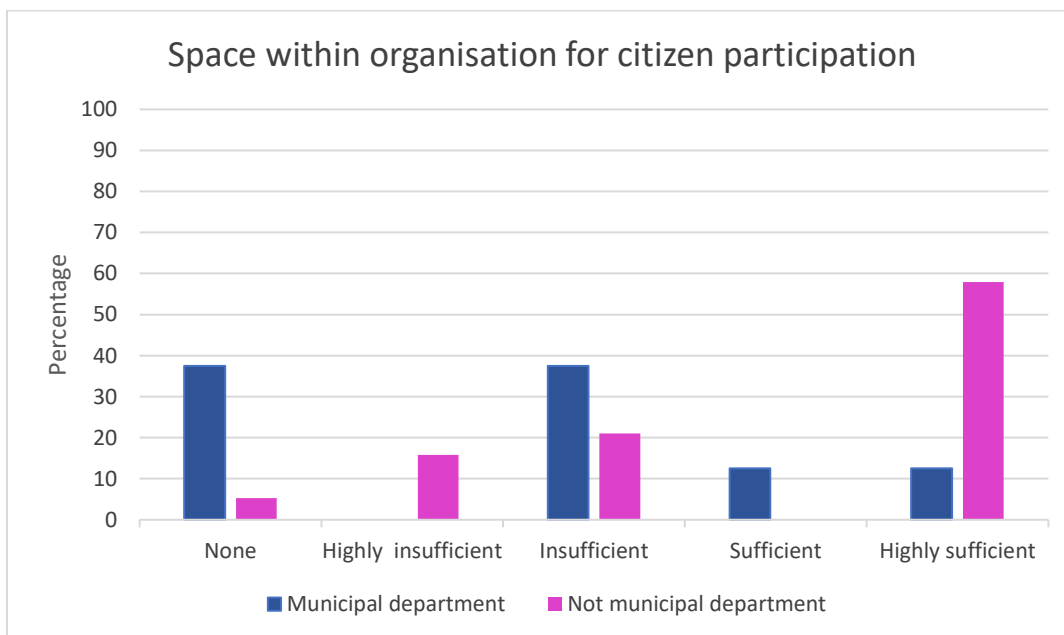


Figure 5.6: Overview of the difference between types of organisations on the space within their organisation to focus on citizen participation.

Secondly, the results show that there is a significant difference ( $p$ -value=0.043) between small, medium and large centres regarding the financial barriers that they encounter, as can be seen in table 5.10. Based on the expert interviews, it was expected that smaller centres more often experience financial barriers regarding citizen participation than larger centres. The Kruskal-Wallis test only showed that there was a difference between the groups, but a pairwise comparison using a Mann-Whitney U test was conducted to analyse which groups differ significantly. The results of these tests show that small centres significantly encounter more financial barriers than large centres.

Table 5.10: Overview of the difference between centres of different sizes on encountering financial barriers.

Do you encounter financial barriers regarding citizen participation? (n=27)			P value (2-tailed) = 0.043
Groups	Yes	No	Total
Small	12	3	15
Medium	2	3	5
Large	2	5	7
<b>Pairwise comparison of groups</b>			

Small and medium: p-value (1-sided) = 0.131  
 Small and large: p-value (1-sided) = 0.032  
 Medium and large: p value (1-sided) = 0.576

Finally, a significant difference (p value =0.023) was found between small, medium and large centres on their opinions on the fragmentation of the EEC sector, using a Fisher’s exact test. The Mann-Whitney U test that was used for a pairwise comparison of the groups showed that there was a significant difference (p=0.019) between small and medium centres. As can be seen in table 5.11, small centres often chose neutral or agreed to this statement, while medium-sized centres either completely disagreed (25%) or disagreed (75%) to this statement. Large centres also agreed or completely agreed more often than medium-sized centres but this difference was not found to be significant.

Table 5.11: Overview of the difference between centres of different sizes on their opinions on the fragmentation of the EEC sector.

<b>Statement 5: The EEC sector is highly fragmented and there is insufficient cooperation with other EEC’s</b>						P value = 0.023
<b>Groups</b>	<b>Completely disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Completely agree</b>	
<b>Small</b>	0	3	7	4	1	
<b>Medium</b>	1	3	0	0	0	
<b>Large</b>	0	3	1	1	1	
<b>Pairwise comparison of groups</b>						
Small and medium: p value (2-tailed) = 0.019 (after Bonferroni correction)						
Medium and large: p value (2-tailed) = 0.372 (after Bonferroni correction)						
Small and large: p value (2-tailed) = 1.000 (after Bonferroni correction)						

Based on the expert interviews, it was to be expected that there was a difference on the space within their own organisation to focus on citizen participation and the presence of the required competencies between the different sizes of EECs, but no significant differences were found. Next to this, it would have been logical to find a difference in the space that municipalities grant the centres between municipal departments and centres that are not municipal departments but also here no significant differences were found.

#### 5.4 Strategies

Theme 4 focuses on opportunities and strategies regarding citizen participation that centres can use. The results, shown in figure 5.7, indicate that most centres see possibilities for cooperation with welfare departments, followed by environmental and spatial planning departments. On a strong contrast, very few centres see opportunities for cooperation with traffic and transportation departments and no centres see possibilities for cooperation with the department of economic affairs. 40 percent of the respondents indicate that they see possibilities for cooperation with other municipal departments than the choice options in the survey such as the departments for public space, sustainability, and culture.

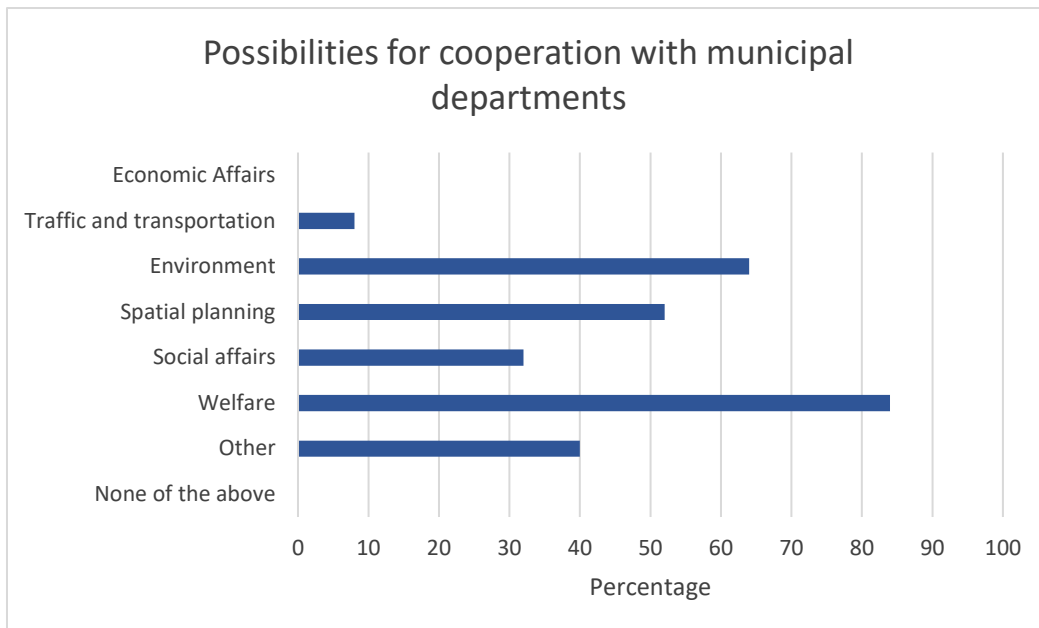


Figure 5.7: Possibilities for cooperation with municipal departments.

The next strategy that was discussed involves the possibilities for broadening the centres activities and projects towards different themes. As can be seen in figure 5.8, all respondents indicated that they see possibilities for including the themes “biodiversity and nature” and “water and climate adaptation”, but also the other themes were often seen as good opportunities, with still 64% of the respondents stating that they see possibilities for the theme of food, even though that is the least popular option.

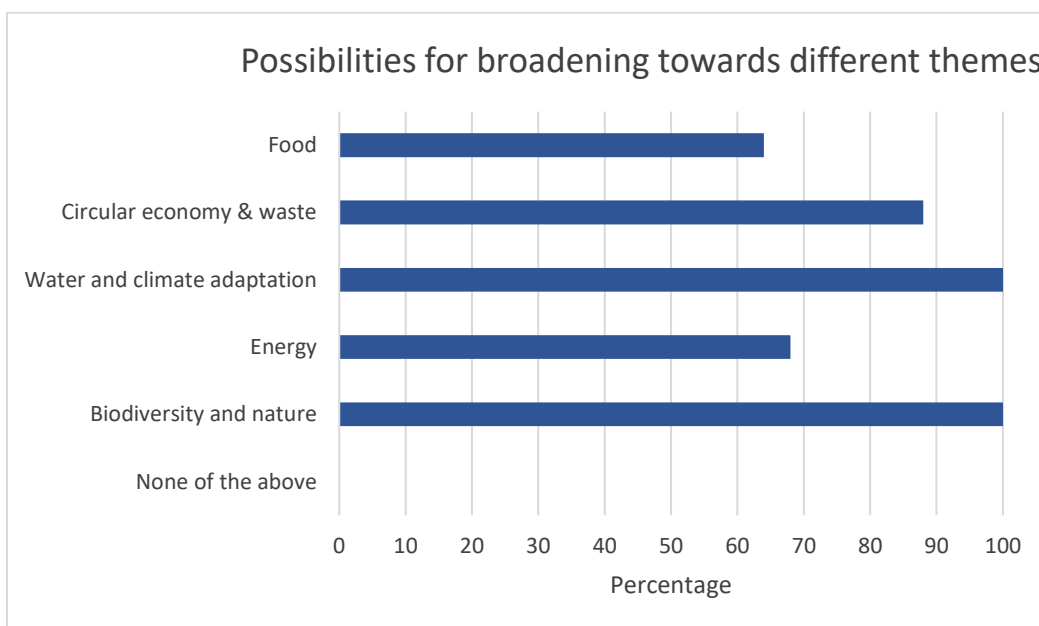


Figure 5.8: Possibilities for broadening of activities and projects towards different themes.

