SCALING CIRCULAR AGRICULTURE

An Explorative Case Study on the Problems and Potentials in the CAP-pilots on Circular Agriculture

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Executive summary in Dutch / Nederlandse Samenvatting

De Nederlandse regering heeft als doel om in 2030 een omslag te maken naar kringlooplandbouw (Ministerie van Landbouw, Natuur en Voedselkwaliteit, 2019), een omslag die deels wordt bewerkstelligd middels experimenteel bestuur in de vorm van pilots. Echter, de rol in van de staat binnen de transitie naar circulariteit kan in twijfel worden getrokken, aangezien deze is geworteld in tijden waarin lineair denken centraal stond en uit onderzoek blijkt dat wetgeving een hoofdbarrière vormt voor circulaire initiatieven (Termeer & Metze, 2019; Kircherr et al., 2018; Campbell-Johnston et. al., 2019). Voor kringlooplandbouw in het bijzonder bestaat de zorg dat de Nederlandse regering alleen technologische, oppervlakkige verandering gaat ondersteunen (Dagecos & Lauwere, 2021).

Daarnaast is bekend dat experimenteel beleid vaak niet tot bredere verandering leidt, een fenomeen dat ook wel de pilot paradox wordt genoemd: Pilots met intern succes, die leiden tot zinnige innovaties ter oplossing van een probleem, hebben vaak weinig tot geen extern succes en dragen dus niet bij aan verandering voorbij de grenzen van de pilot (Zie bijv. van Buuren, Vreugdenhil, Verkerk, & Ellen, 2016). Zodoende kan in twijfel worden getrokken of experimenten van de regering daadwerkelijk gaan leiden tot verandering van bestuur of beleid dat bijdraagt aan kringlooplandbouw.

Binnen dit onderzoek wordt daarom aan de hand van kwalitatieve interviews en een documentanalyse verkend hoe resultaten van experimenten worden verankerd in Nederlands nationaal beleid binnen de GLB-pilots kringlooplandbouw (4.5.2 in WJZ/20162286). Hierbij wordt gebruik gemaakt van het ‘small-wins’ raamwerk om te onderzoeken of de stappen die gezet worden in de pilots daadwerkelijk bijdragen aan de transitie. ‘Small wins’ zijn kleine, radicale stappen die kunnen worden geaccumuleerd middels verdieping, verbreding of opschaling (Termeer & Dewulf, 2019; Termeer & Metze, 2019).

Daaropvolgend wordt het institutioneel werk van pilot-werknemers, intermediatoren en beleidsmedewerkers geëxploreerd, om vast te stellen op welke manier resultaten van de pilots worden verankerd door middel van de leer- en evaluatieprocessen die plaatsvinden in het pilottraject. Deze analyse van institutioneel werk is gericht op twee cruciale processen, namelijk inbedding en schaling. Inbedding heeft betrekking tot de processen waarbij innovaties worden verankerd *in* en *middels* het pilot-beleid, en schaling heeft betrekking tot de processen waarbij resultaten van de pilots worden toegepast op een grotere schaal, door deze te gebruiken voor nationaal beleid.

Resultaten

Uit de evaluatie op basis van het small-wins raamwerk blijkt dat de pilots wel degelijk stappen proberen te zetten die kunnen bijdragen aan transformatieve verandering. Drie pilots richten zich hierbij op het sluiten van kringlopen op regionaal niveau, waarbij sociaal-technologische stappen worden onderzocht die deze sluiting kunnen bewerkstelligen. De twee andere onderzochte pilots richten zich op bestuurspraktijken. Binnen een pilot wordt onderzocht hoe het Europees

Gemeenschappelijk Landbouwbeleid (GLB) zo kan worden vormgegeven dat het de biologische sector, die al grotendeels volgens kringloopprincipes werkt, ondersteunt. Een andere pilot richt zich ook op beloning van kringlooplandbouw, met behulp van Kritische Prestatie Indicatoren. Echter, deze laatste richt zich niet zo zeer op het sluiten van kringlopen, maar draagt bij aan het stimuleren van biodiversiteit binnen de transitie.

Uit het verkennend onderzoek gericht op institutioneel werk blijkt dat de voorevaluatie van het ministerie leerprocessen in gang zet die zorgen dat de experimenten zich lokaal verankeren én bijdragen aan nationaal beleid. Ten eerste worden gelden toegekend voor kennisdeling, die worden gebruikt voor lokale leerprocessen met boeren, scholen, andere pilots en het netwerk van de aantrekkende organisatie. Ten tweede wordt nationale coördinatie vereist, wat heeft geleid tot het koepeltraject, waarbij kennis wordt gedeeld en geaggregeerd met als doel bij te dragen aan beleidsontwikkeling. De verankering van innovaties in het pilot-beleid zorgt er dus enerzijds voor dat organisaties de beoogde experimenten kunnen uitvoeren, en anderzijds dat er lokale verankering en bijdrage aan beleidsprocessen plaatsvindt.

De schaling van resultaten naar nationaal beleid wordt bewerkstelligd middels het koepeltraject, dat wordt aangetrokken door beleidsspecialisten die een brug slaan tussen medewerkers op pilot-niveau en beleidsmakers. Hoewel hier een kans ligt voor schaling, kunnen er een aantal uitdagingen worden geïdentificeerd. De pilots zijn heterogeen en kunnen tot veel en tegengestelde uitkomsten leiden, waardoor het, gezien de beperkte tijd die beleidsmakers hebben, een uitdaging is om de uitkomsten op het moment dat daar politieke ruimte voor is mee te nemen. Daarnaast levert het koepeltraject zelf geen product maar een advies, waardoor de schaling naar nationaal beleid afhankelijk is van beschikbare beleidsinstrumenten. Voor pilots die zich richten op beleid is deze vertaling evident aangezien deze al vanuit een beleidsperspectief experimenteren. Voor pilots die zich richten op de regionale sluiting van kringlopen, behoeft dit meer werk, aangezien moet worden onderzocht hoe het ministerie de diverse schalen waarop kringlopen worden gesloten kan ondersteunen of bevorderen. Daarnaast suggereert dit onderzoek dat het GLB, dat (tot dusver) centraal staat binnen het schalingsproces, wellicht ongeschikt is voor de bevordering van de sluiting van kringlopen: De mogelijke eco-activiteiten die gesteund gaan worden door dit beleid zijn onderdeel van de innovaties van de pilots, maar gaan niet in op de sociale veranderingen die de sluiting van kringlopen behoeft.

Aanbevelingen

- Voor pilot-projecten die zich richten op het lokaal sluiten van kringlopen is het van belang om te onderzoeken hoe hun innovaties en de leerprocessen kunnen voortbestaan wanneer de subsidies eindigen. Door hier al over na te denken tijdens het innovatieproces kunnen de innovaties mogelijkerwijs worden vormgegeven op een manier dat ze tot langdurige, bredere

verandering leiden. Daarnaast is het essentieel om na te denken hoe de innovaties verder verspreid kunnen worden (regionaal of landelijk). Voor beide processen liggen wellicht kansen in de (al bestaande) samenwerking met lokale autoriteiten, boeren, kennisinstituten, scholen en andere projecten. Bovendien biedt het koepeltraject een kans voor kennisdeling met betrekking tot dit onderwerp.

- Om te zorgen dat de innovaties blijven voortbestaan en invloed hebben buiten de grenzen van de pilots, kunnen medewerkers van het koepeltraject een aantrekkende rol innemen tijdens de landelijke of thematische bijeenkomsten. Door gesprekken met en tussen pilot-medewerkers te starten over hoe zij denken te blijven voortbestaan kan dit gestimuleerd worden en kan van elkaar geleerd worden. Dit is met name van belang bij pilots waarbij beleidsverandering niet het hoofddoel is, aangezien het voortbestaan hiervan minder evident is als bij beleidsgerichte pilots.
- De tijdsplanning van het pilottraject sluit goed aan op de tussentijdse evaluatie van de implementatie van het GLB. Echter, aangezien binnen de interviews is aangegeven dat de pilots naar verwachting ook voor andere beleidsvraagstukken gebruikt kunnen worden, is het van belang hierbij na te denken over wanneer procesmatige en politieke ruimte bestaat voor verandering, zodat resultaten niet vergeten zijn op het moment dat zij van belang zijn.
- Daarnaast adviseer ik de beleidsmedewerkers die betrokken zijn bij de implementatie van het GLB om verder te (laten) onderzoeken in hoeverre de nationale implementatie bijdraagt aan de Nederlandse ambitie om in 2030 over te schakelen naar kringlooplandbouw. Gezien het vrijwillige en technische karakter van de eco-activiteiten, kan in twijfel worden getrokken tot in hoeverre dit boeren gaan stimuleren om actief aan de slag te gaan met het sluiten van kringlopen. Hierbij kan eventueel gebruik gemaakt worden van de pilots en het netwerk van de betrokken organisaties.
- Ten slotte zou het voor beleidsmedewerkers interessant zijn om, in plaats van na te denken over hoe pilots kunnen bijdragen aan beleid, te kijken hoe beleid of bestuur kan faciliteren dat pilots, die stappen maken in lijn met de beoogde ambities, niet onder de radar blijven en kunnen cumuleren.

Abstract

Based on eight semi-structured interviews and content analysis of fourteen documents/policies, this research explores through which processes results of experimentation are being embedded in national policy in the CAP pilots on circular agriculture in the Netherlands. First, the small-wins framework is used to assess whether steps are being taken within the pilots that have the potential to lead to transformative change, which is necessary to bring about the transition to circular agriculture. Second, this research explores how the results of the pilots will be embedded and scaled, through the learning and evaluation processes of the pilots, so that the innovations could have consequences beyond the boundaries of the pilot. This research concludes that in this case, innovations in the pilots could only become small wins (radical steps that contribute to transformative change) when they are embedded in local institutions and learning processes or when they contribute to policy in such a manner that this enables persistence or spreading of their innovations. Moreover, I suggest that the process in which innovations and results from the pilots are vulnerable, as it is subject to the availability of suitable policies and political and procedural space to make policy changes.

Keywords: *transformative change, experimental governance, small wins, circular agriculture, institutional work, scaling, embedding, pilot paradox, Common Agricultural Policy*

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1. Introduction to the Research

1.1 Research Context

The current agricultural landscape in the Netherlands is leading to various environmental and ecological problems, leaving all those involved with the rather complex challenge of establishing sustainability in the agricultural sector (Planbureau voor de Leefomgeving, 2020). The Netherlands has exceeded nitrogen limits set at the European Union and United Nations levels, mainly through the agricultural sector, which accounts for 60% of nitrogen pollution (Van Veldhoven, 2019). Furthermore, biodiversity loss increases solely in agricultural zones (PBL, 2020, p. 11), so that also in relation to biodiversity, the Netherlands will not achieve national and international goals (Sanders, Henkens & Sijkerman, 2019).

A central approach of the Dutch government to counteract these challenges and to organize agriculture differently is the introduction of circular agriculture (CA): In the new coalition agreement, they introduce a CA transition fund as a means for dealing with the nitrogen exceedances, but also with the (EU) challenges in relation to water, soil, biodiversity and climate (VVD, D66, CDA & ChristenUnie, 2021). Moreover, the Ministry of Agriculture, Nature, and Food Quality has the establishment of CA as an objective for 2030 (Ministry of Agriculture, Nature, and Food Quality, 2019). Crucial to this plan is creating room for experimentation to create new opportunities for sustainable circular initiatives.

Subsequently, CA pilots (experiments) are taking place that should contribute to the (national implementation of) the Common Agricultural Policy[1] (CAP) and other national policies that could contribute to a sustainable agricultural sector (art. 4.5.2 in regulation nr. WJZ/20162286). The pilots are part of a threefold set, consisting of future-proof farmers pilots, peatland pilots, and circular agriculture pilots (studied in this thesis), which altogether should contribute to the policy that fosters the transition to sustainable agriculture.

[1] The CAP is a central policy framework at the EU-level, that currently (mainly) focuses on farmers' income support. As a result of the Green Deal, the funding structure will be changed, with rewards for contribution to environmental goals being introduced.

Legend

Pilot 5: Modern CA with a New Regionally Oriented, Mixed Farm

Pilot 4: Supporting Farmers with KPIs for Biodiversity in the Transition to CA

Pilot 3: Organic in Development

Pilot 2: Circular Shifting in the Kempen

Pilot 1: Experimental Garden for Sustainable and Innovative Agriculture Van Pallandtpolder

Note. Some pilots use multiple locations. In that case, the point marker is pinned on the location of the organization in charge.

In total, there are twenty-one pilots. The pilots are funded by the European Union (EU) and organized by the Ministry of Agriculture, Nature and Food Quality, in cooperation with the

Rijksdienst voor Ondernemend Nederland (RVO). Initiatives could apply until April 2021 and after the approval process, which takes up to 22 weeks, the pilot- scheme runs until December 31, 2023. A total of eight pilots were launched under the CA-theme, five of which were studied in this thesis (for the locations, see map above).

Although the government sees opportunities in experimental governance in relation to the transition to CA, it has not been examined whether the pilots are organized in a way that can contribute to the intended transitions. This thesis is an attempt to explore this, by examining the potentials and problems within the organization of the pilot trajectory on the basis of transition literature, qualitative interviews and document analysis.

1.2 Problem description

In literature on socio-technological change, experiments are perceived as crucial processes that could lead to informed alterations in meeting societal needs (e.g. Termeer & Dewulf; 2019; Turnheim, Asquith & Geels, 2020). Experimentation plays a crucial role in bringing about change, as innovation is experimental by nature (Seyfang & Smith, 2007). The literature review by Sengers, Wieczorek & Raven (2019) reveals that, according to transition studies, experimental research predominantly contributes to system change in two ways. First, by revealing the barriers to such change. Second, by finding concrete, small-scale innovations that can be solutions for societal challenges. From this point of view, the CA pilots could play an important role in bringing about change in the sector.

Circular challenges

Nonetheless, there are a few challenges in relation to the experimental governing process initiated by the government that should be noted. First, the role of the state in the transformation to circularity is ambiguous. regulations deriving from the ministry could impede transformation processes associated with CA, as scholars suggest that current regulations obstruct circular transformations (Termeer & Metze, 2019; Kircherr et al., 2018; Campbell-Johnston et. al., 2019). Furthermore, governmental bodies were developed in linear times, which indicates that their instruments may not be suitable for establishing circularity (Termeer & Metze, 2019). Thus, the question remains whether policy instruments used by the government could foster the transformational trajectories they propose, and if the institutionalized bodies involved can change their pathways.

Scaling challenges

Second, several studies reveal that disseminating the results of those experiments appears to be a major challenge (Van Buuren & Loorbach, 2009; Van Buuren, Vreugdenhil, Verkerk, & Ellen, 2016; van Buuren, van Popering-Verkerk, Ellen, van Leeuwen & Breman, 2018; Turnheim, Kivimaa & Berkout, 2018; Metze, 2021; Van den Broek, Elzakker, Maas & Deuten, 2020; Von Wirth et al., 2019). As van Buuren et al., (2016) describe, the terms and conditions of experimental space, which are crucial for enabling innovation, can obstruct the further acquisition of those innovations. This is also known as the "the pilot paradox": Due to limited time frame, small scale, contemporary financial support, and sometimes the repeal of legislation, pilots often do not succeed in scaling. Although they succeed in their pilot trajectory and sufficiently develop innovative solutions as a result of those circumstances, they do not lead to change beyond the scope of the pilot, because those circumstances do not apply there (van Buuren et al., 2016).