Since many centres experience financial barriers regarding citizen participation, it is important to develop new business cases. However, as can be seen in figure 5.9, 44% of the respondents state that they do not see any opportunities for business cases related to citizen participation, or at least don't see any opportunities in the four other categories. Within these categories, selling services and knowledge, for example by seconding or leasing employees, and utilising hard assets, for example by renting out facilities or materials are the most popular options.

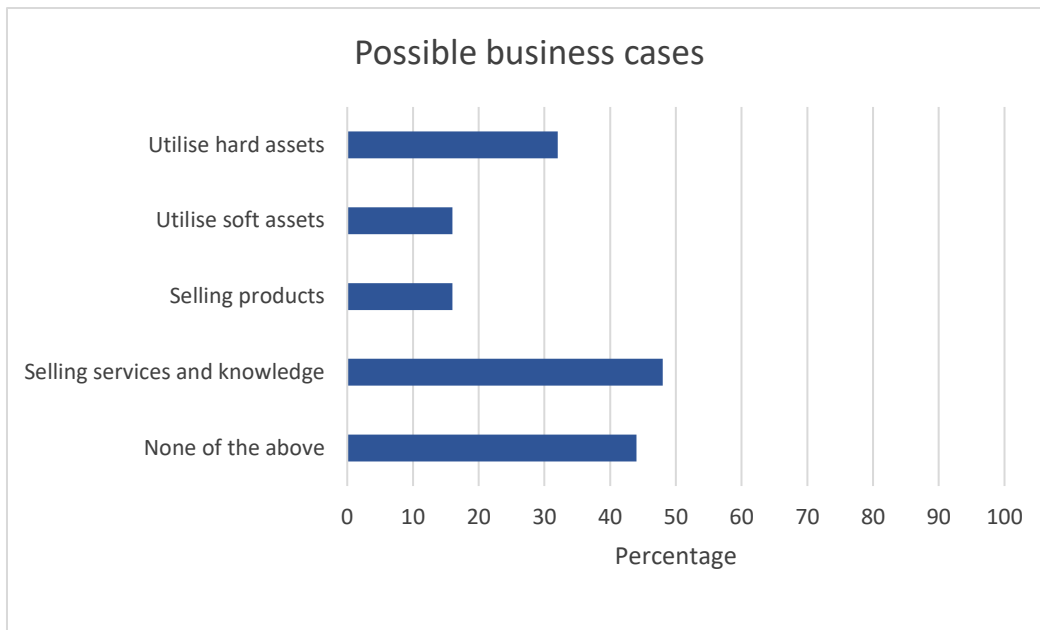


Figure 5.9: Possible business cases related to citizen participation.

The last part within the theme of strategies is related to the small wins framework. Actions that are important according to this framework were listed and respondents were asked to choose the three actions that they thought were the most important. The results, shown in figure 5.10, highlight that centres are aware of the importance of motivating and energising stakeholders, collaborating with other domains and sectors, and creating a culture of participation. However, other actions that are equally important according to the framework were often overlooked by respondents, especially setting provocative and ambitious targets, learning by doing during activities and projects, and identifying and appreciating achieved success. The results of this question can be seen as an indicator that learning process and knowledge development within EECs should focus on the actions that are currently less prominent.



Figure 5.10: Overview of the most important actions of the small wins framework in facilitating citizen participation.



## 5.5 Development of knowledge and expertise on citizen participation

The survey also investigated knowledge and expertise development related to citizen participation. The results, shown in table 5.12, show that most respondents prefer fact sheets or other learning tools such as a webinar, training or workshop. Next to this, respondents indicate that they prefer a learning style in which they are either a doer or decider instead of an observer or thinker. Finally, roughly 50% of the respondents state that they want to participate in a learning course on citizen participation if it costs less than € 2.000 and 50% indicates that they do not want to participate in such a learning course.

Table 5.12: Overview of the preferred learning tools, learning styles, and the interest for a learning course.

<b>Type of learning tool (n=25)</b>	<b>Results</b>
Book/lesson folder	8% (2)
Movie	8% (2)
Podcast	8% (2)
Fact sheets	40% (10)
Other	36% (9)
<b>Preferred learning style (n=25)</b>	
Doer	40% (10)
Observer	12% (3)
Thinker	12% (3)
Decider	36% (9)
<b>Do you want to participate in a learning course (n=25)</b>	
No	48% (12)
Yes, and it should cost a maximum of € 2.000	52% (13)
Yes, and it should cost a maximum of € 3.000	0% (0)
Yes, and it should cost a maximum of € 4.000	0% (0)

## 5.6 Summary

The results of the survey highlighted that most centres think that citizen participation will be an important task for EECs in the future and most centres are currently already active in citizen participation. Next to this, the survey indicated that many centres work on citizen participation together with other organisations and that they work primarily demand-driven.

Regarding the barriers, respondents indicated that they encounter financial barriers, a lack of mandate or space from municipalities, a lack of space within their organisation, difficulties in reaching all target groups, and difficulties in measuring impact. On a strong contrast, other barriers that were mentioned in the expert interviews or in literature such as competencies, strong competition from other parties, problems due to the hard side of the government, and fragmentation in the sector were not found to be an issue for many respondents. Next to this, the results showed that municipal departments more often encounter a lack of space within their organisation than not-municipal department, small centres

encounter more financial barriers than large centres, and small centres more often think that there is more fragmentation in the environmental education sector and there is a lack of cooperation between EECs than medium sized centres.

Finally, the survey highlighted that respondents see many opportunities for cooperation with different municipal departments and for broadening towards different themes. On a strong contrast, few respondents recognised chances for new business cases related to citizen participation.

## 6. Overview of barriers and strategies

This chapter will provide an overview of the five most important barriers that EECs can encounter in the step from formal education towards a focus on citizen participation and it will present nine strategies that can be used to navigate these barriers. These barriers and strategies, as well as the relationships between them, are summarised in figure 6.1. The results of this chapter are primarily based on the expert and in-depth interviews and the survey, complemented with insights from the literature study. Section 6.1 will discuss the barriers after which section 6.2 will further elaborate on the strategies that centres can apply. Section 6.3 will provide a short summary of the chapter.

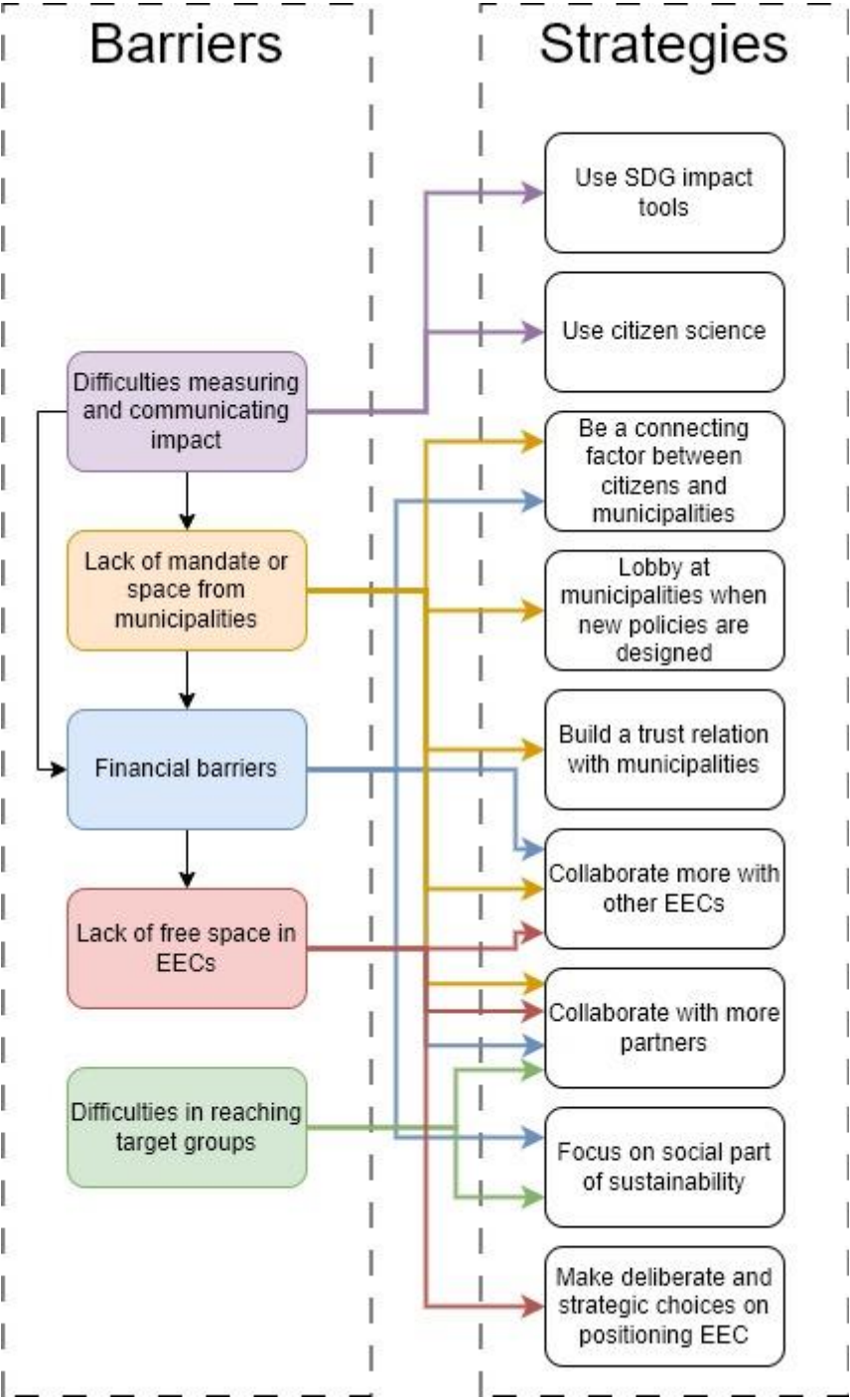


Figure 6.1: Overview of the five main barriers that EECs can encounter in the shift towards citizen participation, relations between these barriers, and nine strategies to navigate the barriers.