Thus, in sum, although experimentation is seen as a crucial process for bringing about transformative change, there are two potential challenges that the actors involved have to overcome. First, it appears that it is difficult to scale pilots. Second, the role of governments in these processes is ambiguous: While the government aims to promote circularity with this pilot scheme, it can be debated whether they can play a role in transforming the agricultural sector in such a manner that it becomes circular.

Small wins

However, several suggestions can be made for overcoming both issues. Regarding the role of the state, literature on transformative change suggests that for governing ambiguous transitions, such as circularity, policymakers should not try to establish linear policy instruments (Termeer & Dewulf, 2019; Termeer & Metze, 2019; Weick, 1984). Instead, policymakers should take a humble approach and keep their eyes open for 'small wins' and identify whether mechanisms are activated that broaden, deepen or upscale these identified wins (Termeer & Dewulf, 2019).

To elaborate, small wins are concrete, radical steps of moderate importance that can contribute to continuous change when learning mechanisms are activated that accumulate

them. Moreover, *broadening* refers to the expansion of consequences from the small win to other areas, *deepening* concerns the increase of intensity and radicalness of the win, and *upscaling* implies that the small win becomes larger or more numerous (Termeer & Metze, 2019). From this angle, the pilots could play a role in establishing the transition to CA, as the experiments could become small wins that accumulate through those mechanisms.

Embedding

Moreover, the mentioned pilot paradox could potentially be avoided by identifying from the outset the policy context to which the pilots should contribute so that the innovation can be applied to this context (van Buuren et al., 2016). Van den Broek et al. (2020) refer to this as 'embedding-oriented innovation': Innovating in such a manner that it can lead to results that can be applied in the societal context. This way, actors can *embed* their innovations in such a manner that they become useful (Pel, Wittmayer, Dorland & Søgaard Jørgensen, 2020; Von Wirth et al., 2019; Van den Broek et al., 2020). Studies reveal that embedding is indeed pivotal to establishing broader change. First, embedding in the governance context can play a supportive role: By adapting the innovations to the governance context, initiatives can utilize governance resources that support the experimental processes (Loorbach, Wittmayer, Avelino, von Wirth & Frantzeskaki, 2020). Second, Avelino, Dumitru, Cipolla, Kunze & Wittmayer (2019) suggest that local embeddedness is crucial for the diffusion of innovations. By adapting innovations to the (local or institutional) context of the experiment, they become context-specific and therewith humane and sustainable. Combined with trans-local connections, innovations manage to challenge dominant institutions and practices (Avelino et al., 2019; Pel et al., 2020). Finally, to bring about these embedding processes, Metze (2021) suggests that actors involved in the experiments can conduct institutional work, from which they actively draw lessons in relation to the institutional context.

Justification and Objective

Building on these suggestions, in this thesis I will study the embedding and scaling (Von Wirth et al., 2019) of small wins (experiments) (Termeer & Dewulf, 2019; Termeer & Metze, 2019; Weick, 1984) and how this overcomes barriers to transformation. In doing so, I will combine a small-wins evaluation (Termeer & Metze, 2019) with an explorative investigation on the institutional work (Lawrence, Suddaby & Leca, 2011), in which actors involved actively change, produce, or reproduce institutions with regard to embedding and scaling

(Von Wirth et al., 2019). Pilots could become small wins, but need to go beyond the pilot phase to do so, as small wins should contribute to *continuous* change (Termeer & Metze, 2019). Literature on the pilot paradox suggests that it may be difficult for innovations to take hold after the pilot process (e.g. van Buuren et al., 2016), but embedding and scaling the pilot results and innovations could help to deal with this (Avelino et al., 2019; Pel et al., 2020; Von Wirth et al., 2019). From this point of view, innovations from the pilots may be able to become small wins once they are embedded and scaled: By dealing with the pilot paradox, they could start to contribute to continuous change. To investigate this further, this thesis explores how institutional work that facilitates embedding and scaling of the innovations, may influence the development, and, potentially, accumulation, of small wins in the CAP pilots on CA.

To do so, first, I will apply the small-wins evaluation framework (Termeer & Metze, 2019) to assess whether the innovations from the pilots develop potential small wins. In this analysis, it will be central whether the innovations are radical enough to contribute to transformative, continuous change, which is crucial for the transformation to CA. Therewith, I aim to answer the question: *How do the pilots contribute to the transition to circular agriculture?*

Second, I will look at the institutional work (Lawrence, Suddaby & Leca, 2011) that actors conduct during the pilot process so that the results from the pilots reach further than the safe space of the pilot. In this, embedding and scaling are central. Embedding refers to the adaptation and integration of results to the socio-institutional context (Von Wirth et al., 2019), which will be studied by investigating learning and evaluation processes in the pilot scheme. To investigate this, I will answer the question: *How are the evaluation and learning processes, in which results retrieved from the pilots are gathered, organized?* Moreover, scaling, the transformation of results from one scale to make them applicable on another (Von Wirth et al., 2019) is necessary to overcome the pilot paradox, as the pilot paradox stems from the inability to breach the gap between pilot innovations and policy development (van Buuren et al., 2016). As these pilots should contribute to national policy, this thesis focuses on how this contribution process is organized, by answering the question: *How are the results of the pilots translated to national policy?*

Finally, the central research question will be answered: *How are small wins embedded and scaled within the circular agriculture CAP pilots?* To answer this question, I will combine the outcomes of the small-wins evaluation with the empirical results regarding the learning, evaluation, and translation to policy, to investigate how these processes may lead to the development of small wins. Finally, after analyzing how the innovating and institutional work may lead to the development of small wins, it will be examined whether there are opportunities within these processes that can lead to processes that accumulate those wins, namely broadening, deepening, and upscaling (Termeer & Dewulf, 2019; Termeer & Metze, 2019).

Taking this back to the case, although the Dutch government advocates for experimentation in the transition to CA (Ministry of Agriculture, Nature, and Food Quality, 2019), it has not yet been researched whether the pilot trajectories are designed in a way that contributes to the desired transformation. This thesis breaches the research gap, by conducting qualitative interviews and document analysis, to investigate to potentials and problems in the CAP-pilots for CA in relation to governing circularity. Simultaneously, the case study will be used to elaborate on the relationship between institutional work and small wins, by exploring how the institutional work may lead to the development and potentially, accumulation of small wins.

2. Theoretical Framework

2.1 Governing Circular Agriculture

CA is an application of the circular bio-economy concept for the food system, intending to close nutrient loops to minimize the usage of natural resources and reduce environmental emissions (De Boer & van Ittersum, 2018; Jurgilevich et al., 2016). In this thesis, the transition to CA is perceived as a transition that should be transformative, which entails changes on multiple levels and scales (De Boer & van Ittersum, 2018; Jurgilevich et al., 2016; Koppelmäki, Helenius, & Schulte, 2021).

As briefly touched upon earlier, since governmental bodies and their policies have come into being, in times of linear thinking, their role in establishing circularity remains ambiguous (Termeer & Metze, 2019). For CA, in particular, several concerns can be identified in relation to the role of governments. As Koppelmäki et al. (2021) suggests, circular flows in

agriculture, consisting of biomass- and nutrient cycles, have to be organized on multiple geographical scales. To establish these flows, case-specific cycles should be organized, depending on how farms are nested. This stresses how challenging it might be to organize circular agriculture nationally: Scales at which flows are organized could go beyond national scales and are case-dependent (Koppelmäki et al., 2021), which makes it difficult to create broadly applicable policy instruments. Moreover, since administrative systems are bounded by geographical borders, whereas nutritional flows are not, it remains a challenge to govern towards circularity, by means of those systems (Korhonen et al., 2018).

Additionally, Dagecos & Lauwere (2012) expressed concerns about the way CA is accomplished in the Netherlands. They question if the way governments interpret CA will warrant change that really contributes to sustainability. Although the ministry's vision can be seen as an ideological shift, the examples mentioned are mainly technical changes that fit within the linear way of thinking about agriculture. Moreover, farmers who work according to CA principles are worried that government interventions would only lead to incremental changes (Dagecos & Lauwere, 2021).

Thus, first, it could be questioned whether the government can steer the transformation, as it requires the organization of nutrient flows on scales that are case-specific and therefore hard to organize on a national scale. Second, it could be questioned whether the government is able to foster processes that lead to transformative changes, as the steps that are currently promoted seem mainly technological. To explore whether the innovations in the CAP-pilots are game-changing and could lead to transformative change, I will use the small-wins framework, which I will introduce in the following paragraph (Weick, 1984; Termeer & Dewulf, 2019; Termeer & Metze, 2019). To explore how the government develops national policy based on the pilots, I will use an institutional work-perspective, introduced in paragraph 2.3.

2.2 Small wins

Evaluation of small wins

The small-wins framework is an evaluation framework that has been proposed as a way to deal with the governance of wicked (ill-defined, ambiguous, and systemic) problems

(Termeer & Dewulf, 2019; Termeer & Metze, 2019; Weick, 1984). It is rooted in the idea that through an accumulation of in-depth changes of moderate importance, namely small wins, transformative change can be made (Weick, 1984; Termeer & Dewulf, 2019). This argument is supported by previous research, which suggests that small wins can indeed lead to deeper change (Golden-Biddle & Germann, 2006; Jason, 2012; Lott & Webster, 2006; Reay, 2006; Rog, 2015; Vermaak, 2013).

Weick (1984), the founder of the small-win concept, argued that change can only be brought about when problems are perceived on a small scale, as it gives people the opportunity to think of concrete steps to solve them. This perspective on change collides with the common response to large-scale transitions, in which in-depth, systemwide, and fast change is advocated (Termeer & Metze, 2019). In fact, the small wins concept is anchored in a continuous change perspective, which assumes that change is made through continuous learning processes (Weick & Quinn, 1999).

Based on this view of change, Termeer & Metze (2019) developed a framework (based on Termeer & Dewulf, 2019) to evaluate small wins, of which this thesis addresses four indicators in order to investigate whether the pilots develop small wins. However, small adjustments have been made to make the framework applicable to this case. First, the focus is on the contribution to CA, and not to circular economy, which is central in Termeer & Metze (2019). Second, I have excluded ‘concrete results’ as the pilots are still at the beginning of the innovation process.

Thus, the first indicator concerns the contribution to CA. Based on the earlier definition in 2.1, I will explore whether there is a ‘Clear context-specific narrative of current and potential contribution’ to CA, mainly focusing on the question of how loops are closed in the pilot, and how this contributes to change in the context of the pilot. Secondly, I will explore whether this is a case of ‘radical new practices’ or ‘second-order change’. These indicators will be used to explore whether the pilot brings about in-depth changes, which is important for organizing circularity in a manner that is transformative. As raised in the example from Termeer & Metze (2019), this is context-specific. What can be an in-depth change for one, does not have to be for another. Therefore, I will assess whether it is a radical practice or

second-order change in the context the experiment focuses on. The third indicator is 'connection to social and technological change', in which the social can touch upon relations and roles and the technological to the application of knowledge. The final indicator is that the pilot is 'overcoming technical, financial and/or regulative barriers; faced resistance', as an in-depth change cannot be achieved easily. These last three indicators are used to assess whether the innovations contribute to deep and transformative change, as they determine whether the innovations are not superficial and bring about both social and technical change.

Table 1. Characteristics and indicators of small wins (based on Termeer & Metze, 2019).

Characteristic	Indicator	Contra-indicator
Contribute to a CA	Clear context-specific narrative of current and potential contribution;	No clue; small losses for many actors
In-depth changes	Radical new practices; second-order change	More of the same; quick wins; low hanging fruit
Overcoming resistance and barriers	Overcoming technical, financial, and/or regulative barriers; faced resistance	Mentioning barriers only; (too) easily achieved
Connection technical and societal change	Various modes of synergies	Technological innovations only; societal innovation only

Note. Edited from "More than peanuts: Transformation towards a circular economy through a small wins governance framework.'' By Termeer, C., & Metze, T. (2019). *Journal of Cleaner Production*, *240*, p. 4. https://doi.org/10.1016/j.jclepro.2019.118272

Small wins and the pilot paradox

However, if the innovations in the pilots become small wins for CA, and do not merely address technological or shallow change, it is crucial that they go beyond the pilot phase, which governments can do by readjusting or developing new policies (Termeer & Metze, 2019). However, as mentioned in the introduction, this means that initiatives involved in the trajectory should deal with the pilot paradox.

To elaborate, as explained by van Buuren et al. (2018), the pilot paradox arises from opposing requirements for the two functions of pilots: On the one hand, pilots aim to develop innovations, for which openness to (social) learning and the inclusion of different perspectives are essential. On the other hand, pilots are policy-oriented. Their aim is to tailor or create policies, as a way to adapt to or tackle the new societal challenges. In this process, adaptation to standard institutions enhances the uptake into policy. The space for innovation is created by open processes of collaborative learning, whereas successful uptake in policy requires adaptation to the institutional context and congruence (van Buuren et al., 2018). From this point of view, pilots that could become small wins, may struggle to touch upon policy change, as small wins bring about second-order change and actively overcome barriers and resistance, which is at odds with the adaptation and congruence required for policy uptake. As Van den Broek et al. (2020) emphasize, in particular, groundbreaking experiments are difficult to embed. Nonetheless, the small wins perspective embraces ambiguity as a driver for change, and learning processes may lead to change beyond the pilot boundaries (Termeer & Metze, 2019; Termeer & Dewulf, 2019). The earlier mentioned institutional work, in which actors involved in the pilots actively draw lessons based on their pilot (Metze, 2021), poses an option to do so. Thus, to investigate how such activities take place in the CA pilots, I will study the institutional work executed by the actors involved.

2.3 Institutional Work

The institutional work perspective is used to study how institutions are actively changed, produced, or reproduced (Lawrence, Suddaby & Leca, 2011). As this perspective emphasizes work in addition to the inquiry of institutions (rule-systems), it recognizes certain intentionality and effort in the process of shaping those (Lawrence et al., 2011). The perspective is compatible with the structuration point of view (Zietsma & Lawrence, 2010). In this, actors are constrained by structures, but at the same time continuously reproduce them (Giddens, 1984). However, whereas the structuration theory focuses on all change, the institutional work perspective highlights intentional change or maintenance (Zietsma & Lawrence, 2010; Lawrence, Suddaby & Leca, 2009). As such, agency takes a more reflective turn, in which one purposely alters social situations, based on a future objective (Lawrence et al., 2011). In this respect, the actors involved in the pilots execute institutional work in which

they aim to *change* institutions by experimenting on how CA, an objective for the future, can be established.

Institutional work for handling the pilot paradox

Pilots aim to change institutions through small-scale or temporary experimentation. However, the pilot paradox reveals that it is often not successful in actually changing the institutions: The local or temporary innovation often does not lead to broader change. Subsequently, the challenge becomes to use the innovations from the pilots in a way that contributes to broader, long-term change. It is a prerequisite that the innovations are small wins, really leading to transformative change, but the actual institutional work consists of the embedding of those small wins in different institutional contexts. To understand how those involved in the pilots aim to do so, I will outline the processes in which the results from the pilots are embedded, by studying the institutional work that is being done by the actors involved in the pilot, and focusing on *how* the actors involved aim to establish CA *through* this pilot policy.

2.4 Embedding

Embedding refers to the adaptation and integration of the initiative into the socio-institutional context. It requires that the innovations and outcomes of the pilots are adapted and integrated into the local institutions and regulations (Pel et al., 2020; Von Wirth et al., 2019). Thus, by embedding results they become operable in the institutional context, which in this case implies that after small wins are developed, they should lead to feasible results for national policy, and potentially other local institutions. Thus, in this thesis, embedding processes will be captured by studying the *gathering* of the results from the pilots.