## 6.1 The five main barriers that EECs can encounter if they choose to shift their focus from education towards citizen participation

### **Difficulties measuring and communicating impact**

A first barrier that EECs can encounter involves difficulties in measuring and communicating the impact of their activities and projects related to citizen participation. The results of the survey show that 40 percent of the responding centres experience this barrier and 26 percent of the respondents chose neutral, indicating that they also experience this barrier to at least some extent. In the expert interviews, Arjen Wals summarised this barrier by stating: “Maybe also having a good instrument or tool to make visible that what they are doing in this field is having an effect, that it is having an impact. You also have to show the municipality or other clients that it is producing something because they want hard results. And that requires monitoring and evaluation” (A. Wals, personal communication, March 13 2023). In the in-depth interviews, Judith Zuiderwijk and Anne Marie van der Veen explained how measuring the impact of projects that are related to the planet or nature side of sustainability is not a pressing issue but measuring the impact of projects related to social aspects of sustainability is often challenging: “If it involves how many tiles have been taken out of the garden and how many plants have gone in? Of course that's all easily measurable. Or how many solar panels they have placed on their roof. I would always try to make it as clear as possible, but yes, measuring things like social cohesion, of course, that's not easy” (J. Zuiderwijk, personal communication, May 23 2023) and “It is just, the hard thing is that when a project is more structural, we have to find ways to secure it financially, and for that you have to demonstrate the effects of the project. As a municipality, it is always difficult to show the impact of those social things for the environmental goals” (A.M. van der Veen, personal communication, May 22 2023). Next to this, Anne Marie van der Veen and Liesbeth Bronkhorst explained how it is often difficult to measure the long-term effects of environmental education, for example related to changes in awareness or environmental attitudes (A.M. van der Veen, personal communication, May 22 2023; L. Bronkhorst, personal communication May 25 2023).

### **Lack of mandate or space from municipalities**

The second barrier that EECs can encounter entails a lack of mandate or a lack of space from municipalities. The results from the survey highlight that this barrier is often encountered by centres as the results indicate that only 30 percent of the centres is in the ideal position in which they receive tasks for activities or projects around citizen participation from the municipality. As figure 6.1 shows, this barrier can be the result of the previous barrier regarding the measurement of the impact of projects related to citizen participation; if centres are not sufficiently able to show their results and convince the municipality of the added value of their projects, centres might not receive any tasks or might not be given enough space to undertake these projects. However, as explained in chapter 4, this barrier might also arise as a result of the political situation in a municipality: does a municipality focus on sustainability and citizen participation and is there enough internal support among municipal employees for projects related to these themes.

### **Financial barriers**

Barrier three entails financial barriers that centres encounter related to citizen participation. Séverine Louf aptly described this barrier by stating: “we want to be there, we want to do, we want to make an impact and we do make an impact. It is just, Mother Earth does not have a bank account that can pay us, so that's one of our largest issues” (S. Louf, personal communication, May 16 2023).

This is one of the most often occurring barriers with 60 percent of the responding centres indicating that they indeed experience this barrier. This result is supported by the expert interviews in which was explained that many centres experience to at least some extent financial barriers, both in a general

sense but also regarding citizen participation (H. van Nispen, personal communication, February 28 2023; A. Wals, personal communication, March 13 2023). The privatisation of many EECs, a development that was explained in chapter four, has aggravated financial difficulties for many centres. As explained in chapter five, small centres encounter this barrier more often than larger centres. As can be seen in figure 6.1, financial barriers can arise as a result of the two previously discussed barriers. Centres can encounter difficulties with funding due to them not being able to measure the impact of their projects and provide the hard results that are often required by clients or subsidy providers. Next to this, a lack of mandate or tasks from the municipalities strongly affects the financial opportunities of EECs as many EECs depend heavily on subsidies or other funding from municipalities, as was explained by Liesbeth Bronkhorst: “But I also find the funding for this difficult. It takes quite a lot of time and energy to set up those participation trajectories and certainly if you also want to scale up a bit. Look, doing something once here or there is fine, but if you really want to scale it up, then it just takes a lot of time and money which I don't have in my mandate or task” (L. Bronkhorst, personal communication, May 25 2023). Another financial barrier that centres encounter involves the difficulties in reaching financial resources from governmental actors, other than municipalities. It is often difficult to apply for national or provincial subsidies or programmes as an individual centre (L. Bronkhorst, personal communication, May 25 2023; J. Zuiderwijk, May 23 2023). Finally, Séverine Louf explained how her centre encounters difficulties related to municipal subsidies due to the cross-sectoral nature of many of their projects, in which they simultaneously focus on for example environmental and social aspects: “And, it's very paradoxical, because they say we have to work together, but that's such a cliché. And we actually do it and then they don't remember from which subsidy or which municipal department it could be financed” (S. Louf, personal communication, May 16 2023).

### **Lack of free space in EECs**

A fourth barrier that EECs can encounter entails the lack of space (both financially and employment-wise) within their organisations for knowledge development and being able to keep up with developments and innovations regarding citizen participation. As explained in chapter five, the results of the survey show that municipal departments encounter this barrier more often than centres that are privatised. These results are in accordance with a statement from Liesbeth Bronkhorst who stated: “Well, you can often see that those privatised foundations are a bit further ahead in their thinking than municipal departments, also because municipal departments are completely encapsulated within that municipal organisation” (L. Bronkhorst, personal communication, May 25 2023).

As shown in figure 6.1, a lack of space within the EECs organisation can often be the result of financial barriers that for example prevent centres from being able to hire extra employees that are needed for the shift towards citizen participation. Next to this, centres can be too busy with their current activities to take the step towards citizen participation. This is also what Hak van Nispen and Roel van Raaij explained: “Because at the moment that you are up to your ears in work and you don't know how to survive due to all budget cuts then you will not take on this extra theme of citizen participation” (H. van Nispen, personal communication, February 28 2023) and “The problem is that you can be so successful with your current target group that there is very little space left to take up new things. So as a result, also your ability to innovate decreases (R. van Raaij, personal communication, February 21 2023).

### **Difficulties in reaching target groups**

The fifth and final barrier that EECs can encounter involves difficulties centres experience in reaching target groups. The results of the survey indicate that many centres encounter this barrier with 48 percent of the responding centres experiencing this barrier and only 12 percent indicating that they do

not experience this barrier at all. The in-depth interviews highlight that it is especially difficult to reach citizens with a lower income, lower levels of education and citizens with a migration background (L. Bronkhorst, personal communication, May 25 2023, A.M. van der Veen, personal communication, May 22 2023). Séverine Louf explained how involving all citizens is important for EECs from the perspective of the Sustainable Development Goals and climate justice: “But if we want a sustainable future, and this is also important in the Global Goals: leave no one behind. Then everyone will have to go in that direction, and we say, everyone should also be able to go in that direction too. Because if you don't have a penny to invest in double glazing or insulation, for example. Well, then you will be hit even harder with such an energy crisis. Because if you already have little and can't invest, things will only get worse. People who can invest, they will benefit from their solar panels and so the dichotomy in society will only increase” (S. Louf, personal communication, May 16 2023).

## 6.2 Nine strategies to navigate the five barriers

This section will further elaborate on the nine most promising strategies that EECs can apply to navigate the barriers they can encounter if they choose to shift their focus from education towards citizen participation. Each subsection will give an explanation of the strategy, it will describe to what barriers the strategy is related, and if applicable it will describe the most important benefits and drawbacks of the strategy.

### **Use SDG impact measurement tools**

As can be seen in figure 6.1, this first strategy is related to the barrier regarding difficulties in measuring and communicating the impact of projects or activities in citizen participation. It is a strategy reported by the ACT project in which the EEC Ulebelt explained how they used an MAEX analysis, a specific type of SDG impact measurement tool to measure the impact of their projects (Poventud et al., 2022). One of the main benefits of using SDG tools is that they include all of the three domains of sustainability: the environmental perspective, the social perspective and the economic perspective. As explained in chapter four, many centres have broadened their scope and broadened the themes that they focus on and as such the integrated and comprehensive SDG impact tools are a good fit. However, using SDG impact measurement tools is not a straightforward solution. As Logius and Ministerie van Binnenlandse Zaken (2020) explain, it is difficult to set clear ambitions, define indicators for these ambitions, and finally gather the required data. Next to this, there is a large variety of SDG impact measurement tools that are currently used, which makes it difficult to compare and aggregate the results of different organisations (Logius & Ministerie van Binnenlandse Zaken, 2020; López et al., 2023). These drawbacks can be reduced by collaborating with other EECs or other actors and share for example best practices and experiences with specific tools.