Various scholars stressed that embedding is a key process for innovating in a way that contributes to further uptake (Van Buuren et al., 2016; Van den Broek, 2020; Pel et al., 2020). Additionally, by taking into consideration societal context from the beginning, one can steer towards embedding-oriented innovation, which should lead to further uptake of the results from the pilot.

Van den Broek et al. (2020) have outlined different dimensions of embedding, including the ‘embedding in laws, regulations, standards, and protocols’ (p. 20). As the goal of the pilot is to alter national governance, this dimension is crucial for the pilot projects. In this, it is crucial

to ensure that future application areas have been identified and that results are connected to the policy issues of concern (van Buuren et al., 2018).

As this research seeks to unravel how actors seek to bring about change through the pilot policy, embedding will be studied in two ways: initiatives become embedded in (figure 1), and by means of (figure 2) the pilot arrangement. To become part of the pilot scheme is not an end in itself, it is a means to embed in a way that leads to further change. Thus, I will outline the various evaluation and learning processes in the pilot policies to see how the integration of results from the pilots is organized.

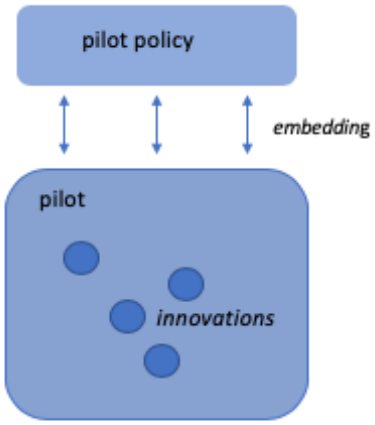

Figure 1

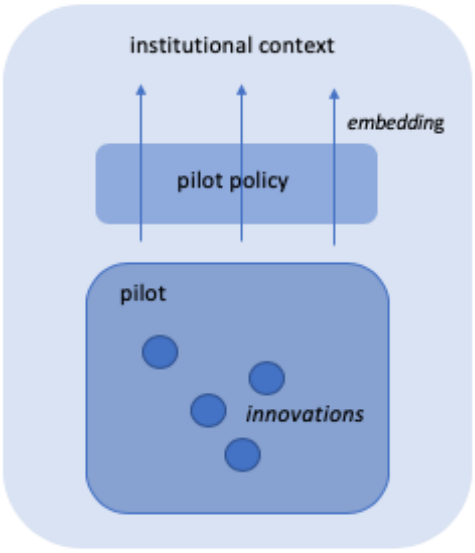

Figure 2

2.5 Scaling

Scaling comprises the transformation of results from one scale (the pilot) to another (national), by making it applicable to the latter (Von Wirth et al., 2019). On that account, scaling does not imply that the experiment itself has to spatially enlarge: The results have to be made applicable on a larger scale. It is beyond the scope of this thesis to investigate whether the policies resulting from the pilot regulation will influence mainstream agricultural practices. Hence, it is impossible to determine whether the institutional work done by the actors is successful. Alternately, the focus will be on how the innovations made at the pilot

level are being translated into policy that *could* make it a mainstream practice (e.g. financial support for sustainable practices).

Thus, the scaling process will be explored as a process in which government officials aim to find ways to diffuse small wins or change existing institutions. This is also referred to as institutional scaling: Broader change that is enabled by modifying or adding regulations and policy (Jolly, Raven & Romijn 2012; Van den Broek et al, 2020). Both embedding and scaling are processes in which the experiments are being applied and integrated into the institutional context. To study the embedding process, the focus will be on how the pilots are being evaluated and how the information is gathered. In particular, it has regard to the evaluation and learning processes. To study the scaling process, emphasis will be on how the innovations will be scaled through the NSP (or possibly other policies), by assessing which policies are targeted in the pilot scheme and how knowledge is transformed from pilot innovation to nationally applicable policy. Hence, whereas embedding focuses on the aggregation of innovations through evaluation and learning processes, the scaling process emphasizes the use of these results on the national level (see figure 3).

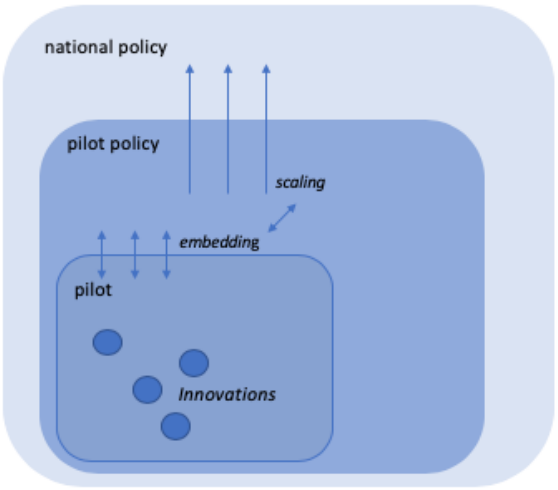

Figure 3

3. Methodology

3.1 Design

This thesis is exploratory and can be considered a case study. Conducting a case study comprises in-depth inquiry to get a profound understanding of a particular process, event, and activity within a bounded system (Cresswell, 2002). The case being explored consists of several CAP pilots on CA, all of which started the trajectory in 2021.

In this research, triangulation is applied, in which various sources and methods are used to gather data, leading to a comprehensive understanding of the case (Patton, 1999). As the innovating, embedding, and scaling processes studied in this thesis, take place on different levels, various methods will be used to investigate these processes. First, eight semi-structured interviews were held with actors involved at the pilot level, intermediary actors, and policy-makers. By interviewing actors working at the different levels in the pilot trajectory insights were gained about all processes. Second, internal documents and policies were analyzed, which gave complementary insights into the procedures.

In applying triangulation, integrating data from various resources and methods had a *complementary* and *confirmatory* function (Morgan, 2019). First, the interviews provided insight into the process in particular, while the documents and policies provided insight into the formalities and technical aspects of the process. To illustrate, in the interviews, respondents often struggled to remember the details and technicalities that could be analyzed in the document analysis. Second, the different data sources sometimes confirmed a particular statement or explanation.

3.2 Data Gathering

The respondents were selected through expert sampling and snowball sampling. I have selected knowledgeable actors but cannot describe the criteria as it will undermine anonymization that was agreed upon with the respondents. Furthermore, I have used the network of the respondents to find other people involved in the pilots. To steer the conversations in the interviews in such a manner that the respondents explained the processes, online semi-structured interviews were conducted, using different interview guides (see appendix 1, 2, 3, and 4). The documents used are internal documents, published regulations,

evaluations reports, and draft policies. These were sent to me by respondents or retrieved from https://www.toekomstglb.nl/.

3.3 Data Analysis

3.3.1 Method of Analysis

To answer the following questions, thematic content analysis was conducted based on the concepts outlined in chapter 2. Qualitative content analysis is descriptive by nature and combines deductive with inductive research, based on coding frames set prior to the analysis (Boreús & Bergström, 2017). On the one hand, this research takes an open approach as it aims to capture the institutional work of the actors involved. On the other hand, it is focused on the specific processes that could make the pilots successful (e.g. learning processes, contribution to policy). Therefore, thematic content analysis seems appropriate as it enables to code semantic units that state something meaningful about these processes based on the pre-set framework, in order to inductively describe *how* these processes are shaped by the different actors.

3.3.2 Coding Strategy

Question 1

For the first question, 'How do the pilots contribute to the transition to circular agriculture?' the coding frame at the beginning of the analysis consists of two simple codes: project description and innovation. First, semantic units that describe the most important innovations were coded, using the project plan and the transcripts of the interviews. Moreover, if semantic units said something about barriers to innovation, these would be coded as well (see appendix 5 for an example of a final code framework based on the data for pilot 3). Second, to investigate whether these innovations could become small wins, I used the (adjusted version) of the small-wins framework (table 1) to reflect on their potential for transformative change. Thus, this evaluation is done after analyzing the steps are being taken by the initiatives.

Question 2

To answer the second question; 'How are the evaluation and learning processes, in which results retrieved from the pilots are gathered, organized?' A thematic content analysis will be conducted on policy documents, project plans, and transcripts of interviews, using learning process and evaluation process as starting codes. Although sometimes overlapping, learning

process was used when a semantic unit says something about the learning processes in general, whereas evaluation processes have a more judgmental undertone to them. As an example, I added the final codes that I used to describe the pre-evaluation in secton 4.2.1.1 in appendix 6.

Question 3

To answer the third question; 'How are the results of the pilots translated to national policy?' A thematic content analysis will be conducted through which I will study how the results from the pilots translated into national policy instruments. All data will be used to identify how the pilots contribute to certain policies. In this, I coded all semantic units that say something about the translation to policy, starting with the code 'translation process'. The final codes of this analysis this can be found in appendix 7.

3.4 Scope and Limitations

As the design of this thesis is a case study, the results cannot be generalized: The aim is to give a detailed insight into this particular pilot scheme. However, due to time limitations, I focused on five pilots, which limits the empirical base of the study: There are eight pilots in total. Moreover, only two policymakers were interviewed. Although the policy documents provide insight into the formal organization of the institutional work being done in the ministry and the interviewed policymakers play a key role in the policy development, the results of the interviews can only be considered exploratory: Other policymakers may have other ways of working.

Another limitation of this research is that the pilot arrangement runs until 2023, whereas this thesis had to be submitted at the beginning of 2022. It nevertheless allows looking at the processes, which would not be possible if the pilot trajectory was to be studied in retrospect. However, it limits the research to the extent that I cannot draw any conclusions regarding the outcomes of the pilots. Nonetheless, the results could be used to improve the practices within the arrangement, as it is still running.

3.5 Referring to the Data

In table 2, in-text references to the documents and transcripts are displayed. All respondents gave permission to be cited and paraphrased anonymously. Moreover, permission was given

to display the organizations that are part of the pilot trajectory. Citations are translated from Dutch by me.

Table 2

Source	Reference
Interview pilot 1	R1
Interview pilot 2	R2
Interview pilot 3	R3
Interview pilot 4	R4
Interview pilot 5	R5
Interview policy maker 1	R6
Interview policy maker 2	R7
Interview intermediator	R8
Project plan Experimental Garden for Sustainable and Innovative Agriculture Van Pallandtpolder	D1
Project plan Circular shifting in the Kempen	D2
Project plan Organic in Development	D3
Project plan Supporting farmers with KPIs for biodiversity in the transition to CA	D4
Project Plan Modern CA with a new regionally oriented, mixed farm	D5
GLB-pilot policy WJZ/20162286 (Ministry of Agriculture, Nature and Food Quality, 2021)	D6
Explanation of evaluation section (internal document)	D7
Evaluation CAP-pilots (internal document)	D8
Proposal umbrella project (koepelproject) (internal document)	D9
Project plan umbrella project (internal document)	D10
Concept National Strategic Plan (Rijksoverheid, 2022)	D11

Potential eco-regulations (Rijksoverheid, 2021)	D12
Factsheet CAP (European Commission, 2022)	D13
EU requirements for CAP strategic plans, document 52018PC0392 (European Commission, 2018)	D14

4. Results

4.1 Evaluation of Small Wins

4.1.1 Experimental Garden for Sustainable and Innovative Agriculture Van Pallandtpolder

The Van Pallandtpolder (Pilot 1) is a 70-hectare pilot project in which two farmers work together: An arable farmer, Landbouwbedrijf Wesdorp, and a dairy farmer; H. Groeneveld. Several external parties are involved: Louis Bolk Institute Foundation, Savon Vogelonderzoek Nederland, Van Iperen B.V. and M. Groenendijk Agro. In addition, a number of parties are informally involved, meaning they do not receive the CAP-pilot subsidies. These are Staatsbosbeheer, Natuur- & Landschapsbescherming Goeree-Overflakkee, and the municipality of Goeree-Overflakkee (D1, R1).

The pilot aims to contribute to the transition to CA by creating a regional model area for a "future-oriented, common way of farming, relevant and practically feasible within the southwestern Delta" (D1, p. 4). The project focuses on steps that regular farms can take, but uses principles from the organic sector (D1, R1). In doing so, the pilot explores various circular flows through a collaboration between arable and dairy farming, and regional collaboration with nature conservation.

4.1.1.2 Innovations

1. Organic manure

The first circular innovation is locally produced organic manure. Organic manure is made from organic residues and nutrients from the adjacent nature reserve, nature clippings in the form of bokashi, and the manure from H. Groeneveld's cattle. By using these together, the soil quality should be improved, and the use of artificial fertilizers can be reduced (D1, R1).

2. Locally organized cattle feed

The second circular innovation being made is the usage of protein-rich crops and multispecies grass clippings as cattle feed. Parts of the parcel that is used by the arable farmer are used for the multi-species grassland, which should increase the population of meadow birds. Moreover, the protein-rich crops in combination with these grass clippings should increasingly replace supplied concentrated feed (R1, D1).

The latter is made possible by introducing strip cultivation on the arable land. As an addition to the diverse strips for traditional, commonly grown crops, multi-species grassland strips are added (5,5 ha), that besides the cultivation of cattle feed, should lead to natural protection of the crops and with that, a decrease in pesticides (R1, D1). Furthermore, nature elements are added to the parcel (D1). Additionally, two small interventions were done: The use of an eco-plow ensures that soil life will be less damaged, and searches for bird-nests increase the survival of meadow birds. It is linked to CA as it reduces the import of cattle feed.

Small-win indicators

The farm's organization as a whole could potentially become a small win that could contribute to the transition to CA. The two loops clearly reveal circular thinking, in which materials from nature as well as the farm, that would normally be (waste) output, are used on the farmland (indicator 1). Various interventions could be considered a radical new practice (indicator 2) in regular farming: The cooperation between the dairy farm and arable farm, the mixed land use, and the usage of organic techniques (R1). Furthermore, the pilot focuses on both social and technological change (indicator 3). The social changes are the mixed land use and the new collaborations. The technological changes are bokashi, strip cultivation, and eco-plow. The barriers the pilot aims to overcome (indicator 4) are technological and financial. The farmers did not have sufficient knowledge to measure whether their new way of working had the positive impact it should have (R1). Therefore, they used the pilot subsidies to pay for environmental monitoring (R1). In the business analysis, it is analyzed whether and in what way the circular flows influence the profits, as the farmers will purchase fewer pesticides and fertilizers (D1). Thus, trying to overcome financial barriers is part of the pilot, which indicates it could be a small win (indicator 4).

4.1.2 Circular Shifting in the Kempen

Circular Shifting in the Kempen (pilot 2) is led by Van den Borne Aardappelen, a company that owns an area of 1000 hectares, most of which is leased. 30 hectares are used for the pilot. Moreover, the pilot is carried out in cooperation with dairy farmer VOF Mijs-Creans from Bladel, and rural company Den Elshorts, where mainly pigs are kept. All farms participate in the pilot with their farmland. The pilot is supported by Huis van de Brabantste Kempen, a network organization, and Praktijkcentrum voor Precisielandbouw, an educational center. Furthermore, Wageningen UR, project KLIMAP (executed by the water authorities), and the province of Noord-Brabant are responsible for the method of execution for the scenario development and workshops (D2). Other actors involved are: WeatherMakers, Boerderij van de Toekomst, and Waterschap de Dommel.

The pilot project aims to contribute to CA by connecting leading farms to governments, knowledge institutions, water authorities, and nature managers (D2, R2). The pilot takes a systemic view on CA, by focusing on different fields: In the project plan (D2) they emphasize 'circular shifting' with policy, strip-cultivation, legislation, manure, compost, landscape elements, data, knowledge, and creating a support base (D2). The project consists of two sub-pilots, in which they organize the following loops: the low emission manure loop and the soil conditioner loop (D2, R2).