### **Use citizen science**

The next strategy that can be used to resolve difficulties in measuring and communicating the impact of citizen participation projects involves the use of citizen science, a strategy that was proposed by Arjen Wals in his expert interview (A. Wals, personal communication, March 13 2023). Citizen science is defined as the engagement of lay people in projects through various modes and channels of collecting, commenting, transcribing and analysing data (Tauginiené et al., 2020). Involving citizens can greatly help in the measurement of impact of citizen participation projects, especially when these projects are related to the environmental domain or to natural science. Although citizen science can also be applied to social sciences this is not a common practice (Tauginiené et al., 2020). Next to help measure the impact of centres, citizen science can help in achieving social goals related to citizen participation as it can lead to a stronger sense of place and sense of ownership, an increase in

community-building, social capital and social learning, and changes in environmental attitude (Haywood, 2014).

### **Be a connecting factor between citizens and municipalities**

A third strategy entails the positioning of centres as a connecting factor between citizens and municipalities. As can be seen in figure 6.1, it is a strategy designed for financial barriers and barriers related to a lack of space and mandate from municipalities. The strategy was mentioned in many interviews and in the ACT project that was conducted as part of the larger research project (R. van Raaij, personal communication, February 21 2023; H. van Nispen, personal communication, February 28 2023; B. Kuypers, personal communication, March 8 2023; Poventud et al., 2022). Hak van Nispen described this promising position as follows: “I think that EECs are pre-eminently places that can be that hinge point, that connecting factor between policy and practice. They can operate very close to the neighborhoods and public society. They can do that with a certain degree of continuity, which also makes them a trusted partner for those residents and those organizations” (H. van Nispen, personal communication, February 28 2023). In this position, centres can fill the gap between policy and society, helping the municipality to reach citizens by creating new connections. Next to this, centres can help to implement municipal policies by translating policy goals and ambitions into specific practical projects and activities. To a certain extent the centres could even become an ambassador of the municipality, as described by NMCX Centrum voor Duurzaamheid in Poventud et al., (2022): “we are the implementing organization of the municipality” (Poventud et al., 2022).

There are several reasons why this position can be considered to be a good fit for many centres. Firstly, most centres have a lot of experience in the execution of practical projects and activities, either related to citizen participation or to other domains, and as such they are a good partner for municipalities that might lack this experience. Furthermore, as explained by Judith Zuiderwijk, EECs are usually well acquainted to the local context, they know which themes or which problems are important for citizens, local organisations and municipalities (J. Zuiderwijk, personal communication, May 23 2023). These two arguments align well with the perspective offered by the small-wins framework: EECs can play a key role in recognising and appreciating small wins related to citizen participation as they are in close contact with citizens and are perhaps better capable of recognising promising initiatives than municipalities. Thirdly, Monique Verstraten and De Groene Belevenis explain how this position can help with reducing financial barriers as there are usually subsidies available for projects and activities as they help in achieving governmental policy goals (M. Verstraten, personal communication, February 23 2023; Poventud et al., 2022). From a theoretical perspective, the position as a connecting factor between municipalities and citizens can be described as a promising and helpful position at the intersection between the government system and societal system (defined as “systeemwereld en leefwereld” in Dutch) (Van Der Steen et al., 2014). A gap can be recognised between these two systems which is also often described as the policy-implementation gap or the knowing-doing gap (Bressers et al., 2017; Van Der Steen et al., 2014). “Although much attention is paid to policy making, the practical implementation and thus the effects of the policy lag behind. Social problems are solved mainly (and sometimes only) on paper. This creates a tension on putting policy into practice, resulting in an ever-widening gap between policy and practice implementation” (Bressers et al., 2017). This gap can be viewed from four different perspectives: the perspective of a gap between the two systems that has to be bridged, the perspective of compartmentalisation in which actors from both systems use different logics and paradigms that has to be broken, the perspective of colonisation of the societal system by the government system that has to be halted, and the emotions of angry actors in the societal system that need to be better understood by actors in the government system (Bressers et al., 2017). EECs can especially play an important role in

the first and fourth perspective: they can help to bridge the gap and they can help in understanding the emotions and feelings of citizens as explained by Monique Verstraten: “we are neutral and often people like us and enjoy us, because we do nice work with children. So, in that we can really mean a lot to at least take the heat and anger out of the discussions” (M. Verstraten, personal communication, February 23 2023). Furthermore, Brigit Kuypers described how centres are often more approachable than municipalities and as a result can more easily reach citizens (B. Kuypers, personal communication, March 8 2023).

Although the position as connecting partner between municipalities and citizens is promising and provides many opportunities for centres, it is also a very challenging position. To start with, centres have to be able to find a balance between on one hand facilitating the participation society, using the energy and motivation of citizens and responding to the demands and needs of citizens (bottom-up), and on the other hand the needs of municipalities or other governmental actors that want to reach certain policy goals and want to steer the behaviour of citizens in a certain direction (top-down) (R. van Raaij, personal communication, February 21 2023). Hak van Nispen explained how it is crucial to maintain a good relationship with municipalities to ensure the continuity and longevity of this new position of centres, while also maintaining the required degree of independence to be able to respond to the demands and needs of citizens (H. van Nispen, personal communication, February 28 2023). This aligns well with the findings of a study on citizen participation in spatial planning, in which the authors highlight the importance of maintaining independence and agency (Blanchet-Cohen, 2015). In order to be able to fulfil this role, centres should work primarily demand-driven. The results of the survey indicate that 29 percent of the EECs work supply-driven, meaning that these centres have to change their way of working.

Secondly, it is essential to find a balance between different types of citizen participation (Silverman, 2005). As explained in chapter two, there are many different types of citizen participation that can be recognised. EECs have to dynamically position themselves somewhere on the continuums or scales that can be recognized in the typologies of Arnstein, Silverman and Læssøe, in which participation is respectively divided into token, instrumental, and top-down participation on the one hand and genuine participation, grassroots or bottom-up participation on the other hand. As explained by Anne Marie van der Veen and Brouwer et al. (2019), it is important to first identify the themes and target groups of projects and activities and thereafter critically think about whether citizen participation is a good fit and suitable for the situation and which type or which types of citizen participation are suited best for this project (A.M. van der Veen, personal communication, May 22 2023; Brouwer et al., 2019). In the expert interview with Arjen Wals, he explained how emancipatory, genuine participation processes are best suitable for complex projects in which actors have different views and opinions and together can search for solutions. Education for sustainability requires a paradigm shift that challenges established ideologies and power dynamics, promoting the emergence of inclusive spaces that foster alternative modes of thinking, valuing, and acting (Holmberg & Samuelsson, 2006). These spaces can be easier created in emancipatory participation projects. On the other hand, more instrumental types of participation can better be used for more straightforward projects with a clear goal or ambition (A. Wals, personal communication, March 13 2023). These instrumental types of citizen participation are often comparable to nudging, they are used to tempt and guide people into changing their behaviour. As such it can be used by EECs to help municipalities to reach their policy goals and it can also be used to guide citizens into more sustainable behaviour, one of the main ambitions for many EECs and for GDO. However, as Arjen Wals described, the chance that citizens fall back into their old behaviour in the long term is large as this change is not based on their intrinsic motivation and values (A. Wals, personal communication, March 13 2023). When centres make the choice for a certain type of



participation, an important aspect to consider involves the different types of learning that are connected to the different types of citizen participation. Centres have to find a balance between emancipatory, genuine participation that provides more space for social learning and more instrumental forms of citizen participation which in general leave less room for social learning and focus more on instrumental learning (van der Hoeven et al., 2007). EECs have a lot of knowledge on learning processes and didactics and as such are well equipped to guide and facilitate social learning processes. However, more instrumental types of citizen participation might in some cases align better with the goals and ambitions of municipalities and as such provide more financial opportunities.

### **Lobby at municipalities when new policies are designed**

As can be seen in figure 6.1, this fourth strategy is related to the lack of mandate or space from municipalities. It is a strategy that was mentioned by René Munsters that involves the active lobbying at municipalities at the moment that new policies related to sustainability, environmental education or citizen participation are designed or developed (R. Munsters, personal communication, June 19 2023). This strategic mobilisation of political forces is also strongly recommended by Leusink et al. (2018). EECs should seek contact with municipalities at the first stage of the policy cycle, the agenda setting stage in which problem recognition and issue selection takes place or at the second stage of the policy cycle in which policies are formulated and decision-making takes place (Fischer et al., 2007). By doing this, EECs have the opportunity to influence the municipal policies, thereby creating more opportunities for activities or projects related to these themes when the policies have been implemented and are being put into practice. Naturally, the success of lobbying depends on factors such as the political climate in the municipality, the strength of the EECs relationship with the municipality and the power dynamics between these two actors. Depending on these factors, EECs can choose to focus primarily on lobbying at the civil servants of the related municipal departments, lobbying at the municipal council (Gemeenteraad in Dutch) and the municipal aldermen, or focus on both pathways simultaneously.

### **Build a trust relationship with municipalities**

As shown in figure 6.1, this strategy is also connected to the barrier of a lack of mandate or space from municipalities. Where the previous strategy focuses on the strategic lobbying at the municipalities, this strategy is geared towards building a long-term trust relationship with the municipalities. As explained by René Munsters, building trust at the municipality is crucial for getting the mandate or task for projects related to citizen participation (R. Munsters, personal communication, June 19 2023). Especially for centres that are new to citizen participation this can be a large barrier; they have to convince the municipality to take a leap of faith as these centers have no track record or previous experience with these projects. There are several methods that the EECs can apply to convince the municipality to take this step (R. Munsters, personal communication, June 19 2023). Firstly, EECs can choose to collaborate with other organisations that are already working within the theme of citizen participation for the municipality to gain experience and trust. Secondly, EECs can temporarily hire experts, for example from other EECs. In this case it is essential to appoint one of their own employees to learn from this expert and to ensure continuity after the experts leaves the organisation. Thirdly, EECs can search for national and provincial subsidies for citizen participation projects. As a result, municipality are not financially responsible and are therefore incentivised to take the leap of faith. Finally, centres can choose to start with low-hanging fruit, focusing on easy and accessible projects, and by doing so building a trust relationship with the municipality, moving step by step towards more complex and risky projects.