4.1.2.2 Innovations

1. Low emission manure

The pilot wants to replace artificial fertilizer by using cows' manure. The loop starts with changing the cow feed. By adding ImpactPowder and changing the feed, the nitrogen in the manure will be increasingly bound. Afterward, the manure will be treated with N2Applied, a plasma technology that binds nitrogen and reduces NH3 (ammonia) emission. In the three manure pits where this is being tested, whey, humic acids, and special algae extracts are added to further investigate how these substances reduce emissions. It turns manure into a natural fertilizer, which then is used for arable farming (D2).

2. Circular soil conditioner

By combining grass clippings from Water authority de Dommel and Brabants Landschap, wood chips from municipality Hilvarenbeek, slurry, straw, and farmyard manure, CMC-compost is produced. This is a kind of compost that can be used as a soil conditioner by arable

farms. Parts of the land from rural company Den Elshorts will be used to measure the effects on the soil (D2).

3. Insect highways

To develop insect highways on the vehicle lanes, it is analyzed which combination of herbs and/or flowers contributes most to biodiversity (seasonally). In arable farming, GPS technology (RTK-GPS) is used in which driving paths are determined. Using what they call 'holistic engineering', the aim is to create three-meter-wide insect highways, on which the farm vehicles drive as little as possible, with vegetation between the tire tracks.

4. Farmers as partners against drought

Together with KLIMAP, it is explored what farmers can do against soil desiccation through collaboration. To do so, it is investigated and examined whether activities from the CAP regulations and the above-mentioned innovations contribute to keeping the soil wet (D2, R2).

Small-win indicators

The pilot takes a systemic approach to CA, in which they describe different circular shifts that should be made on various levels. They present all these shifts as part of a switch cabinet for CA (D2). Looking at the first two innovations, the contribution to CA is clear, as they focus on closing loops: The low emission manure (partly) closes the nitrogen loop and the second innovation combines different types of output to create biological fertilizer. Moreover, innovation four emphasizes retaining water, which could reduce water use (indicator 1).

There are various radical new practices (indicator 2). Re-using manure seems to be low-hanging fruit, as it is already done regularly at the Belgian part of the land (R2). Nonetheless, in the Netherlands, this is forbidden because of how manure use is regulated, which reveals it is a radical new practice in this context (R2). Moreover, innovation four emphasizes a new role for farmers, in which they work together against drought. This could be considered a second-order change (indicator 2).

At first glance, it seems as if the first three innovations are mostly technological, which is a contra-indicator for small wins (indicator 3). However, innovation 4 and the framing of the CA-transition reveal that pilot 2 does focus on social changes, as it emphasizes the

collaboration between farmers to counteract soil drought, and focuses on social issues such as farmer involvement. There is another project, in which they try to make a 'hotline' for farmers that want to become more sustainable (R2). However, integrating the social changes that are required for using these technological innovations beyond the boundaries of the pilot could improve the chances for developing small wins in the pilot.

There are some regulatory barriers (indicator 4) to developing the low emission manure. R2 explained that while in Belgium this is a normal practice, in the Netherlands, there are multiple barriers to using cows' manure. It is forbidden by law: First, there is a certain amount of fertilizer (from manure or artificial) that one is allowed to use, which makes it impossible to use natural fertilizer, for that should be used more frequently (R2). Second, according to R2, it is not allowed to fertilize aboveground with manure slurry. Moreover, farmers have been taught to use artificial fertilizer only, meaning they do not have sufficient knowledge to apply this on their land, which could be perceived as a technological barrier. Thus, there are various barriers, which suggest that in the context of the Netherlands, this might be a small win. As R2 explained, the artificial fertilizer lobby has been powerful when making these regulations, which made it impossible for regular farmers to work with manure.

4.1.3 Organic in Development

Organic in development (pilot 3) focuses on how the new CAP can strengthen the organic farm sector. It is organized by bio-next, a chain organization that focuses on political representation and projects in relation to all parts of the organic (food) business chain (D3). Furthermore, Biohuis, the association for organic farmers and gardeners, and Biobol, the association for organic bulb growers are involved. In addition to this, two farmers work along: Pipie Smits van Oyen, an arable and beef farmer, and Francine van Rossem, an organic crop gardener. The goal of the pilot is to discover how the revised CAP could be made applicable in the organic farm sector, which the pilot investigates by comparing policy and doing field research at organic farms (D3, R3).

4.1.3.2 Innovations

1. Fitting CAP to the organic sector

The pilot project compares the goals and measures of the (national and EU) organic legislation and the CAP. The aim is to shape the CAP measures so that they can be used by organic farmers (D3, R3).

2. Fitting the organic sector into CAP

The project also explores to what extent organic farmers could use the CAP schemes, by conducting interviews with experts and farmers. Moreover, field experiments are conducted to explore whether certain measures could be taken by organic farmers (D3, R3).

3. Stimulating organic farmers' use of CAP

Currently, organic farmers do not use CAP schemes. Pilot 3 aims to investigate why this is the case and how it can be improved. The pilot, therefore, has an educational component: Through their own communication channels, they aim to inform farmers about the possibilities in regards to the CAP (D3, R3).

Small-win indicators

It could be argued that, when these three steps are taken successfully, and organic farms could make use of the CAP schemes, this would be a small win. In the project plan and the interview, it is argued that the organic sector already works a lot according to the principles of CA: They are obligated to use organic input, and to give away their organic output to other organic farms, which entails they already close material loops in the sector (R3). As a result, organic farmers already work in close cooperation (R3). Thus, there is a clear connection to the CA narrative (indicator 1): Enabling organic farmers to make use of CAP funds would support the organic sector, which already works according to CA principles.

If the national implementation of the CAP would be changed in such a manner that it could support the organic sector, it could be a radical new practice, as organic farmers are currently not using the CAP subsidies, and the concept version of the CAP is not suitable for organic farms (indicator 2) (R3). Furthermore, it could be considered second-order change, as including them in the regulation gives acknowledgment that the relatively small organic sector plays a pivotal role in the transition (indicator 2).

The pilot mainly emphasizes social change, as it focuses on rewarding the organic sector for ecosystem services. However, it is also connected to technological change: The farmers test the application of eco-activities from the CAP (indicator 3).

Finally, there are various regulatory barriers that the pilot tries to overcome (indicator 4). In the current concept version of the CAP, there are conditionalities that are not appropriate for organic farmers. First, farmers should have zones that are free of productive activities and used for nature elements. For organic farmers, it would be redundant to take part of their land out of operation, as they are not using chemicals from the beginning and they already contribute to various CAP goals, such as biodiversity and the decrease of ammonia emissions (R3, D3). Second, farmers should have buffer zones alongside their lands to ensure that nitrogen is not released into nature. However, organic farmers do not use artificial fertilizer, which means there is no volatile nitrogen that can be released (R3).

4.1.4 Supporting Farmers with KPIs for Biodiversity in the Transition to CA

Pilot 4 is organized by BoerenNatuur, an umbrella organization with 30 agrarian collectives as members. These collectives carry out nature and land management with farmers in their region (R4). One of the key purposes of this organization is the design and implementation of KPIs (Kritische Prestatie Indicatoren, which can be translated as Critical Performance Indicators) for the agricultural sector. KPIs are indicators that can be used by private organizations or public authorities to reward farmers for their commitment to environmental and nature challenges. Farmers receive a mark for their contribution to a certain goal (such as climate or biodiversity) (D4, R4). This pilot addresses some problems in the IT system that is used to determine the scores on KPIs. This pilot explores problems and solutions, in order to develop this IT system further, so that it can be used by all Dutch farmers, focusing on the KPIs for biodiversity (D4, R4).

4.1.4.2 Innovations

KPIs

The pilot focuses on making KPIs usable by improving the IT of two KPIs related to biodiversity. These are already used but are calculated manually by Boerennatuur. By improving the IIT infrastructure the KPI can be calculated automatically. In addition, farmers

themselves can get insight into their KPI. The pilot aims to improve the IT program, primarily focusing on two frequently requested KPIs for biodiversity: KPI herb-rich grass and KPI nature and landscape. In the pilot it will be explored whether other KPIs could be involved.

Small-win indicators

The relation to the CA narrative (indicator 1) remains somewhat unclear in the project plan (D4). The KPIs do not necessarily contribute to closing loops (although herb-rich grass could probably be used as feed like in pilot 1, it does not have to be). However, R4 explained that Boerennatuur believes that biodiversity should be part of the interpretation of CA. From that point of view, one could argue that these could steer the transition in a way that is favorable for biodiversity. The KPI thus could support rewarding farmers that aim to conduct CA. Nonetheless, it may also support the rewarding of farmers that merely add nature elements or herbal grasslands to their farms.

Rewarding farmers for their contribution to the environment is a radical new practice (indicator 2). Furthermore, the pilot focuses on second-order change, as KPIs could change the role of farmers in relation to environmental challenges: By giving a farmer a mark and suitable reward based on their contribution to the environment, their responsibility in this regard is acknowledged. Moreover, KPIs derive from the idea that various parties contribute a little to the transition, as it enables different private and public parties to reward farmers.

This pilot addresses technological barriers as well as regulatory barriers (indicator 3), as the project focuses on problems regarding the use of the software, and some problems regarding the privacy regulations in relation to this software (R4, D4).

Furthermore, the project does address technical and societal change (indicator 4). Although the steps taken in the pilot are mainly technological, they are supposed to serve a social change, in which farmers take into consideration their environmental impact (R4).

To conclude, KPIs could be small wins for the transition towards sustainable agriculture, as they could enable a new reward system in which farmers' contribution to environmental goals

can be rewarded by various parties. Nonetheless, it may also support farmers that do not work circularly, but that take measures that contribute to increasing biodiversity.

4.1.5 Modern CA with a New Regionally Oriented, Mixed Farm

Pilot 5 organized by the Vereniging Agrarisch Landschap Achterhoek (Association for Agrarian Landscape Achterhoek) in collaboration with the Markte- Agro-Innovatiecentrum, and Vereniging Vruchtbare Kringloop Achterhoek & Liemers. This pilot project aims to improve soil quality by experimenting with a more varied cultivation plan and crop-specific application of manure (D5, R5). Similar to pilot 1 and 2, the pilot focuses on the collaboration between arable and livestock farmers. It does so on a regional level: By connecting farmers and executing regional planning, circular flows are organized in a sustainable manner (D5).

4.1.5.2 Innovations

1. Regional collaboration

In the pilot it is explored how farmers can collaborate in the Achterhoek-area so as to close (manure) loops. In this, the pilot aims to create a local cultivation and fertilization plan, by exploring potential instruments and methods that support collaboration. These instruments can be (CAP)policies (D5).

2. Balanced manure use

After identifying an area in which farmers can collaborate, balanced manure use is tested, in which the thin and thick friction from the manure is separated, so that the thick friction can be used for crops. The manuring of those crops will be specific to the needs of those crops in order to grow (D5).

3. Land-based farms

The pilot experiments with land-based companies that have more variation in their crops. By increasing the use of so-called ‘green-manure’ crops and crops that hold protein, the soil quality increases. Instead of leasing the land for a small amount of time, farmers’ companies will be based on a certain land permanently, so that farmers can take care of the soil (D5, R5).

4. CA-tool

The pilot aims to make a CA-tool in which farmers, based on scientific models, can see the balances for nitrogen from fertilizers, carbon from organic matter, and possibly water on their

land. Currently, there exists a model-set in R (statistics software) to calculate these balances, but the idea is to create an app based on these models, that farmers can use, to give them insights into what they are doing for the environment and what they can do to improve (D5, R5). Moreover, it could be used to reward farmers for their contribution to society (R5).

Small-win indicators

There is a clear context-specific narrative of the contribution to CA (indicator 1), as the pilot focuses on re-using manure, and cultivating the soil in such a manner that it retains nutrients and water, and reduces the nitrogen and carbon emissions. These loops are closed on a regional level through collaboration.

The pilot focuses on in-depth changes for this area, as there are indicators that there are radical new practices (indicator 2) for the Achterhoek: Currently, most farmers get one-year lease contracts, which suggests that having a land-based company is something new (R5). This could be seen as a second-order change, as it focuses on changing the company structure of the farms. Moreover, farmers currently do not collaborate, which suggests this system, in which you take a region-based approach and re-use output, is a radical new practice (indicator 2)

The pilot addresses both societal and technological change (indicator 4). The societal changes include farmers' collaboration, their role in society, and the boundedness of the farm to the land. The CA-tool gives them insight into their 'contribution to society' and could possibly support a new rewards system, such as the CAP (R5). The technological changes are the CA-tool itself, the new organization of crop cultivation, and the re-use of the manure.

There are different barriers (indicator 3) in this process, which the pilot addresses. Especially collaboration seems a barrier, as previous collaboration, in which dairy farmers leased their land to crop farmers, that cultivated potatoes for one year, did not have good outcomes: The soil was completely deserted after (R5). This caused resistance and R5 expects this to persist. Moreover, R5 points out that arable farmers are not used to collaborating, whereas the dairy farmers already work together a lot: They have the tendency to think about their own company's interests. The pilot tries to investigate this further with in-depth interviews.

Finally, the pilot focuses on the potential financial barriers in this process, by conducting a business analysis (D5).

4.1.5 Overview of potential small wins for CA

How do the pilots contribute to the transition to circular agriculture?

Within the pilots, various steps are taken which could become small wins that contribute to the transition to CA. The Van Pallandtpolder (pilot 1) could become a small win for the regular agricultural sector, as the company applies a new form of organization in which cycles are closed at the farm and regional level. Pilot 2 is taking a number of technological steps that can contribute to closing cycles, but which are not yet explicitly socially embedded: although farms are being used, it is mainly technological trials that need to be tested. There are, however, opportunities for this: Pilot 2 has a holistic view on CA and certainly deals with social issues within other projects. In addition, it cooperates with farmers and businesses that can address social issues. Pilot 3 is a policy-oriented pilot that, together with farmers and sector organizations, looks at how organic farming, which is already largely built on closed-loop farming principles, can be rewarded through CAP policy. The KPIs that are further developed within the fourth pilot, which should enable farmers can to what they contribute to biodiversity and that they can be rewarded for this, could be seen as a small win, although the contribution to CA is still somewhat unclear. Therefore, it can be said that they do contribute to the sustainability of the agricultural sector and can support the transition to circular agriculture by paying attention to the role of biodiversity within the transition. Finally, the last pilot could lead to new organizational forms that could be a small win: Landownership and cooperation between farmers can lead to the closing of cycles on a regional level, leading to healthy soil and fewer emissions.

4.2 Evaluation and Learning

4.2.1 Evaluation Processes

In the legislation of the CAP pilots, there are different evaluation processes that can be divided into a pre-evaluation, mid-term evaluation, and a final evaluation.

4.2.1.1 Pre-evaluation

The following types of project applicants may participate in the pilots (translated from D6, p. 2):

- Certified agricultural collectives
- Partnerships consisting of two or more certified agricultural collectives
- Partnerships consisting of one or more certified agricultural collectives in collaboration with farmers, producer groups, other small or medium-sized cooperatives, and branch organizations
- A partnership consisting of at least one farmer together with other farmers, producer farmers, producer groups, cooperatives, or interbranch organizations.

In order to participate in the CAP pilot on CA, initiatives must submit a project plan that will be used to assess whether the initiatives can participate in the pilot. The plan is first checked on the minimum requirements by the RVO, the executive body for this policy (D6). It should consist of (translated from D6, pp. 5-6):

1. A budget plan
2. A detailed time plan
3. Intended results and products.
4. Explanation of how the project seeks to contribute to the goals of the pilot
5. Explanation of how the project contributes to the selection criteria consisting of effectiveness, efficiency, feasibility, and innovation
6. Description of plans for collaboration
7. Description of plans for publicity

Budget plan

The budget plan should be made in line with a product list prepared by the ministry. This list establishes amounts of the costs incurred, consisting of process costs for reporting on the experiments, various knowledge sharing activities, and costs for agricultural activities consistent with the potential eco-activities of the CAP (D6, D12). In the latter, an amount is allocated based on the number of hectares on which the activity is carried out (D6).

Selection criteria

Points are awarded based on the selection criteria effectiveness, efficiency, feasibility, and innovation, which determine the award of the grant. First, a minimum number of points must be obtained to participate in the scheme. Second, the points determine the amount of subsidy that will be awarded to the initiative. For each part, between 0 and 5 points are awarded.

Points for effectiveness are weighted 5 times, those for feasibility 4 times, those for efficiency are weighted 3 times, and those for the degree of innovation once. Thus, a total of 50 points can be obtained. The minimum amount to participate in the pilot is 30 points (R6, D6, D7). When pilots reach 30 points or more, a ranking is made according to which the subsidies are distributed (R6).

A brief explanation is given of how an assessment is done in relation to the criteria. In the assessment of *effectiveness,* the CAP goals are central. It is assessed whether the initiatives contribute to the goals of the CAP or the ministry's vision on CA. In the assessment of *efficiency*, it is evaluated how the resources will be used for what output, and whether this is done efficiently. The *feasibility* assessment is two-fold. First, it is evaluated whether the project itself is executable. Second, it is evaluated whether the pilot delivers interventions that are widely applicable in the Netherlands. Finally, *innovation* will be evaluated by assessing whether the innovations contribute to the CAP goals and the cooperation in the pilot. Moreover, it is evaluated whether the pilot contributes to the intended transition to CA and/or nature inclusive agriculture (D6, D7).

R6 describes that these four criteria are secured at the EU level "The assessment of cooperation projects includes a general of how we should do it in the Netherlands, which has been verified by the European Commission". This implies that the pilots must be assessed on those criteria. However, the point system leaves some room for flexibility for actors involved in the pilots. First, policymakers can differentiate the weight given to the criteria depending on what is important in the pilot regulation (D6, R6). Second, initiatives can be flexible: Depending on the pilot's aim, they can get many points for one criterion and very little for another, without being excluded (R6).

A group of experts at the ministry assigns these points (R6, R7). First, they evaluate the project plans separately. Second, they compare them to see whether they have the same score as the pilots. When the scores are similar, an average is taken. When the scores are very different, they aim to understand why it is the case. Their expertise is essential in this process (R7). R7 illustrated this with the following example:

Look, you know, when I read that, a lot of it is also about knowledge and experience. Sometimes you have to read between the lines. I've seen a project for circular agriculture, which went for a sustainability subsidy. And listen to what they did: A cattle farmer and an arable farmer were going to work together, and that farmer had 90 hectares of land, and 1/3 potatoes. Potatoes give a lot of poison, a lot of depletion of the soil, but also give a lot of money. So, a farmer wants a lot of potatoes. And he (the applicant) *says, I'll cooperate with the cattle farmer next door, then he'll get some of my waste, he'll use the leaves and so on, and then I can use some of his land once in a while, so I'll have grassland once in a while or something like that. So first he had 30 hectares of potatoes, because he had 90 hectares of land with 1/3 potatoes, he went together with that farmer, to 60 hectares of potatoes. They had 150 hectares together and they planted 50 hectares of potatoes, so it was just an intensification. Well, then you get a project plan with all these beautiful proposals, all the cycles that go everywhere, and actually, I only have to read one line, which I have to be alert to: How many hectares, how intensive is it going to be? You can summarize everything in protocols and so on, but the calculations can be very creative.*

This example reveals that one can still meet the requirements at first glance, and that it requires sufficient knowledge of the environmental effects of agriculture to assess whether it actually contributes to the goals.

In addition, the scalability of the pilot is taken into consideration. This does not imply that the pilots should carry out innovations that should be feasible throughout the country, but that there is a realistic idea about to what extent these innovations could be applied in a broader area, which could also be a certain region (R6, R7).

However, the process may not be perfect for assessing the quality of the (potential) pilots, as R6 points out that there are people that have really good plans but that are not skilled in writing in such a manner that these criteria are fulfilled. This suggests that if you want to embed your project in the pilot framework, it is necessary to be able to write the project plan in such a way that it meets these requirements. Moreover, R7 pointed out that one applicant

had achieved 50 points, but had forgotten a zero in the budget plan, and therefore had to be excluded.

Objectives and activities of the pilots

In addition to these criteria, prescribed goals and activities are set in the legislature. The pilot project should be aimed at trying out new measures with regard to the new CAP. The pilot must be aiming at facilitating the implementation of the CAP and delivering performance in relation to the CAP, increasing support in the targeted sector or area, and/or trying out new forms of cooperation between the parties involved in the implementation of the innovation (translated from D6, p. 2). Additionally, the pilots must contribute to sustainable management of agricultural soils and carbon sequestration in those soils, the reduction of crop rotation, groundwater protection in areas where compensations apply due to requirements of the Water Framework Directive[2], closing loops through collaboration between livestock and arable farmers, and remuneration forms through cooperation between public authorities, market parties or social groups (D6, p. 2) .

These listings reveal that the pilots are steered towards certain activities that influence the innovations, such as organizing collaboration and reducing the rotation of the crops. Moreover, they steer the pilots towards policy implementation, namely the Water Framework Directive and the CAP.

Altogether, the pre-evaluation seems to have several functions. First, these processes determine whether a project plan overlaps with the directions the government wants to take. The goals, activities, and contributions to policy must match. In addition, four criteria must be met, which are assessed by policymakers through a joint analysis. Here, there is room to determine, based on expertise, whether the pilots actually contribute to the goals set. Second, the pre-evaluation functions as a process in which the amount of subsidy is allocated. On the basis of the criteria and a list of communication and agricultural activities, specific amounts are allocated to applicants.

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[2]The Water Framework Directive is a guideline from the EU that prescribes requirements for water quality

Strategies for fitting in the pilot framework

Most actors involved in the pilots were assisted in meeting the requirements. Some initiatives collaborated with partner organizations (R1, R5). Others worked with subsidy specialists: BIO worked together with someone from RVO that provides support in the application process and R2 from CSK explained that they have a subsidy office. Moreover, the KPI pilot was organized by Boerennatuur, who implement subsidies themselves, and the organization already has experience with this and works in close cooperation with RVO (R4).

4.2.1.2 Mid-term evaluation

In December 2022, the pilots have to provide a preliminary report describing their progress in executing the measures and the results so far (D6). According to R7, the main purpose of this report is to see if the project is making sufficient progress. As the planning of pilots is mostly too optimistic, the ministry tries to monitor whether the initiatives stay on track. In addition, it is checked whether the expenditures correspond to the number of tasks performed. If it is not, the ministry asks for an explanation. This is, R7 explains, to avoid possible fines from the EU. The results are not used for policy content-wise.

4.2.1.3 Final evaluation

For the final evaluation, the pilots need to deliver a final report (D6). In evaluating this report, content does matter. Both policymakers point out that the pilots should contribute to the new CAP. R6 and R7 explain that the results are used to verify whether the measures taken in the pilot indeed contribute to the environmental goals of the EU. Nonetheless, they both stress that the pilots actually end too late to contribute to the NSP, which should be executed in 2023. Furthermore, R6 stresses that whereas the previous round of pilots actually helped to design the eco-regulations of the CAP, these probably won't (I will elaborate on this issue in 4.3).

4.2.1.4 National reports

In addition to the reports that have to be delivered by the pilots' projects, a national report should be made. The mid-term report should contain a description of the projects, evaluation, lessons learned, and recommendations for the development of the CAP regulations. This should be handed in in December 2022. The final report only should contain a description of

the projects, evaluation, and lessons learned (D6). These reports are made by the umbrella project, which will be explained in 4.2.2.

4.2.2 Learning Processes

4.2.2.1 Umbrella Project

National coordination takes place via the umbrella project (*koepelproject/traject* in Dutch), which focuses on intermediary activities, knowledge sharing, and external joint communication. The project is executed by Boerennatuur. Intermediary activities consist of providing policy input, which can be knowledge and insights, on behalf of all pilots (meaning, also those focusing on other themes than CA) (D10, R8). In total, there are twenty-one pilots that all take part in the project (D9). Additionally, practical, administrative assistance is offered with regard to concerns that are relevant for multiple pilots (R8, D10).

The sharing of knowledge by the project team relates to policy developments, as the project team keeps the pilot updated through newsletters with policy-related feedback. The knowledge-sharing activities between pilots consist of meetings between pilots that pertain to the same theme, focus on particular policies, emphasize score methods (e.g. KPIs), and emphasize the organizational structure of the pilot scheme (D10). Thus, knowledge sharing is twofold: The project team provides information about policy and the pilots share knowledge with each other.

The external communication consists of newsletters, expert events in which all stakeholders are invited to share information, a final symposium about the findings, field trips to the pilots, and country-wide communication products such as presentations and videos. Thus, the umbrella project fosters knowledge sharing between the pilots as well as external knowledge sharing on a national level. This is complementary to the communication that pilots organize themselves (D10, R8).

4.2.2.3 Learning through Collaboration

Knowledge institutes

Most pilots collaborate with knowledge institutes such as research institutes, universities, and more practical educational institutes (pilots 1, 2, 3, and 5). Research institutes and universities are mostly responsible for monitoring the environmental effects of the innovations, whereas

educational institutes are often used for learning activities such as workshops and internships (D1, D2, D3, D5, R1, R7). Thus, the knowledge institutes support the gathering of results as well as the dissemination of those.

Working with farmers

All pilots work involves farmers in the learning processes that work in their targeted field or region (D1, D2, D3, D4, D5). Pilot 1 is coordinated by farmers themselves, but in the other pilots, the organizations in charge have a more managerial role (such as agricultural collectives). By working together with farmers, they want to include the perspective of those who need to implement the changes. For example, pilot 3 works with organic farmers to explore whether they could be supported by new potential eco-activities, and pilot 5 is conducted in collaboration with the kind of farmers dominant in their region (potato farmers and dairy farmers) (R3, D3, R5, D5).

Local authorities

Various pilots collaborate with local authorities, namely water authorities, provincial states, and municipalities. For pilot 1, participation in the pilot scheme enabled them to meet the requirements for leasing the land, set by the municipality (R1). Additionally, several innovations serve as possible means for local or regional implementation of policy (R1, R2, D1, D2, D4).

Using own network

As the pilots are mostly organized by organizations that have a network with farmers and/or local actors on a certain topic, results are shared gathered with and shared through this network. This is conducted through their regular communication channels and field activities, such as workshops or events (D2, D3, D5). However, Pilot 1 is mainly conducted by farmers and thus is not organized by a broader organization. Nonetheless, their communications officer organizes similar activities, in which they collaborate with regional authorities (R1, D1).

Other projects

Pilots 2, 3, 4, and 5 are conducted by organizations that conduct other projects focusing on the same environmental challenges. The results from the pilots complement these projects in

tackling these challenges. The KPIs are an example of this: The pilot focuses on two KPIs in particular, but the results could provide insights for using other KPIs from Boerennatuur. Vice versa, the innovations of those other projects support the pilots in their innovation process.

In addition, the actors from the pilots often work together with other pilots, to mutually support each other (pilots 3, 4, and 5; R3, D4, R5, D5). For example, pilot 3, which focuses on changing the CAP regulations to include the organic sector, works together with a pilot that focuses on testing and renewing the eco-regulations in particular. This is also encouraged by the umbrella project, in which actors involved organize different sharing events, focused on particular topics (D10, R8).

4.2.3 Sub-conclusion

> *How are the evaluation and learning processes, in which results retrieved from the pilots are gathered, organized?*

In order to participate in the pilots, it is necessary to meet a list of requirements. Through the pre-evaluation process, the ministry ensures that subsidy is granted to initiatives that have designed a pilot that is coherent with their objectives, related activities, and criteria from the EU level. For the latter, the policymakers use the mid-term evaluation as well. As the funds are allocated by the EU, they are held accountable by the EU as to how they have spent their subsidy. The mid-term evaluation is therefore used to check and ensure that the money is being spent proportionally. This is based on the points awarded by the ministry, and a list of farming and communication activities. Hence, the pre-and midterm evaluation processes are organized in a way that steers the pilot projects so that they will conform to the requirements and plans of the ministry and the EU commission. This steers the content of pilots in certain directions and guarantees that policymakers do not get into trouble when justifying their spending. Nonetheless, as mentioned by the policymakers, granting of the subsidy hinges on the ability of the writers of the project plan to fulfill the legal and content-related criteria.

In the final evaluation, policymakers look at the results of the pilots. It is checked whether the measurements contribute to the environmental objectives defined in the CAP. Nonetheless, their contribution remains questionable, as the pilots finish too late to be included in writing

the NSP. Additionally, national reports should be written, in which the pilot's results are aggregated. The latter is conducted through an umbrella project organized by Boerennatuur, which will be further discussed in 4.3.

The learning processes that are utilized to gather knowledge nationally are fostered by the umbrella project. Through thematic sessions, pilots learn from each other and reflect on related criteria. For the latter, the umbrella project facilitates learning about policy as well.

Moreover, the learning processes are supported by versatile knowledge institutes that execute or assist the innovation and monitoring processes. Vice versa, the results are used for education, which enables researchers, students, or participants to learn about the results. Furthermore, the learning processes are executed in collaboration with local authorities, so that the results can be used for local governance. Moreover, research is conducted in collaboration with farmers the pilot aims to target. Additionally, the pilots are conducted by organizations that already have an extensive network, which enables them to investigate potential problems and share the results through their own communication channels. Finally, the results of the pilots are used for other (long-run) projects and other pilots that are part of this scheme.

4.3 Contribution to National Policy

4.3.1 Umbrella Project

When asking respondents about the ways in which they seek to contribute to national policy, the actors involved in pilots that do not focus on policy in particular (1, 2, and 5) indicated that this is still in development (R1, R2, R5). Respondents involved in pilots 2 and 3 had extensive ideas about policy as their innovations are more policy-related (R3, R4). According to R8, who is working on the umbrella project, knowledge of policy seems to vary among actors in the pilot, as does the extent to which the pilots pay attention to translation into policy.

All actors involved in the pilots emphasized that they plan to contribute to policy through the umbrella project (R1, R2, R3, R4, R5). Pilot 3 is the only pilot with a lobbyist involved, who is in contact with policymakers that focus on organic farm law (R3, D3). The umbrella project

functions as a ‘collection point’ and a ‘conduit’ between actors involved on the pilot level and the actors involved on the national level (i.e. the ministry and RVO) (R8).

First, results from the pilots are aggregated so as to contribute to policy (R8, D10, D11). As there are twenty-one pilots in total, it is difficult for policymakers to stay in (direct) contact with all of them (R4, R8, R6). Therefore, those working for the umbrella project aggregate the different results and report to those writing the national policy. The project team meets every six weeks with the ministry and RVO and is responsible for the joint contribution in regard to the NSP/CAP and possible other policy domains (R8, D10). Second, the project members from the umbrella project inform the actors involved in the pilot about the pilot policy and policy developments. As mentioned before, the knowledge about policy varies among pilot staff. To support those with lacking knowledge, the umbrella facilitates learning about policy (R8, D10). For example, a crash course on the CAP was provided to project leaders of one pilot (R8). Hence, the project provides interaction between the two levels and has an intermediary purpose that facilitates policy development.