### **Collaborate more with other EECs**

This sixth strategy involves collaborating more with other EECs. This strategy was often mentioned in the interviews and was highlighted as a promising strategy in the report of Leusink et al (2018).

Collaborating more with other EECs is related to three barriers as shown in figure 6.1: the lack of mandate or space from municipalities, financial barriers and the lack of free space within the organisation of EECs. Related to financial barriers, EECs can mutually apply for funding (H. van Nispen, personal communication, February 28 2023). By working together in this, centres might be admissible for provincial, national or even international subsidies that are out of reach for individual centres. In this manner, more established and more successful centres can help the less successful centres to break the vicious circle of budget cuts and other financial barriers.

Also, EECs can lobby together at provinces or the national government, or at least collaboratively support environmental lobby organisation such as the “Groene 11” (H. van Nispen, personal communication, February 28 2023). Next to this, centres can work together by sharing knowledge and exchanging best practices (R. van Raaij, personal communication, February 21 2023; Leusink et al., 2018), a strategy that is strongly encouraged by GDO. One particular way in which knowledge can be shared was described in the previous strategy in which was explained how centres can rotate employees to help them gain experience in new areas or themes (H. van Nispen, personal communication, February 28 2023; Leusink et al., 2018). Although collaboration with other EECs can provide many opportunities, Brigit Kuypers provides an important nuance to this strategy, indicating that: “You shouldn't work together for the sake of working together, because that frustrates, so if you can just do something yourself, in your own bubble and own context, then you should just do it individually” (B. Kuypers, personal communication, March 8 2023).

### **Collaborate with more partners**

A seventh strategy entails collaborating with more partners. This strategy can be used to navigate the effects of four barriers as can be seen in figure 6.1: the lack of mandate or space from municipalities, financial barriers, the lack of free space within the organisation of EECs, and the difficulties in reaching target groups. Since many centres indicate that they experience barriers related to finances or to a lack of free space within their internal organisation, seeking for new partnerships with other organisations can be a helpful strategy as it can provide new business cases and it can reduce pressure on employees (Leussink et al., 2018). One promising partner that is worth highlighting entails educational institutions. Liesbeth Bronkhorst explained how she sees many opportunities in working together with universities of applied science such as Windesheim or Aeres in Almere who have access to national or even international funding and as such can provide interesting business cases. “No matter what they study, it is also always about the relationship of residents and citizens. What do they think about this issue? What can they do with it? What do we want them to do with it? Well, those are all questions that come up in all those research groups. And they are very happy that we can bring in practical experience, practical examples, practical knowledge, our network” (L. Bronkhorst, personal communication, May 25 2023). A second promising idea involves developing regional partnerships or regional EECs that focus on one specific theme. This could be implemented in a similar way as Regionale Energie Strategieën (Regional Energy Strategies), regional partnerships that focus on the energy transition. Hak van Nispen explains how they could design regions and have an EEC in each region that fulfils a stronger role and has more capacity and knowledge on one specific theme (H. van Nispen, personal communication, February 28 2023). A third promising partnerships involves collaborating with organisations that focus on social goals, for example welfare organisations, municipal social departments or housing corporations. This strategy will be further elaborated on in the next section.

Finally, next to collaborating with more partners, centres can also play an important role in promoting and facilitating partnerships between other organisations or between municipal departments. Liesbeth Bronkhorst explained this by stating: “A very important task of ours is to connect all those parties (local nature associations, municipal departments) to each other. So, what we do is facilitating the collaboration and connection of those parties and they don't do that by themselves. So that platform function, it is very important” (L. Brinkhorst, personal communication, May 25 2023).

### **Focus more on social part of sustainability**

The eight strategy involves focusing more on the social part of sustainability, a strategy that can be used to navigate financial barriers and difficulties in reaching all target groups. Hak van Nispen highlighted that EECs often focus too little on the social aspects of sustainability: “I think that the conception or the explanation of the word sustainability is actually still quite narrow. It's still mostly pretty much stuck on the word planet and the aspects related to the people and profit parts are actually not adequately expressed in it. If you look at the Sustainable Development Goals, I think it would be a good idea to include the social component much more in your role as an EEC” (H. van Nispen, personal communication, February 28 2023). The results of the survey indicate that centres are aware of the opportunities that focusing more on social themes provide with 84 percent of the respondents seeing chances for a collaboration with the welfare department of municipalities and 32 percent seeing opportunities in collaborating with the social affairs departments.

One of the approaches that EECs can use within this strategy is ABCD: Asset Based Community Development, which aims to build capacity within communities by focusing on the strengths and assets that are available in these communities instead of focusing on weaknesses and problems (Phillips & Pittman, 2009). It is an approach that aligns very well with the small-wins framework as it also focuses on working step by step towards a large goal or ambitions and it also highly values small triumphs and successes (Phillips & Pittman, 2009). Séverine Louf explains how she puts this approach into practice: “You look from the perspective of citizens and you start by listening. And sure, I also want biodiversity and greening of neighbourhoods and all those thing. But if I go down that street in that neighbourhood and ring the bell: Guys take out your tiles, put in plants, they will tell me something else. So I actively have to go to those neighbourhoods and see, what moves them? What is their story, what's going on here, what do they have, what do they need? There's always a starting point to eventually do those sustainability projects, but I use a different approach, I have a different intention” (S. Louf, personal communication, May 16 2023). Next to this, Séverine Louf explains the importance of really making a connection with citizens and focus on that sense of involvement: “And that contact is the basis, because only if that contact is there, only if that trust is there, you can start talking to them about tomorrow. Let alone the future, let alone a sustainable future and that's purely social community development and it's long term. But if you want to get everyone on board, if you adhere to the Global Goals leave no one behind principle, this is the basis” (S. Louf, personal communication, May 16 2023) and “In the end, that connection is what it's all about. If you feel that connection. Firstly, that connection with yourself, knowing what you want, who you are. Then you can also connect with others. You are seen, you are heard, you are meaningful. And then you can also formulate together what you want in that neighbourhood. You can make that connection with nature, with the environment. Only when you feel that you are part of the community, then you can grow and then you also feel the responsibility for your environment” (S. Louf, personal communication, May 16 2023).

Focusing on social themes can be a challenge for EECs as they often do not have experience in this domain. Séverine Louf explains that: “It is a profession in its own right. That's why you don't have to

do it all by yourself and instead should seek cooperation with community work (Opbouwwerk in Dutch) and with housing corporations who also know very well who they are dealing and where the hotspots are of citizens who are still very far away from sustainable behaviour” (S. Louf, personal communication, May 16 2023). Next to this it may exacerbate barriers regarding measuring and communicating of the impact of projects. As explained previously, especially measuring the effects projects that focus on social themes and goals can be challenging. However, this strategy also provides many opportunities. Related to financial barriers, centres can find new business cases in Social Return On Investment (SROI) rules for companies and they can apply for subsidies or funds related to social policies. Next to this, it can be a method to become more inclusive and reach all citizens (Klein Woolthuis et al., 2023). Séverine Louf summarises the importance of this strategy as follows: “Especially that target group deserves it, needs to be seen, to be heard, to be taken seriously, to be worked with, because only then can we all move towards a sustainable future (S. Louf, personal communication, May 16 2023).

### **Make deliberate and strategic choices on positioning EEC**

The ninth and final strategy involves making deliberate and strategic choices on the positioning of the EEC. As explained in chapter four, the environmental education sector is a very dynamic field with many developments that have taken place in the recent past or are still taking place at the moment. EECs have to make strategic decisions on their positioning considering these developments. Especially since many centres experience a lack of space within their organisations to make the step towards citizen participation, it is crucial to make deliberate choices on the themes or on the strategies that a centre will focus on. As explained in chapter four, there is a large variety of themes that EECs can focus on. Next to this, as explained above in the section on becoming a connecting partner between municipalities and citizens, there are many different forms of citizen participation that can be applied. It is not possible to focus on all themes, all target groups, and all different forms of citizen participation and therefore it is vital to carefully consider all options and decide which options and strategies fit best with the EECs organisation. Important to consider are the assets, strengths and unique selling points of an EEC, using for example tools such as a SWOT analysis (Poventud et al., 2022). Next to this, it is recommended to assess the surroundings by doing a market analysis and a policy analysis as these will respectively provide important insights in the gaps in the market where EECs can have a large added value, and the themes or domains that governmental actors want to focus on (R. Munsters, personal communication, June 19 2023). Another strategy to help centres make these choices is to (temporarily) hire experienced employees to focus more on the strategic positioning of centres. Many centres highlight the importance of hiring new employees that help guide them in their strategic positioning. Monique Verstraten explained how she hired a team leader to focus on tactical and strategic choices, De Groene Belevens temporarily hired a director to guide them in their transition from being financed by the municipality towards depending on other sources of finance, and Ulebelt assigned an interim director for the transition towards a more professional and modern organization (M. Verstraten, personal communication, February 23 2023; Poventud et al., 2022). It is important to consider the principles of the small wins framework in these choices. Centres have to realise that it is perhaps more practical to start with smaller projects when they decide to make the step towards citizen participation. By starting with smaller and less complex projects or by collaborating with other organisations, centres can learn by doing. They can slowly build a reputation and use this reputation to convince municipalities or other financiers to provide them with more tasks and projects. As Hak van Nispen explained, centres have to try to create a participation culture in which all actors that are involved in citizen participation are connected and collaborate (H. van Nispen, personal communication, February 28 2023). Naturally, creating such a culture is not an easy task and centres should work towards this ambition step by step, starting with smaller projects and

over time expanding into larger and more complex projects. In this process, according to the small wins framework, centres should focus on motivating and energising citizens, governmental and other involved organisations by showing previously achieved results, lowering the threshold for citizen participation by actively facilitating and helping citizens with practical things, and collaborating with other domains and sectors.