However, in those intermediary processes, the quantity of pilots poses a challenge (R6, R4, R8). To illustrate, R6 explained that in a previous pilot round, the CAP eco-point system was developed in cooperation with participating farmers, during which R6 had direct contact with those farmers, that executed eight pilots (R6, D8). In this round, it is not only farmers that work on specific policies, but a great variety of actors, that could contribute to various issues and policy fields (R6, R8). As policymakers have little time, this increase in pilots and the heterogeneity of those pilots complicates the utilization of the results (R5, R6, R8). This lack of time is reinforced by the account-holding from the EU, as the reporting and monitoring are time-consuming for policymakers (R6, R5). Moreover, this great variety between pilots may also lead to a variety of outcomes that sometimes contradict, which makes it harder to integrate them into policy as the outcomes seem to be case-specific (R6). Hence, the large number of pilots constitutes a challenge, as it leads to an extensive variety of results that policymakers have to process within a limited timeframe, which results in less direct contact between the policymakers and pilot staff. The latter reveals that the umbrella project plays a pivotal role in the contribution to policy, as joint efforts are made to deliver policy-related results (R8).

4.3.2 CAP Eco-regulations

The policy at the core of the pilots is the CAP, an EU scheme that consists of income support for farmers and funding for rural development. Several respondents (R6, R8) indicated that these pilots do not necessarily focus on the CAP, but derived from the project plans and interviews, this is the most prominent policy issue. The allocation structure of the subsidy is currently changing, as the standard income support, which is based on hectares, is reduced, and more support is given to environmental services, based on eco-regulations. Furthermore, income support will be partly allocated from larger to smaller farms, as for the first 60 hectares, income support is higher (R6, D13, D14). National governments compose strategic plans in which they determine how they will execute the CAP, whereby they have room to adapt to national needs, but they are subject to EU requirements (D13, R6). These requirements are mostly based on objectives, as the EU monitors the performance of member-states in relation to the objectives determined at the EU level (D13, R6). As R6 explains: "*We actually have gotten a lot more freedom in EU-policy, but the registers and conditions, you have to abide by them*".

Contribution to CAP eco-regulations

All pilots somehow address the eco-regulations and/or conditionalities (requirements to receive the financial support that is allocated based on hectares, referred to as GLMCs). This is fostered by the requirements for the subsidy (explained in 4.2.3) as pilot subsidies are attributed based on a list of activities, that overlaps with possible eco-regulations.

All pilots, but pilot 1 especially, focus on the testing of those eco-regulations. Their circular innovations consist, among others, of a range of activities that are coherent with eco-activities (activities that are rewarded with the eco-regulations) (D1, D2, D3, D4, D5, D12). Pilot 2 focuses on the role of organic manure in the CAP (D2, D2) by testing out new ways to produce organic manure to minimize emissions. Additionally, as explained in 4.2.3, pilot 3 aims to include the organic sector in the CAP (D3, R3). Moreover, the KPIs (pilot 4) could possibly support the implementation of the CAP (D4), although it remains a matter of debate whether they should: KPIs are marks that reflect a farmers' contribution to a certain goal, whereas eco-regulations will reward farmers for their activities (R4, R6). Finally, pilot 5 focuses on including new activities in the CAP, as the actors involved explore whether cooperation between farmers somehow can be stimulated by the CAP (D5). The latter could

also be supported through the rural development pillar of the CAP; This is something they still need to develop (R5).

However, although all pilots touch upon CAP regulations, changing these is not their main objective (pilot 3 apart). As R6 and R8 pointed out, the pilots categorized under the 'future proof farmer' theme focus more specifically on this policy. For pilot 4, the KPIs may be able to support the implementation of the CAP regulations, but R4 emphasizes that especially market-actors and regional governments have been asking for them (R4, D4). For the pilots that focus on the circular organization of farms (1, 2, 5) the innovations could be supported by the CAP, as the eco-activities are elements of these innovations (D1, D2, D5, D12). To illustrate, some potential eco-activities are protein-rich crops, strip cultivation, and rotating crops (D12). These activities are elements from the pilot innovation, as for example pilot 1 organizes loops through a farm organization that consists of strip cultivation and rotating crops (D1). However, these innovations acquire a social element, as organizing these loops requires cooperation between farmers, which is not captured by the current potential eco-regulations (D12). Hence, the CAP could support these innovations conducted by the pilots, but it does not necessarily steer towards applying all aspects of the innovation.

In a similar vein, one of the policymakers (R6) expressed that circular flows are hard to reward through the CAP, as the CAP schemes are based on hectares of the farmland, whereas the circular flows are organized regionally. Therefore, R6 does not consider the CAP an appropriate policy instrument for organizing circularity (R6).

As mentioned briefly in 4.2.1.3, policymakers stressed these pilots may be too late for developing the NSP that should be implemented in 2023. However, this does not mean that the pilots cannot contribute to the CAP at all. R8 expressed that the umbrella project will target the mid-term review in 2025, "*The first big moment when there is something to be done about the system"* (R8). However, R8 adds that it is actually not possible to change 'the system' (meaning the EU legislature) at this point, but that it is possible to alter the national implementation, namely the NSP. Additionally, R8 emphasizes that in the policy trajectory from the NSP, the ministry has to report to the EU annually. Strategically, this could also be a

moment to report to authorities, although the chances to affect policy are deemed larger in the mid-term review (R8).

Along the same line, R6 stressed the importance of the political room to change, as it is crucial to take into consideration that the results from the pilots come at a time that one can change the policy. Otherwise, R6 argues*, "most people forgot about the result of a pilot when they actually need it"*. Since many pilots have a political character, it is crucial to take into consideration whether there is political room to change policy, especially as large policy changes take two or three years (R6). In this case, the pilots are planned in a way that they can contribute to the mid-term evaluation of the CAP, which prevents the rules from (unintentionally) being cast aside at times when you need them, which often happens with pilots (R6).

4.3.3 Other Policies

Even though the CAP seems to play a large role in the pilots, their contribution to national policy is not limited to it. Looking at the project plans, the elaboration is less present than on the CAP regulations, although some policies are mentioned (D1, D2, D3, D4, D5). Some examples are the organic legislature (pilot 3) and the nitrate framework (pilot 2 and 5). Nonetheless, R8 has stressed that based on the themes from the umbrella project, policies will be addressed: "*In fact, these issues center around all agricultural policies. So it is relevant for a lot of things*". Additionally, policymakers explained that they will explore the overlap with policies with an open view. R6 explained that he had not looked into these pilots yet, but that he plans to explore whether the pilots can give him any insights into what certain policy is working on. Likewise, R7 expressed that when there is overlap with policies, this would be taken into consideration.

4.3.4 Sub conclusion

How are the results of the pilots translated to national policy?

The actors involved at the initiative level mainly aim to translate results to policy by means of the umbrella project. The learning processes described in 4.2.2.1 facilitate this process, in which results are aggregated thematically and intermediator actors inform actors at the pilot

level about policies. Nonetheless, the heterogeneity and the number of pilots constitute a challenge here: As policymakers lack sufficient time to look at the pilot results, it could be questioned to what extent these can be taken into consideration in policy development. However, the umbrella project could tackle this challenge, as it develops national reports.

Initially, the pilots contribute to the CAP, as it is mentioned in all project plans and interviews with policymakers and the intermediator. This is fostered by the evaluation structure, in which the pilots received subsidies based on practices that are coherent with (potential) eco-activities. Additionally, the pilots are planned in such a manner that they are able to contribute to the mid-term review of the NSP from the CAP. Nevertheless, apart from pilot 3, the CAP is not the main innovation. For the pilots focused on regional or farm-based nutrient flows, the CAP eco-activities are part of the innovation, but do not necessarily cover the organizational practices in the pilots. Although pilot 5 attempts to change this by looking at whether cooperation can be rewarded through the CAP, R6 emphasized that the CAP may not be the appropriate policy instrument to cover such activities.

Although CAP policy is most apparent in the processes, there is room to contribute to other policies as well, as the umbrella project will facilitate the contribution to policy thematically and the policymakers are open to using the results for other policy fields.

5.1 Discussion

5.1.1 Small Wins for CA

In the thesis at hand, I applied the small-wins framework to assess whether the pilots could lead to transformative change. Based on the analysis it could be argued that a broad variety of small wins could be developed within the CAP pilots on CA. Whereas three pilots (1, 2, and 5) focus on different practical innovations to establish loops on the farmland, the other two (3 and 4) emphasize policy and governance change.

The pilots that focus on establishing loops on the farmland use technologies and new organizational forms that enable the regional (regular) farm sector to shift to CA, which they do by means of collaboration and technologies to organize nutritional loops. For example, pilot 1 develops a new farm organization in which a dairy farmer and cattle farmer

collaborate, which enables them to reuse manure for cultivation and grow their own cattle feed. These pilots are likely to develop small wins for CA as they touch upon social changes (new organizational forms) and technological changes (e.g. re-using manure). In fact, this seems to be necessary in order to form nutritional loops: The closing of nutrition loops seems to require a new organization form, because if only one technology is applied, it becomes difficult to re-use the output: The output has to go somewhere too in order to close a loop, which in the pilots that focus on regular agriculture requires collaboration between farmers and local institutions (such as governments and nature protection authorities). This is why in pilot 2, the organizational principles could be further elaborated, in order to assure that when their technological trials have positive outcomes, those technologies can be implemented in an organizational form that fosters the closing of loops.

For the pilots that aim to contribute to CA through policy and governance change, the contribution to the transition to CA has a different nature. The instruments they develop focus on supporting and rewarding farmers that work according to CA principles. For pilot 3, which focuses on the organic sector, including this sector in the CAP regulations contributes to CA as it supports a sector that already works with closed loops. For pilot 2, KPIs could support farmers that work with closed nutritional loops, but it could also be that they do not. However, it could support the transition as it emphasizes increasing biodiversity, which is one of the major challenges for the agricultural sector.

Coming back to the argument from Koppelmaki et al. (2021), the pilot plans reveal that, indeed, CA may be organized on various scales and levels. The farmland-based pilots (1, 2, and 5) have different scales at which they organize nutritional loops (regionally or farm-based), which suggests that, indeed, CA could be organized depending on the way farms are nested. Moreover, pilots 3 and 4 suggest that governance towards CA may be executed from multiple levels. First, KPIs are designed to be used by various private and public actors. Second, pilot 3 emphasizes the CAP and organic legislature, to explore whether supporting the organic sector can facilitate the transition to CA. However, drawing any conclusions regarding the extent to which these actually contribute to the transition to CA requires further investigation.

5.1.2 Embedding Small Wins

Embedding in the pilot-scheme

The pre-evaluation process is key for embedding the initiatives in the pilot scheme. To embed their planned innovations in the pilot policy so that they can make use of the subsidy, the initiatives must meet a list of requirements, deriving from EU- and national objectives, that are evaluated by the ministry and the RVO. The actors involved at the initiative level met those requirements by collaborating with specialists or actors that are more knowledgeable. Therewith, the innovation process is designed in a way that meets the requirements that are determined by the government. In fact, these conditions ensure that the results of the pilots get embedded in different policies and projects. The subsidy was granted based on a list of required activities consisting of learning practices and eco-activities from the CAP. First, national coordination was required by the government, which led to the umbrella project, an intermediating project that fosters shared learning and contribution to policy. Second, it led to local embedding, by means of the learning process in collaboration with farmers, knowledge institutes, and local authorities.

While these requirements ensure that objectives from the ministry are met, they simultaneously enable the actors that initiate the pilots to carry out the innovations and the learning processes to share their results, as these are paid with the subsidy. As such, requirements from the ministry needed for embedding initiatives in the pilot scheme ensure that initiatives organize these learning processes. Hence, there seems to be a synergy between policymakers who ensure that their goals are achieved, and initiatives that, by fulfilling those requirements, gain the financial resources to initiate learning processes.

Embedding oriented innovation

The evaluation structure enables pilots to focus on embedding their results locally, which could be seen as '*embedded-oriented innovation'*; Innovating in such a manner that the results contribute to the institutional context (Van den Broek et al., 2020). It activates initiatives to innovate in such a manner that firstly, their results get embedded locally, as it enables local learning processes, and secondly, that the results are used for policy. Thus, as the amount of subsidy granted is subject to required learning activities, this may lead to embedded-oriented innovation, as it forces actors involved to spend time on making their innovations feasible in local and policy contexts.

However, the question remains whether these innovations will be embedded to the extent that the learning processes persist and lead to continuous learning. In order to become small wins, it is crucial that the pilot goes beyond the pilot stage and is perceived as a successful step (Termeer & Metze, 2019). As small wins should be embedded into continuous learning mechanisms (Termeer & Dewulf, 2019; Termeer & Metze, 2019), pilots can only become small wins when they are embedded so that these learning processes continue after the pilot phase. Currently, the learning processes are paid for from the pilot grants, which is a finite amount.

Nonetheless, learning processes with farmers, local authorities, and knowledge institutes may support that the small wins maintain after the pilots. First, local authorities could use the results for policy change that facilitates further existence of the innovations by allocating financial resources, which could make those a small win, or develop policy instruments to accumulate those small wins. Second, farmers give insights into the problems that arise when adapting the innovations beyond the scope of the pilot, which enables actors at the pilot level to investigate what is required to embed the innovations in farm contexts beyond the safe space of the pilot. Third, the knowledge institutes can monitor challenges to overcome barriers. For example, business analysis that is conducted in several pilots, can give insights into how financial barriers that have to be overcome, will remain to persist after the pilot phase. Additionally, the knowledge retrieved from the pilots can become part of scientific debate or could inspire students from applied education to initiate similar activities in their work field.

The difference with the small-wins approach

However, it is important to note that there are several features in the pre-evaluation that are at odds with the small-wins approach. The small-wins approach prescribes a humble approach from policy-makers, in which they look at what is out there, and organize mechanisms to accumulate small wins (Termeer & Dewulf, 2019; Termeer & Metze, 2019). The pre-evaluation structure of this pilot scheme requires knowledge and skills to write a project plan that will be approved by policymakers and legal experts. When initiatives do so, it can influence their innovation plan in a way that facilitates local embedding, but it also guided

practices in the innovations extensively, which is the opposite of what is advocated in the small-wins literature (Termeer & Metze, 2019).

Nonetheless, although the government steered the innovation process, the small-wins evaluation in this thesis reveals that embedding-oriented innovation does not have to lead to shallow changes: The pilots actively overcome barriers, try out radical new practices, and touch upon various second-order changes. Thus, although the pre-evaluation structure clashes with the small-wins perspective, this case study suggests that if the government takes on a somewhat guiding role, this does not necessarily lead to shallow experimentation.

5.1.3 Small wins and Scaling

Innovations from the pilots are scaled by means of the umbrella project, in which it is explored which policy interfaces exist. In this process, the intermediaries and actors involved in the pilots explore related policies and aggregate results to develop recommendations. This reveals some dependency on available policy instruments as the umbrella project is used to give feedback on policy and does not create new policies. Whether innovations, that may become small wins, will be used for policy innovation, depends on the extent to which they can be used to reflect on existing policy. In addition, it depends on if they are designed in a way that they interrelate with policy, and whether the actors involved notice these policy interfaces.

Scaling farmland innovations

Especially for the pilots executed on the farmland, the scaling process requires some work, as their main purpose is not a policy change, but to establish new agricultural organizational forms. Currently, the translation to policy focuses on including circular practices (that constitute those organizational forms) in possible policy instruments, that can support those practices. The data suggests that, hitherto, this is mainly through the CAP, as the innovations are constituted by eco-activities that are going to be rewarded with the CAP. Hence, the transformation from pilot results to national governance mainly consists of finding out how the innovations could be rewarded by the government.