### 6.3 Summary

This chapter listed the five most important barriers that centres can encounter and nine strategies that they can use to navigate these barriers. The barriers include: difficulties measuring and communicating impact, the lack of mandate or space from municipalities, financial barriers, a lack of free space in the organisation of EECs, and difficulties in reaching all target groups. The proposed strategies to navigate these barriers include: the use of SDG impact tools, the use of citizen science, be a connecting factor between citizens and municipalities, lobby at municipalities when new policies are designed, build a trust relation with the municipality, collaborate more with other EECs, collaborate with more partners, focus more on the social part of sustainability, and finally, make deliberate and strategic choices on the positioning of centres.

## 7. Discussion

### 7.1 Reflection on methodology

#### **Internal validity**

This section will elaborate on the internal validity of this thesis, focussing on the extent to which the results and conclusions of this study are correct within the research situation. An issue related to this type of validity entails the lack of a clear definition of citizen participation in the survey. As a result, it is unclear exactly what activities or projects are considered as citizen participation by the respondents, making it difficult to draw strong conclusions on questions such as “do you expect citizen will be an important task for EECs in the Netherlands?” and “are you already active in citizen participation?”

Several biases might play a role in this study. Firstly, respondent bias might play a role as interviewees are maybe careful and reluctant to address the barriers and problems that they encounter. Moreover, some topics, especially those related to employees or to the collaboration with other organisations might be sensitive. However, as triangulation was applied and the data was collected by both interviews as well as by the anonymous survey, it can be argued that this type of bias does not have a substantial impact on the internal validity of this research. Secondly, researcher bias can potentially affect the interpretive validity of this research (Johnson, 1997). This bias involves the interpretations that I had to make when I analysed the data from the interviews and the open-ended questions of the survey. The bias is described as: “Not only is there always some information that is not communicated, but every interpretation of data is influenced by researcher’s pre-constructed theories and values” (Kuzmanić, 2009). Johnson suggests to apply the method of reflexivity to reduce the negative impact of this researcher bias on the internal validity of this study (Johnson, 1997). In line with this suggestion, I actively engaged in critical self-reflection about my potential biases and predispositions. For me, these predispositions were mostly related to the values that I developed during my studies on themes such as sustainability and citizen participation. Moreover, I used a method proposed by Noble & Smith (2015) regarding respondent validation by asking the interviewees for feedback and approval on my interpretations of their stories and quotes (Noble & Smith, 2015).

#### **External validity**

The external validity of a research project is defined as the extent to which the conclusions can be generalised outside the research sample, i.e., the population in the real world. The first issue that arises related to this type of validity is the relatively small sample size in the survey with 30 from the 140 centres responding to the survey. Especially with such a small sample size, participation bias could arise, which is defined as: “a skewness in the data set because participants disproportionately possess certain traits that affect participation, attrition, or outcomes. The resulting sample is not truly representative of the population as a whole, and the results cannot be generalized” (Elston, 2021, p.1). However, in the survey sample, this bias appears to be limited as the sample provides a good mix of characteristics of EEC in the Netherlands with a large variety in centre size and type of organisations. One limitation that might have played a role entails a self-selection bias in which centres that value citizen participation more were more likely to participate in the survey than other centres. All in all, the conclusion can be drawn that the survey sample is fairly representative for all EEC centres in the Netherlands, meaning that the results of this study can be generalised outside the study population.

### 7.2 Reflection on theoretical framework

This second section of the discussion chapter reflects on the theoretical concepts and perspectives that were used in this study. To start, the theoretical concepts on citizen participation and social learning

provided the required background information to understand the main theme of this study, the step towards citizen participation in EECs better. Next to this, the concepts provided important insights related to the positioning of centres, especially regarding the strategy of becoming a connecting factor between municipalities and citizens.

Moving on to the multi-level perspective on transitions, the conclusion can be drawn that it proved to be very useful for understanding the current situation and context of the environmental education sector. As explained in chapter four, the change towards more citizen participation in EECs does not take place in a vacuum. It is only one of the changes that is currently happening in the field of environmental education. By using the theoretical perspective of transition theory, the dynamic nature of the field of environmental education was highlighted, thereby emphasising the importance of the strategic positioning of centres and taking into account the developments in the sector. However, this perspective was originally developed for technical applications and as a result some of the interactions were difficult to recognise in the context of this thesis. Next to this, since this thesis focuses primarily on social and policy or governance themes, no changes were recognised that took place solely on the niche level that were relevant for this study. If the scope is broadened to environmental education in general, then some innovations on the niche level can be recognised such as for example the whole school approach, “a framework for re-orienting and redesigning education considering emerging global sustainability challenges” (Mathie & Wals, 2022). Moreover, in accordance with a critique on the multi-level perspective by Jørgensen (2012), who states that the three levels do not clearly define the role of actors, arguing that actors can never operate on just one level, but engage, transform and intervene at all levels (Jørgensen, 2012), it proved to be difficult to distinguish between the different levels. For example, governmental actors such as municipalities play an important role in the daily practice of EECs, taking place at the regime level, while they also play an important role on the landscape level in developments such as the implementation of new public management.

Finally, discussing the relevance of the small wins governance framework, the conclusion can be drawn that it provides an interesting list of actions and indicators for these actions but that it was difficult to apply to this research topic. The framework was developed for the step towards circular economy, meaning that there was a clear goal or ambition that can be reached by the accumulation of small wins (Termeer & Metze, 2019). In this thesis, there was no clear end goal; by contrast, a recommendation following from this research is that centres should not always strive to focus on citizen participation but that they should carefully think about their position and make strategic choices about their future. Without a clear goal it is difficult to apply the actions and principles from the small wins framework. Next to this, there is a difference in the type of change that the framework is applied to. From origin, the small wins framework focuses on a transformative change towards a circular economy, in which the circular economy is “at odds with many norms, logics and routines underlying the linear economy. As a consequence, realising circular economy ambitions does require fundamental technological changes and changes at the level of practices, regulations, markets and networks” (Termeer & Metze, 2019, p.1). This is very different from the transition towards citizen participation in which EECs have to strategically position themselves within the current systems and regimes. This transition is not a transformative change but it can instead be classified as a first order change “that aims to do things better within the existing institutional logics and taken-for-granted frames of reference” (Termeer & Metze, 2019, p.2).

### 7.3 Reflection on results and implications of findings

This section will start with a reflection on the most important and surprising findings of this study.

The first interesting and perhaps surprising finding of this study is the fact that centres are aware of the importance of citizen participation with 80 percent indicating that they expect it to be an important task for EECs and with 70 percent indicating that they are already active in the field of citizen participation. However, as explained in section 7.1, it is important to note that these high numbers are perhaps caused by the lack of a clear definition of citizen participation. The second interesting finding is related to competencies. According to literature (Haffmans et al., 2013; Leussink et al., 2018) and the expert interviews, a lack of competencies related to citizen participation is one of the main barriers that many centres encounter. On a strong contrast, 74 percent of the respondents in the survey indicated that the required competencies are already present within their current organisations. Furthermore, out of the seven centres that indicated that they do not currently have the required competencies, five centres emphasised that they do not think that these competencies can be developed by knowledge development with their current employees. This also corresponds with the fact that 48 percent of the respondents answered that they are not willing to participate in the learning trajectory. However, as can be seen in table 7.1, a Fisher's Exact test showed that there is a significant difference ( $p=0.0114$ ) regarding competencies between centres that are already active in citizen participation and centres that are not yet active. As explained in section 7.1, a self-selection bias might have played a role in sampling, which means that there are perhaps more centres in the sample that are already active in citizen participation than is representative for the whole population of 140 EECs in the GDO network. This could also mean that a lack of competencies is a barrier for more centres in the Netherlands than the results in this study have suggested.

*Table 7.1: Differences in the presence of competencies between centres that are currently active in citizen participation and centres that are not (yet) active in citizen participation.*

<b>Group</b>	<b>Competencies present</b>	<b>Competencies not present</b>	<b>Not answered</b>
<b>Already active in citizen participation (n=21)</b>	17	2	2
<b>Not (yet) active in citizen participation (n=9)</b>	3	5	1

The third important finding of this study involves the finding that municipal departments more often experience a lack of space within their organisation for knowledge development and innovations regarding citizen participation than not-municipal departments, often privatised organisations.

Moving on then to a comparison of the results of this research with other studies, it is interesting to note that the emphasis I have put on collaboration related to citizen participation, both with other EECs and with other organisations, is also one of the key recommendations of the report of Leussink et al. (2018) for the environmental education sector in general. Moreover, it is interesting to highlight some differences between the strategies that I propose and the recommendations of the first ACT project. In that project, which focused mainly on more innovative centres that were already successful in their citizen participation projects, a facilitator role of centres in citizen participation projects is recommended, focusing strongly on bottom-up processes. By contrast, I conclude that the role of centres should be more flexible depending on the type of citizen participation that fits best with the goals of projects. Similar to my strategies, the researchers also recommend more collaboration, but they focus mainly on collaboration with businesses (Poventud et al., 2022), while I recommend collaborating more with other EECs and with a broad range of organisations; including businesses but also for example welfare organisations and community development organisations.



Next to this, when considering the implications of the findings of this study in relation to the larger research, it is important to note that the results of this study have already been used by other projects of the larger research project. An ACT project about the development of a learning trajectory for EECs and two interns of GDO that focus on learning tools for EECs have used the barriers and strategies that were identified in this thesis as input for their projects.

Further research is needed on methods or tools that centres can use to measure the impact of their citizen participation projects, especially related to the measurement of their social results and ambitions. Although this study recommends using citizen science and SDG impact measurement tools, both strategies have some drawbacks as was explained in chapter six. Therefore, more research is needed on the application of these strategies or on the development of a new method or tool specifically designed to accommodate the needs of EECs. Next to this, Liesbeth Bronkhorst emphasised the demand for the development of a framework for strategic positioning that centres can easily use to find out their strengths, do a market analysis and help them decide on what strategies or what domains or themes they should focus (L. Bronkhorst, personal communication, May 25 2023).

## 8. Conclusion

As part of a larger research project on the step from formal education to citizen participation in EECs, this study aimed to identify the barriers that centres can encounter in this process and propose strategies that centres can use to navigate these barriers. By using a mixed method approach including two explorative interviews, a literature review, six expert interviews, a survey and four in-depth interviews, the five most important barriers as well as nine strategies to navigate these barriers were identified. These barriers include: difficulties measuring and communicating impact, the lack of mandate or space from municipalities, financial barriers, a lack of free space in the organisation of EECs, and difficulties in reaching all target groups. The proposed strategies to navigate these barriers include: the use of SDG impact tools, the use of citizen science, be a connecting factor between citizens and municipalities, lobby at municipalities when new policies are designed, build a trust relation with the municipality, collaborate more with other EECs, collaborate with more partners, focus more on the social part of sustainability, and finally, make deliberate and strategic choices on the positioning of centres.

I would argue that from all these strategies, the most important recommendation is to make deliberate and strategic choices since the theoretical multi-level perspective on transitions has highlighted the dynamic field of NDE. There are many developments happening in the environmental education sector and centres should take time to reflect on their current strategy and position, conduct a market and/or a policy analysis, try to identify the barriers that they encounter, and finally make strategic choices on their position in the future.

Next to this, becoming a connecting partner between citizens and municipality, and within this strategy finding a balance between bottom-up and top down approaches and between different types of citizen participation is often recognised as a very promising strategy.

As the results of the survey indicated, small centres more often encounter financial barriers and therefore they can focus more on the strategies that can be used to navigate this barrier such as becoming a connecting partner between citizens and the municipality, collaborating with more partners and EECs and focusing more on the social part of sustainability. In a similar sense, municipal departments that more often experience a lack of space for knowledge development and innovation within their organisation can consider to try to navigate this barrier by collaborating more and by making more deliberate and strategic choices on their positioning.

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## Appendices

### Appendix A. Interview guide expert interviews

#### **Start:**

- Introductie van mezelf, onderzoeksproject en thesis
- Uitleggen hoe het interview eruit gaat zien
- Toestemmingsformulier samen doorlopen en laten ondertekenen (bij online interview voorafgaand aan interview het formulier alvast doorsturen)
- Zodra opname gestart is vragen om zich te introduceren (werk, ervaring NDE)

#### **Thema's:**

##### **Vanuit multi-level perspective on transition om een algemeen beeld te krijgen van de NDE sector: eerst uitleggen welke ontwikkelingen ik zie (broadening of themes, new public management, and increase of citizen participation) en dan vragen hoe zij daarover denken**

1. Welke grootschalige veranderingen vinden plaats in de NDE sector? (Beleidsveranderingen, veranderingen in de samenleving, toenemende rol burgerparticipatie, veranderingen in positie/rol centra, verandering in activiteiten centra)

- Doorvragen naar oorzaak/reden van veranderingen (bewuste/politieke keuze, onbewust ontstaan)
- Doorvragen naar gevolgen van verandering: welke kansen bieden de veranderingen en welke problemen ontstaan er?
- Hoe kunnen centra deze kansen aangrijpen? Welke factoren/competenties zijn hiervoor nodig?
- Hoe kunnen centra omgaan met deze problemen? Welke strategieën kunnen ze toepassen?

2. Welke innovaties vinden plaats in de NDE sector? (kleinschalig, nieuwe onderwerpen/methodes/partners)

- Doorvragen naar hoe om te gaan met deze innovaties?

3. Wat is de rol van de NDE centra in deze transitie/veranderingen? Mee met veranderingen of focus op traditionele/conservatieve activiteiten en educatie? Hoe zouden centra zich moeten positioneren?

##### **Vanuit small-wins governance framework:**

1. Eerst uitleggen van het framework en onderstaande concepten

- Framework toepassen op burgerparticipatie
- Activating the right mechanisms (energising, learning by doing, logic of attraction, coupling, robustness)
- Identifying small wins (visible results, synergies/co-construction)
- Setting a provocative ambition (leading by example, represent desired future, stretch/challenge status quo)
- Welke van dit soort acties of dit soort concepten zijn belangrijk om burgerparticipatie te vergroten en succesvol toe te passen?

2. Hoe faciliteren van burgerparticipatie? Hoe pak je dit aan?

- Top- down (Actief burgers betrekken, zelf projecten starten) of bottom-up (afwachtend, faciliteren van initiatieven)?
- Activistisch of alleen faciliterend?

3. Welke factoren zijn nodig om dit te kunnen doen?

- Doorvragen naar andere competenties, andere organisatie/management van centra, nieuwe verdienmodellen

4. Welke uitdagingen of problemen rondom burgerparticipatie?

- Doorvragen naar oorzaak van problemen

- Doorvragen naar mogelijke manieren om deze problemen te voorkomen of als dit niet mogelijk is er goed mee om te gaan

**Einde:**

1. Uitleggen dat volgende stap in onderzoek een enquête voor NDE centra is en vragen voor input voor enquête, welke vragen zou ik ze moeten stellen?

2. Andere aanbevelingen voor onderzoek? Waarop focussen, met wie spreken in laatste ronde interviews? Bepaalde onderzoeken of beleidsstukken die belangrijk zijn?



## Appendix B. Survey

### Introductie

Deze enquête is onderdeel van het onderzoeksproject “Van educatie naar burgerparticipatie: leren van ervaringen van lokale organisaties voor natuur- en duurzaamheidseducatie”. Dit onderzoek wordt uitgevoerd door GDO in samenwerking met de Wetenschapswinkel en Wageningen Economic Research. Verdere informatie over dit project is te vinden op: <https://www.wur.nl/nl/project/van-educatie-naar-burgerparticipatie-leren-ervaringen-van-lokale-organisaties-voor-natuur-en-duurzaamheidseducatie.htm>

Mijn naam is Rik Timmers en ik voer deze enquête uit als onderdeel van mijn Masterscriptie voor Wageningen Universiteit. Bij de stap naar burgerparticipatie kunnen NDE centra tegen veel barrières aanlopen, zowel binnen hun eigen organisatie als in de samenwerking met gemeentes en burgers. Het zijn deze barrières en mogelijke strategieën om met deze belemmeringen om te gaan waar ik mij in mijn scriptie op zal richten. Als u vragen heeft over deze enquête kunt u een mail sturen aan: [rik.timmers@wur.nl](mailto:rik.timmers@wur.nl).

De enquête duurt tussen de 10 en 15 minuten. Uw deelname aan deze enquête is volledig vrijwillig en u kunt de enquête op elk moment beëindigen. Uw antwoorden zullen worden opgeslagen in een beveiligde omgeving. De gegevens worden vertrouwelijk behandeld, alleen gebruikt voor dit onderzoeksproject en zullen anoniem verwerkt worden in de verslaglegging.

Alvast hartelijk dank voor uw medewerking en tijd!

### Toestemmingsverklaring

Als u onderstaande knop “Akkoord” aanklikt, betekent dit dat:

- U bovenstaande informatie hebt gelezen
- U vrijwillig deelneemt

- a. Akkoord
- b. Niet akkoord

### Deel 1: algemene informatie

1. Wat is uw functie bij het NME centrum?
2. Onder welk type organisatie valt uw centrum?
  - a. Gemeentelijke afdeling
  - b. Private stichting of organisatie
  - c. Publiek-private organisatie
  - d. Anders, namelijk....
3. Wat is de totale personeelssterkte van uw centrum?
  - a. 1 fte
  - b. 2-5 fte
  - c. 5-10 fte
  - d. 10-20 fte
  - e. Meer dan 20 fte

4. Welke activiteiten voert u uit met uw centrum?

Onderwijs

- a. Uitleen leskisten en materiaalzendingen
- b. (Gast)lessen op school
- c. Excursies en veldlessen
- d. Moestuiniëren
- e. Organisatie buitenschool
- f. Trainingen en workshops
- g. Aanleg, beheer en gebruik groene schoolpleinen
- h. Advisering directies/bestuurders
- i. Anders, namelijk ....

Inwoners

- j. Lezingen, workshops en debatavonden
- k. Tentoonstellingen en terreineducatie
- l. Communicatie en informatie (bv. factsheets, krantenberichten ed.)
  - Projecten op het vlak van de vijf duurzaamheidsthema's:
    - m. Biodiversiteit en natuur
    - n. Energie
    - o. Water & klimaatadaptatie
    - p. Circulaire economie & grondstoffen/afval
    - q. Voedsel
- r. Buurt of wijkfunctie
- s. Samenwerking met bedrijfsleven
- t. Anders namelijk....

## **Deel 2: burgerparticipatie**

5. Verwacht u dat burgerparticipatie in de toekomst een belangrijke taak voor NDE centra in Nederland wordt?

- a. Ja
- b. Nee

6. Wordt alleen gesteld als antwoord op vraag 5 a is:

Is dit volgens u een positieve ontwikkeling en waarom is dat zo?

7. Wordt alleen gesteld als antwoord op vraag 5 b is:

Is dit volgens u een gemiste kans en waarom is dat zo?

8. Bent u op dit moment al actief op het vlak van burgerparticipatie?

- a. Ja
- b. Nee

9. Wordt alleen gesteld als het antwoord op vraag 8 nee is.

Was het een bewuste keuze om nog niet actief te zijn op het vlak van burgerparticipatie? En waardoor heeft u die keuze gemaakt?