Scaling policy-related innovations

For the pilots that focus on policy innovation, the scaling process is more evident, as these

already focus on an existing policy instrument that has to be changed: If their innovations succeed, these are already policy changes. In fact, they do not need to make the translation from small-scale, case-specific information to broadly applicable policy because they are already looking at it from this perspective. This reveals that pilots that mainly focus on policy change, do not have to do extra work, while pilots that produce a new farming system do. In line with the farmland innovations, these pilots focus on rewarding farmers that work according to CA principles (organic farmers by means of the CAP) or based on their contribution to biodiversity (KPIs, used for the CAP or other policies).

Scaling by means of the CAP

It can be questioned whether the national implementation of the CAP is suitable for supporting closing loops in a way that leads to transformative change. The eco-schemes are attributed to farms, based on the number of hectares used for certain eco-activities, which makes it a difficult instrument to stimulate new, organizational forms that require social changes beyond the land of the farms. Furthermore, the eco-activities are mainly technological, which means they may also stimulate non-circular farms that conduct these activities. Even though they may reduce emissions and keep some nutrients on the farmland, they do not necessarily stimulate the social components required for closing loops. As the small-wins evaluation reveals, the combination of technological and social change seemed critical for establishing the circular flows in a manner that contributes to transformative change. Therefore, this research suggests that the CAP may support farms that organize according to CA, but they may also support farmers that do not do this, or marginally.

Thus, in line with doubts regarding whether the governmental instruments will be able to govern towards circularity (Termeer & Metze, 2019), it could be questioned whether the national implementation of this central policy, will facilitate steps towards circularity that lead to the transition to CA. Subsequently, especially as those schemes are supplementary to the basic income grant, it would be worth investigating to what extent the schemes lead to an increase in circular activities.

Role of intermediaries and policymakers

Even though the evaluation processes ensure that certain learning processes, that could foster local embedding, are set in motion, it does not guarantee the embedding of small wins into

institutions that should be applicable on a national scale. The innovations that could become small wins have policy interfaces, meaning that the policies such as the CAP could financially support the persistence innovations (which is needed to make them small wins) or may lead to an accumulation of small wins, but it remains an empirical question whether this will happen.

Availability of suitable policy instruments and the capability of intermediaries and policymakers to link these innovations to policy developments and debates at the right time are key in this process, as they foster learning about policy and the integration of pilot results in the policy process. From this angle, the lack of time from policymakers, caused by limited resources and reinforced by the elaborate account-holding from the EU level, poses a risk for the CAP pilots. As a result, the umbrella project becomes even more important, as it fosters the aggregation of results from a large number of pilots to make joint policy recommendations that are more comprehensible than when this would be conducted per pilot.

5.1.4 Institutional work and Broadening, Deepening, and Upscaling

Whilst it is too early to identify all mechanisms that broaden, deepen or upscale the small wins in the pilots, some potential processes can be identified. Local embedding of the results, through the collaboration with local authorities, farmers, knowledge institutes, and other (pilot)projects could lead to the *broadening* of the developed small win, as the results from the pilots reach further than the pilot space. Likewise, the scaling by means of the umbrella project could lead to broadening, as it uses the potential small wins for policy development. Moreover, the upscaling of small wins, which Termeer & Metze (2019) describe as 'becoming larger or more numerous' could be facilitated by embedding innovations in practical knowledge institutes, as these could inspire young farmers to conduct similar approaches. Similarly, the use of the network from the initiatives may lead to becoming more numerous, as the initiatives can reach out through their own communication channels to further spread their small wins. Furthermore, the pilots focus on the national implementation of the CAP, a central subsidy from the EU that in the new version, is going to reward farm practices that could contribute to environmental challenges. This case study suggests that it may contribute to small wins becoming more numerous but it only touches upon the technological parts of the innovations, which may lead to an accumulation of shallow changes. Hence, embedding and scaling of the pilots may lead to small wins becoming more

numerous. Finally, no processes can be recognized that lead to the deepening of the small wins. Instead, *feasibility* was a criterion in the pilot scheme, which could have led to less radical innovations.

5.1.5 The Pilot Paradox

In this case study, the embedding-oriented innovation, deployed through subsidy requirements from the ministry, led to an umbrella project that breaches the gap between policymakers and pilots. Although it remains an empirical question whether actors at the pilot level really change their innovations so that they can be scaled, this joint effort to aggregate results in relation to the policy constitutes an opportunity for overcoming the pilot paradox (Metze, 2021). However, while these requirements force actors to engage with policy development that may touch upon their innovations, in the end, this is a vulnerable and political process, in which both intermediaries and policymakers play a determining role: Intermediaries are in charge of facilitating the learning about policy, and policymakers are responsible for including the results from the project in policy in a meaningful way. In doing so, it is important that the results are used at a moment in which there is political space to change policy. First, for dealing with the pilot paradox, timing is pivotal, as the pilot must tap into a moment that in the policy procedures, making changes is possible. Second, since changes that transformative pilots suggest are political, there must be political momentum to change these policies as well. From that point of view, even when those at the pilot-level focus on the embedding into policy from the outset, which was suggested to overcome the pilot paradox (Van Buuren et al., 2016; Van den Broek, 2020; Pel et al., 2020), it is still possible that policies do not change after all.

5.2 Conclusions

How are small wins embedded and scaled within the circular agriculture CAP pilots?

The findings of this research suggest that the observed practices that facilitate embedding and scaling could support that the innovations from the CA-pilots become small wins, as for becoming small wins, it is crucial that innovations persist beyond the pilot phase which in this case means they should be able to continue without the financial support from the pilot-scheme. Embedding of initiatives in the pilot policy required planning and presenting the

intended innovation process in such a way that they corresponded to the government's objectives and subsidy requirements, a process which resulted in the embedding of innovations into local institutions, that could subsequently support further existence of the pilots' innovations, and thus lead to the development of small wins.

In addition, the embedding in the pilot scheme enabled the umbrella project, which facilitates scaling processes. The scaling processes so far focus on the CAP, which is due to the fact that subsidy was granted based on potential eco-activities from the national implementation of the CAP. Given that the innovations consist partly of potential eco-activities, using these subsidies or changing them so they can use them, may result in them being able to continue. However, the question remains if it could also accumulate small wins.

Moreover, the observed challenges in the pilot trajectory also reveal that this process is fragile, as the extent to which national policy processes can be influenced depends on the time and knowledge of actors operating at the pilot and policy level and the availability of suitable policy instruments. Given the doubts about the role of the state in governing circularity, I suggest further investigation of suitable instruments and possible synergies between local governance and national policy. The CAP eco-schemes do not seem well suited for stimulating social change to close loops, but local collaborative learning processes could play a stimulating role here.

5.3 Recommendations

Further research

Given the exploratory nature of this research, my first recommendation for further research is to investigate this case further. This way, conclusions can be drawn in relation to the extent to which the pilots are used for policy development. As such, it could be explored whether the pre-evaluation from the ministry indeed leads to further embedding-oriented innovation and whether this influences the scaling to national policy. In addition, as this research suggests that the institutional work, conducted by means of the umbrella project, is vulnerable and subject to policy and political developments, it would be interesting to investigate the political dimension of the process. Methodologically, observation techniques could be included, as what people say does not always correspond to what they do.

As previous research stated that often state policies obstruct the transition to circularity (Campbell-Johnston et. al., 2019; Kircherr et al., 2018) I suggest that, for the transition to CA in particular, it would be interesting to investigate how the national implementation of the CAP influences the degree of circular practices. Based on the findings of this study it is not possible to say whether they will, and as the government wants to transition to CA in 2030 (Ministry of Agriculture, Nature and Food Quality, 2019), it is relevant to investigate this further. Especially since the eco-schemes are complementary to the basic income grant, the question remains whether it will stimulate farmers to start working according to CA principles. Therefore, I suggest more elaboration on the NSP that investigates the plans for pillars 1 and 2, to explore how the government aims to foster the proposed transition.

To finalize, in this research I used part of the small wins evaluation framework to inquire whether the government facilitates processes that develop or accumulate small wins. However, although the exploration of institutional work has resulted in insights into how innovations can become small wins so that they can contribute to continuous change, this thesis did not include all parts of the small wins evaluation framework (Termeer & Dewulf, 2019; Temeer & Metze, 2019). In such, an elaborate overview of mechanisms that lead to broadening, deepening, and upscaling is described. It would be interesting to explore this by analyzing these mechanisms at a later stage of the pilots to elaborate further on the pilots' potential for transformative change.

Executive recommendations

First, for pilot projects that focus on closing loops locally, it is key to explore how they can maintain the innovations and learning processes after the pilot trajectory or beyond the boundaries of the pilot (regionally or nationally). Thinking about continuation and dissemination processes during the innovation process may increase the chances for further uptake. In addition, for both processes, there may be opportunities in the present cooperation with local authorities, farmers, knowledge institutes, schools, and other projects. Moreover, the umbrella project could facilitate learning in relation to how innovations can persist and spread as well as how policy could play a role in this.

Second, to enhance learning about how the innovations can persist and have effects beyond the boundaries of the pilots, experts from the umbrella project can stimulate staff at the pilot level during national or thematic meetings. Starting conversations with and between actors at the pilot level may accelerate learning about these. This is particularly important in pilots where policy change is not the main goal, as its survival is less evident than in policy-oriented pilots.

Third, while the pilot trajectory coincides with the mid-term evaluation of the implementation of the new CAP, it was indicated in the interviews that the pilots can also be expected to be used for other policy issues. Therefore, it is important to think about when there is (political) room for change in the development of those policies so that results are not forgotten when they are needed for policy change.

Fourth, I would also advise the policymakers involved in the implementation of the CAP to investigate further (or have others investigate) the extent to which the national implementation contributes to the Dutch ambition to switch to circular agriculture in 2030. Given the collaboration with farmers in the pilots, the pilots may give insights into this.

Finally, from a small-wins perspective (Termeer & Dewulf, 2019; Termeer & Metze), instead of thinking about how pilots can contribute to policy, it would be interesting for policymakers to look at how policy or governance can facilitate that pilots, which make steps in line with the envisioned ambitions, do not remain under the radar and can accumulate.

References

Avelino, F., Dumitru, A., Cipolla, C., Kunze, I., & Wittmayer, J. (2020). Translocal empowerment in transformative social innovation networks. *European Planning Studies*, *28*(5), 955-977. https://doi.org/10.1080/09654313.2019.1578339

Boréus, K., & Bergström, G. (2017). *Analyzing text and discourse: Eight approaches for the social sciences.* Sage.

Van den Broek, J., & Elzakker, I., Maas T., en Deuten, J. (2020). *Voorbij lokaal enthousiasme: Lessen voor de opschaling van living labs.* Rathenau Instituut. https://www.rathenau.nl/nl/vitale-kennisecosystemen/voorbij-lokaal-enthousiasme

Campbell-Johnston, K., ten Cate, J., Elfering-Petrovic, M., & Gupta, J. (2019). City-level circular transitions: Barriers and limits in Amsterdam, Utrecht and The Hague. *Journal of cleaner production*, *235*, 1232-1239. https://doi.org/10.1016/j.jclepro.2019.06.106

Creswell, J.W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Merrill Prentice Hall.

Dagevos, H., & Lauwere, C. D. (2021). Circular Business Models and Circular Agriculture: Perceptions and Practices of Dutch Farmers. *Sustainability*, *13*(3), 1282. https://doi.org/10.3390/su13031282

De Boer, I. J., & van Ittersum, M. K. (2018). *Circularity in agricultural production*. Wageningen University & Research. Retrieved April 7, 2022, from https://edepot.wur.nl/470625.

European Commission. (2018, June 1). *52018PC0392*. EU-Lex Access to the European Union Law. Retrieved March 8, 2022, from https://eur-lex.europa.eu/legal-content/NL/TXT/PDF/?uri=CELEX:52018PC0392&from=NL

European Commission. (2022, February). *Factsheet – a greener and fairer CAP*. https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/cap-glance_en

Giddens, A. (2013). *The Constitution of Society* (1ste editie). Polity.

Jason, L. A. (2012). Small wins matter in advocacy movements: Giving voice to patients. *American Journal of Community Psychology,* 49, 307–316. DOI10.1007/s10464-011-9457-7

Jurgilevich, A., Birge, T., Kentala-Lehtonen, J., Korhonen-Kurki, K., Pietikäinen, J., Saikku, L., & Schösler, H. (2016). Transition towards circular economy in the food system. *Sustainability*, *8*(1), 69. **https://doi.org/10.3390/su8010069**

Jolly, S., Raven, R., & Romijn, H. (2012). Upscaling of business model experiments in off grid PV solar energy in India. *Sustainability Science*, *7*(2), 199-212. DOI 10.1007/s11625-012-0163-7

Lawrence, T., Suddaby, R., & Leca, B. (2011). Institutional work: Refocusing institutional studies of organization. *Journal of management inquiry*, *20*(1), 52-58. https://doi.org/10.1177%2F1056492610387222

Loorbach, D., Wittmayer, J., Avelino, F., von Wirth, T., & Frantzeskaki, N. (2020). Transformative innovation and translocal diffusion. *Environmental Innovation and Societal Transitions*, *35*, 251-260. https://doi.org/10.1016/j.eist.2020.01.009

Lott, B., & Webster, K. (2006). Carry the banner where it can be seen: Small wins for social justice. Social Justice Research, 19(1). https://doi.org/10.1007/s11211-006 0003-y

Metze, T. (2021, april). *VerDuS Essay: Paradoxaal sturen: conflict en democratie in duurzame stedelijke regio's*. VerDuS. https://www.verdus.nl/verdus-essay-paradoxaal sturen-conflict-en-democratie-in-duurzame-stedelijke-regios/

Ministry of Agriculture, Nature and Food. (2019, June). *Realisatieplan visie LNV: Op weg met nieuw perspectief*. Author. Retrieved from https://www.rijksoverheid.nl/ministeries/ministerie-van-landbouw-natuur-en voedselkwaliteit/documenten/publicaties/2019/06/17/realisatieplan-visie-lnv-op-weg met-nieuw-perspectief

Minister van Agriculture, Nature and Food Quality. (2021, February 16). *Pilots toekomstbestendige landbouw nieuw GLB*. Staatscourant 2021, 7759. Retrieved March 8, 2022, from https://zoek.officielebekendmakingen.nl/stcrt-2021-7759.html

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health services research*, *34*(5 Pt 2), 1189.

Planbureau voor de Leefomgeving. (2020, September). *Balans van de Leefomgeving 2020* (4165). Author. Retrieved from https://www.pbl.nl/publicaties/balans van de leefomgeving-2020

Pel, B., Wittmayer, J., Dorland, J., & Søgaard Jørgensen, M. (2020). Unpacking the social innovation ecosystem: an empirically grounded typology of empowering network constellations. *Innovation: The European Journal of Social Science Research*, *33*(3), 311-336. https://doi.org/10.1080/13511610.2019.1705147

Reay, T., Golden-Biddle, K., & Germann, K. (2006). Legitimizing a new role: Small wins and microprocesses of change. Academy of Management Journal, 49(5), 977–998. https://www.jstor.org/stable/20159812

Rijksoverheid. (2021, September 27). *Potentiële ecoregelingen*. https://www.rijksoverheid.nl/documenten/publicaties/2021/09/27/potentiele-ecoregelingen

Rijksoverheid. (2022, November). *Nederlands Nationaal Strategisch Plan GLB 2023–2027* (2023NL06AFSP001). https://www.toekomstglb.nl/het-nsp-in-opbouw/documenten/publicaties/2022/02/11/glb-nationaal-strategisch-plan

RIVM. (2019). *Stikstof*. Retrieved 25 April 2021, from https://www.rivm.nl/stikstof

Rog, D. J. (2015). Infusing theory into practice, practice into theory: Small wins and big gains for evaluation. *American Journal of Evaluation*, 36(2). doi:10.1177/1098214015573068

Sanders, M. E., Sanders, M. E., Henkens, R. J. H. G., Slijkerman, D. M. E., Henkens, R. J. H. G., & Slijkerman, D. M. E. (2019). *Convention on biological diversity : sixth national report of the kingdom of the netherlands* (Ser. Wot technical report, 156). Statutory Research Tasks Unit for Nature & the Environment. Retrieved April 7, 2022, from https://doi.org/10.18174/499170.