Vraag 10 t/m 13 worden alleen gesteld als het antwoord op vraag 8 ja is.

10. Waarom heeft u gekozen om actief te zijn op het vlak van burgerparticipatie?

11. Werkt u zelfstandig aan projecten en activiteiten rondom burgerparticipatie of werkt u hierbij samen met andere partijen?

- a. Zelfstandig
- b. Samen met andere partijen

12. Met welke partijen werkt u samen aan projecten en activiteiten rondom burgerparticipatie?

- a. Burgerinitiatieven
- b. Wijk- en buurtcentra
- c. Bedrijven
- d. Natuur- en milieuorganisaties
- e. Andere maatschappelijke organisaties
- f. Gemeenten
- g. Provincies
- h. Anders, namelijk...

13. Werkt u vooral vraaggericht of aanbodgericht op het vlak van burgerparticipatie?

- a. Vraaggericht vanuit burgers
- b. Vraaggericht vanuit de gemeente
- c. Aanbodgericht vanuit het NME centrum

### **Deel 3: barrières rondom burgerparticipatie**

14. Ervaart u financiële barrières of problemen rondom burgerparticipatie?

- a. Ja
- b. Nee

15. Zou u uw antwoord op vraag 14 willen toelichten:

16. Hoeveel ruimte verleent de gemeente aan u voor projecten en activiteiten rondom burgerparticipatie?

- a. Het centrum krijgt de opdracht voor activiteiten of projecten rondom burgerparticipatie vanuit de gemeente
- b. Het centrum krijgt vrije ruimte voor activiteiten of projecten rondom burgerparticipatie vanuit de gemeente
- c. Het centrum krijgt geen opdrachten en ook geen vrije ruimte voor activiteiten of projecten rondom burgerparticipatie vanuit de gemeente

17. Hoeveel ruimte (zowel qua geld als qua uren) is er binnen uw organisatie voor kennisontwikkeling en om mee te bewegen in ontwikkelingen en innovaties rondom participatie?

- a. Geen
- b. Ruim onvoldoende
- c. Onvoldoende
- d. Voldoende
- e. Ruim voldoende

18. Welke competenties zijn belangrijk bij burgerparticipatie? Vink maximaal 4 antwoorden aan welke het meest van toepassing zijn.

- a. Passie en overtuiging
- b. Creativiteit
- c. Inhoudelijke kennis
- d. Praktische vaardigheden (handen in de klei)
- e. Verbindingskracht en netwerken
- f. Faciliteren en ondersteunen
- g. Organisatie en coördinatie
- h. Acquisitievaardigheden, commercieel denken
- i. Omgevingsbewustzijn en kansenbewustzijn
- j. Communicatie

19. Zijn deze competenties op dit moment al aanwezig binnen uw organisatie?

- a. Ja
- b. Nee

20. Wordt alleen gesteld als het antwoord op vraag 19 nee is.

Is het mogelijk om deze competenties te ontwikkelen met de huidige werknemers d.m.v. bijvoorbeeld kennisontwikkeling of cursussen?

- a. Ja
- b. Nee

21. Geef aan in hoeverre u het eens met onderstaande stellingen: (Likert schaal: helemaal oneens, oneens, neutraal, eens, helemaal eens)

- 1. Het centrum heeft moeite om bepaalde doelgroepen te bereiken met participatieprojecten en activiteiten
- 2. Het centrum is voldoende in staat om de impact en resultaten van projecten op het vlak van burgerparticipatie zichtbaar te maken en aan te tonen
- 3. Het centrum ervaart hevige concurrentie van andere partijen op het vlak van burgerparticipatie
- 4. Het centrum ervaart belemmeringen bij projecten op het vlak van burgerparticipatie vanwege de “harde kant” van de overheid (wetgeving, vergunningen etc.)
- 5. De NDE sector is sterk versnipperd en er is onvoldoende samenwerking met andere NDE centra

22. Ervaart u nog andere barrières of problemen rondom burgerparticipatie behalve de barrières die besproken zijn in de vorige vragen en stellingen?

- a. Ja, namelijk.....
- b. Nee

#### **Deel 4: strategieën rondom burgerparticipatie**

23. Met welke gemeentelijke afdelingen ziet u goede mogelijkheden voor samenwerking op het vlak van burgerparticipatie? Vink maximaal 3 antwoorden aan die van toepassing zijn.

- a. Welzijn
- b. Sociale zaken
- c. Ruimtelijke ordening
- d. Milieu
- e. Verkeer en vervoer
- f. Economische zaken

- g. Anders, namelijk...
- h. Geen van bovenstaande afdelingen

24. Binnen welke van deze thema's ziet u mogelijkheden voor activiteiten en/of projecten van uw centrum?

- a. Biodiversiteit en natuur
- b. Energie
- c. Water & klimaatadaptatie
- d. Circulaire economie & grondstoffen/afval
- e. Voedsel
- f. Geen van bovenstaande thema's

25. Welke kansen voor verdienmodellen ziet u op het vlak van burgerparticipatie?

- a. Verkopen van diensten en kennis (bijv. verhuur medewerkers).
- b. Verkopen van producten (bijv. verkoop lokale, door burgers geproduceerde producten)
- c. Benutten van softe activa (bijv. verlenen/verhuren naam, imago, logo, netwerk)
- d. Benutten van harde activa (bijv. verhuur van faciliteiten, materialen)
- e. Geen van bovenstaande antwoorden

26. Welke acties zijn het belangrijkste bij het faciliteren van burgerparticipatie? Vink maximaal 3 antwoorden aan die het meest van toepassing zijn.

- a. Opstellen van ambitieuze doelstellingen
- b. Herkennen en waarderen van behaalde successen
- c. Motiveren en enthousiasmeren van betrokkenen
- d. Al doende leren tijdens activiteiten en projecten
- e. Laten zien van tastbare behaalde resultaten
- f. Samenwerken met andere domeinen en sectoren
- g. Het creëren van een participatiecultuur

### **Deel 5: kennisontwikkeling en leermogelijkheden rondom burgerparticipatie**

Op basis van alle verzamelde informatie in het onderzoeksproject zal door GDO een leerproces voor leidinggevenden gemaakt worden met daaraan gekoppeld leermiddelen. Over dit leerproces gaan de onderstaande drie vragen.

27. Welk type leermiddel heeft uw voorkeur om kennis mee op te doen?

- a. Boek/lesmap
- b. Film
- c. Podcast
- d. Factsheets
- e. Anders, namelijk: ...

28. Naar welke leerstijl gaat uw voorkeur uit?

- a. Doener: werk graag met praktijkopdrachten
- b. Waarnemer: werk graag met rollenspelen en groepsdiscussies
- c. Denker: werk graag met schrijfoopdrachten, colleges en lezingen
- d. Beslisser: werk graag met excursies en demonstraties

29. Zou u deelnemen aan een leertraject/masterclass om daarmee handvatten te krijgen voor het doorontwikkelen van uw organisatie van educatie naar ook burgerparticipatie?

- a. Nee
- b. Ja, en die mag maximaal € 2.000 kosten
- c. Ja, en die mag maximaal € 3.000 kosten
- d. Ja, en die mag maximaal € 4.000 kosten

**Deel 6: vervolgonderzoek**

30. Mag ik u benaderen voor een interview als onderdeel van het vervolgonderzoek? Zo ja, laat dan hier uw e-mailadres achter:

**Einde**

31. U bent bijna aan het einde gekomen van de enquête. Mocht u nog toevoegingen/opmerkingen hebben, dan kunt u ze hieronder kwijt:

U bent hierbij aan het einde van de enquête gekomen. Uw antwoorden zijn opgeslagen. Hartelijk dank!

## Appendix C. Interview guide expert interviews

### **Start:**

- Introductie van mezelf, onderzoeksproject en thesis
- Uitleggen hoe het interview eruit gaat zien
- Informed consent doorlopen en laten ondertekenen (in geval van een online interview voorafgaand aan het gesprek het formulier alvast doorsturen)

### **Algemene informatie/achtergrond NME centrum:**

Op basis van de antwoorden in de enquête een beeld schetsen van het type centrum en hun activiteiten/projecten, vervolgens hiernaar vragen tijdens interview:

- Hoe zouden zij hun centrum beschrijven?
- Waar focussen ze zich op, welke thema's?
- Wat is hun visie/missie?
- Zijn ze al actief op het vlak van burgerparticipatie?
- Waarom zijn ze wel/niet actief op het vlak van burgerparticipatie?

### **Barrières:**

Algemeen beeld van barrières is compleet na expert interviews en enquête dus deze interviews gebruiken om echt diep in te gaan op bepaalde barrières. Gebruiken van antwoorden op meerkeuzevragen, open vragen en opmerkingen aan het eind van de enquête als basis voor de interviewvragen. Doorvragen over:

- Wat houdt de barrière volgens hun precies in?
- Waardoor wordt de barrière veroorzaakt?

### **Strategieën:**

Kijken in antwoorden van de enquête of ze bepaalde strategieën of acties toepassen rondom burgerparticipatie. Vragen naar verduidelijking van hun antwoorden in het strategieën deel van de enquête, waarom hebben ze gekozen voor bepaalde antwoorden, wat zijn hun beweegredenen. Hiernaast kijken of ze in open vragen of opmerkingen aan het eind van de enquête bepaalde strategieën noemen. Zo ja: doorvragen over:

- Wat bedoelen ze precies, wat houdt de strategie precies in?
- Hoe passen ze de strategie in de praktijk toe?
- Waarom ze hebben gekozen om die strategieën toe te passen?
- Wat zijn voor- en nadelen van de strategie?
- Zouden ze de strategie aanbevelen/aanraden voor andere centra?