Sengers, F., Wieczorek, A. J., & Raven, R. (2019). Experimenting for sustainability transitions: A systematic literature review. *Technological Forecasting and Social Change*, *145*, 153-164. https://doi.org/10.1016/j.techfore.2016.08.031

Seyfang, G., & Smith, A. (2007). Grassroots innovations for sustainable development: Towards a new research and policy agenda. Environmental politics, 16(4), 584-603. https://doi.org/10.1080/09644010701419121

Karvonen, A., & Van Heur, B. (2014). Urban laboratories: Experiments in reworking cities. *International Journal of Urban and Regional Research*, *38*(2), 379-392. https://doi.org/10.1111/1468-2427.12075

Kirchherr, J., Piscicelli, L., Bour, R., Kostense-Smit, E., Muller, J., Huibrechtse, Truijens, A., & Hekkert, M. (2018). Barriers to the circular economy: evidence from the European Union (EU). *Ecological Economics*, *150*, 264-272. https://doi.org/10.1016/j.ecolecon.2018.04.028

Koppelmäki, K., Helenius, J., & Schulte, R. P. (2021). Nested circularity in food systems: A Nordic case study on connecting biomass, nutrient and energy flows from field scale to continent. *Resources, Conservation and Recycling*, *164*, 105218. https://doi.org/10.1016/j.resconrec.2020.105218

Korhonen, J., Honkasalo, A., & Seppälä, J. (2018). Circular economy: the conceptand its limitations. *Ecological economics*, *143*, 37-46. https://doi.org/10.1016/j.ecolecon.2017.06.041

Termeer, C. J., & Dewulf, A. (2019). A small wins framework to overcome the evaluation paradox of governing wicked problems. *Policy and Society*, *38*(2), 298-314. https://doi.org/10.1080/14494035.2018.1497933

Termeer, C. J. A. M., & Metze, T. A. P. (2019). More than peanuts: Transformation towards a circular economy through a small-wins governance framework. *Journal of Cleaner Production*, *240*, 118272. https://doi.org/10.1016/j.jclepro.2019.118272

Turnheim, B., Asquith, M., & Geels, F. W. (2020). Making sustainability transitions research policy relevant: Challenges at the science-policy interface. *Environmental Innovation and Societal Transitions*, *34*, 116-120. https://doi.org/10.1016/j.eist.2019.12.009

Turnheim, B., Kivimaa, P., & Berkhout, F. (Eds.). 2018. Innovating Climate Governance: Moving Beyond Experiments. Cambridge: Cambridge University Press.

Van Buuren, A., & Loorbach, D. (2009). Policy innovation in isolation? Conditions for policy renewal by transition arenas and pilot projects. *Public Management Review*, *11*(3), 375-392. https://doi.org/10.1080/14719030902798289

Van Buuren, A., van Popering-Verkerk, J., Ellen, G., van Leeuwen, C., & Breman, B. 2018. The Pilot Paradox. In B. Turnheim, P. Kivimaa, & F. Berkhout (Eds.), *Innovating Climate Governance: Moving Beyond Experiments*: 145-165. Cambridge University Press.

Van Buuren, A., Vreugdenhil, H., Verkerk, J. V. P., & Ellen, G. J. (2016). Beyond the pilot paradox *How the success conditions of pilots also hinder their up-scaling in climate governance.* Paper for the INOGOV workshop : Beyond experiments: Understanding how climate governance innovations become embedded 25th–27th April. https://nws.eurocities.eu/MediaShell/media/Paper_Pilot_Paradox.pdf

Van den Bosch, S.J.M, & Rotmans, J. (2008). *Deepening, Broadening and Scaling up: a Framework for Steering Transition Experiments.*. Knowledge Centre for Sustainable System Innovations and Transitions (KCT). Retrieved from http://hdl.handle.net/1765/15812

Van Veldhoven, S. (2019, April 9). Emissies onder het NEC-programma in 2017 [Letter of government]. Retrieved from https://www.rijksoverheid.nl/documenten/kamerstukken/2019/04/09/emissies onder-het-nec-programma-in-2017

Von Wirth, T., Fuenfschilling, L., Frantzeskaki, N., & Coenen, L. (2019). Impacts of urban living labs on sustainability transitions: Mechanisms and strategies for systemic change through experimentation. *European Planning Studies*, *27*(2), 229-257. https://doi.org/10.1080/09654313.2018.1504895

VVD, D66, CDA, & ChristenUnie. (2021, December). *Omzien naar elkaar, vooruitkijken naar de toekomst. Coalitieakkoord 2021 – 2025*. https://www.kabinetsformatie2021.nl/documenten/publicaties/2021/12/15/coalitieakkoord-omzien-naar-elkaar-vooruitkijken-naar-de-toekomst

Weick, K. E. (1984). Small wins: Redefining the scale of social problems. *American Psychologist*, *39*(1), 40. https://doi.org/10.1037/0003-066X.39.1.40

Weick, K. E., & Quinn, R. E. (1999). Organizational change and development. *Annual review of psychology*, *50*(1), 361-386. https://doi.org/10.1146/annurev.psych.50.1.361

Zietsma, C., & Lawrence, T. B. (2010). Institutional work in the transformation of an organizational field: The interplay of boundary work and practice work. *Administrative science quarterly*, *55*(2), 189-221. https://doi.org/10.2189/asqu.2010.55.2.189

Appendixes

Appendix 1: Interview guide pilot employees

Introducerend	1.1 Vertel eens hoe jullie zijn begonnen met ……?
	1.2 Doorvragen: Hoeveel mensen werken eraan mee?/ Wat is jullie doel? /Wat inspireerde jullie om mee te doen aan de pilot?
Small wins	2.1 Opening: Hoe trachten jullie bij te dragen aan kringlooplandbouw?
	2.2 Hoe doen jullie dit? (doorvragen hoe het precies wordt uitgevoerd op praktisch en technisch niveau)
Concrete outcomes	2.3 Wat zijn de uitkomsten daarvan tot nu toe?
Second order change *Societal/technological change*	2.4.1. Hoe verschilt dit met reguliere landbouwuitvoering? 2.4.2. Op welke manier verschilt het van lineaire vormen van landbouw? 2.4.3. Hoe kan dit bijdragen aan een ander soort bedrijfsvoering?
Barrieres	2.5 Zijn jullie moeilijkheden die jullie tegenkomen bij het maken van deze verandering?
Leerproces	3.1 Hoe kwamen jullie bij het idee mee te doen aan de de GLB pilots kringlooplandbouw?
	3.2 Kun je wat vertellen over het aanmeldproces? (vragen of aanmeldformulieren etc. gedeeld kunnen worden)
	3.3 Hoe is het contact met het ministerie georganiseerd?
Kennis delen /evaluatie	3.4 Hebben jullie ook contact met andere initiatieven?
	3.5 Hoe delen jullie informatie met het ministerie?
	3.6 Aan de hand van eerdergenoemde innovaties doorvragen hoe de leerlijn is uitgestippeld - Hoe kan dit op Nederlands gebied worden uitgebreid

	- Hoe deel je het met het ministerie - Wat doet het ministerie ermee - gebruiken jullie en bepaald programma
Vertaalproces	4.1 Hoe konden jullie inbreng geven voor nieuw beleid?
	4.2 Wat voor inbreng hebben jullie tot nu toe gegeven?
	4.3 Wat voor inbreng hopen jullie nog te geven?
	4.4 Heb je nog andere ideeën over jullie ideeën in NL worden verspreid?
	4.5 voorzien jullie problems bij het inzetten van de eco-regelingen? + het verspreiden van jullie ideeen
Niet vergeten	- Nog eventueel anderen van het initiatief? - Aanvullende bestanden - Eventuele andere initiatieven?

Appendix 2: Interview intermediator

Introducerend	1.1 Wat is uw functie binnen het koepeltraject?
	1.2 Wat is het doel van het koepeltraject?
	1.3 Waarom is het koepeltraject geïnitieerd?
2. Vertaling beleid	2.1 Opening: Aan welk beleid tracht het koepeltraject bij te dragen?
	2.2 Hoe dragen de pilots bij aan vormgeving van de eco-regelingen? ➔ 2.5
	2.4 Wat is het doel van de eco-regelingen? Hoe dragen deze bij aan kringlooplandbouw?
	2.6 Hoe dragen de pilots bij aan het anlb? -> Daarna 2.5
	2.7 Kunnen de pilots nog op andere manieren bijdragen aan het NSP? -> Daarna 2.5
	2.8 Kunnen de pilots nog op andere manieren bijdragen aan nationaal beleid? -> Daarna 2.5
	2.9 Zijn er nog andere manieren om de kennis van pilots te verpreiden/ delen?
	2.5 doorvragen: **Op wat voor manier trachten jullie kringlooplandbouw te bewerkstelligen via de regelingen?** - Hoe worden de bevindingen van de pilots gebruikt binnen deze regeling/aanpak/dit proces? - Wanneer zijn bevindingen zinvol om te gebruiken? - Aanvullende documenten tov hoe de regelingen eruit gaan zien?

3. Evaluatie/leerproces	3.1 Hoe is het contact met de pilots georganiseerd?
	3.2 Maken jullie gebruik van de tussenrapportage + eindrapportage?
	3.3 Op welke manier maken jullie binnen het koepeltraject gebruik van de kennis vanuit de pilots? ➔ Doorvragen hoe dit precies gebeurt ➔ Kijken jullie ook naar de nieuwe praktijkoplossingen die ingebracht worden?
	3.5 Hoe gaan jullie om met de verschillen binnen de pilots?
	3.6 Veel pilots richten zich op nieuwe (ICT) technologieën. Bijv KPI's. Doen jullie hier ook iets mee binnen het koepeltraject?
	3.7 Welke rol spelen wetenschappelijke instituten ten opzichte van kennisdeling?
Kennisdeling	3.8 Hoe is het contact met het ministerie georganiseerd?
	3.9 op welke manier geven jullie via het koepeltraject terugkoppeling aan het ministerie?
	3.10 Zijn er naast de beïnvloeding van het beleid, nog andere manieren waarop jullie de bevindingen van de pilots proberen te verspreiden?

Niet vergeten	- Nog eventueel anderen beleidsmakers die ik kan spreken? - Aanvullende bestanden?

Appendix 3: interviewguide policymaker 1

Introducerend	1.1 Wat is uw functie binnen de uitvoering van de pilots?
	1.2 Hoe wordt kringlooplandbouw gestimuleerd door de pilots?
2. Vertaling beleid	2.1 Opening: Kunt u vertellen welke rol de pilots spelen bij het vormgeven van het nieuwe NSP?
	2.2 Hoe dragen de pilots bij aan vormgeving van de eco-regelingen? doorvragen hoe ze tot de nuttige kennis komen. Hoe **doen** ze het
	2.3 Wat zijn de uitkomsten daarvan tot nu toe?
	2.4 Wat is het doel van de eco-regelingen? Hoe dragen deze bij aan kringlooplandbouw?
	2.5 doorvragen: **- Op wat voor manier trachten jullie kringlooplandbouw te bewerkstelligen via de regelingen?** - Hoe worden de bevindingen van de pilots gebruikt binnen de pilots? - Wanneer zijn bevindingen zinvol om te gebruiken? - Aanvullende documenten tov hoe de regelingen eruit gaan zien?
	2.6 Hoe dragen de pilots bij aan het anlb? -> Daarna 2.5
	2.7 Kunnen de pilots nog op andere manieren bijdragen aan het NSP? -> Daarna 2.5
	2.8 Kunnen de pilots nog op andere manieren bijdragen aan nationaal beleid? -> Daarna 2.5
	2.9 Zijn er nog andere manieren om de kennis van pilots te delen?

3. Evaluatie/leerproces	3.1 Voor de toekenning van de pilots wordt een analyse gemaakt van innovatie, efficiëntie, haalbaarheid en effectiviteit. Op basis waarvan worden deze punten toegekend? *-> Indien hij dit niet weet, vragen of er iemand is die dit wel weet die ik misschien kan interviewen.*
	3.2 Hoe wordt de voortgang van de pilots gemonitord?
	3.3 Hoe is het contact met het de initiatieven georganiseerd?
	3.4 Waarvoor dient de tussenrapportage+eindrapportage?
	3.5 Welke informatie van de rapportages wordt gebruikt voor het maken van nieuw beleid?
	3.6 Wat is de rol van het EIP-netwerk voor kennisdeling?
	3.7 Welke rol spelen wetenschappelijke instituten ten opzichte van kennisdeling?
	3.8 Welke rol speelt boerennatuur voor het delen van kennis?
	3.9 waarvoor dient het koepelproject?
Niet vergeten	- Nog eventueel anderen beleidsmakers die ik kan spreken? - Aanvullende bestanden?

Appendix 4: Interviewguide policy maker 2

Introducerend	1.1 Wat is uw functie binnen de uitvoering van de pilots?
	1.2 Hoe wordt kringlooplandbouw gestimuleerd door de pilots?
2. Vertaling beleid	2.1 Opening: Kunt u vertellen welke rol de pilots spelen bij het vormgeven van de uitvoering van de kringloopvisie van het ministerie? ➔ 2.5 per onderdeel
	2.2 Hoe dragen de pilots bij aan vormgeving van de eco-regelingen? ➔ 2.5
	2.4 Wat is het doel van de eco-regelingen? Hoe dragen deze bij aan kringlooplandbouw?
	2.6 Hoe dragen de pilots bij aan het anlb? -> Daarna 2.5
	2.7 Kunnen de pilots nog op andere manieren bijdragen aan het NSP? -> Daarna 2.5
	2.8 Kunnen de pilots nog op andere manieren bijdragen aan nationaal beleid? -> Daarna 2.5
	2.9 Zijn er nog andere manieren om de kennis van pilots te verpreiden/ delen?
	2.5 doorvragen: **Op wat voor manier trachten jullie kringlooplandbouw te bewerkstelligen via de regelingen?**

	- Hoe worden de bevindingen van de pilots gebruikt binnen deze regeling/aanpak/dit proces? - Wanneer zijn bevindingen zinvol om te gebruiken? - Aanvullende documenten tov hoe de regelingen eruit gaan zien?
3. Evaluatie/leerproces	3.1 Voor de toekenning van de pilots wordt een analyse gemaakt van innovatie, efficiëntie, haalbaarheid en effectiviteit. Op basis waarvan worden deze punten toegekend? *-> Indien hij dit niet weet, vragen of er iemand is die dit wel weet die ik misschien kan interviewen.*
	3.2 Hoe wordt de voortgang van de pilots gemonitord?
	3.3 Hoe is het contact met het de initiatieven georganiseerd?
	3.4 Waarvoor dient de tussenrapportage + eindrapportage?
	3.5 Welke informatie van de rapportages wordt gebruikt voor het maken van nieuw beleid?
	3.6 Wat is de rol van het EIP-netwerk voor kennisdeling?
	3.7 Welke rol spelen wetenschappelijke instituten ten opzichte van kennisdeling?
	3.8 Hoe is het contact met het ministerie georganiseerd?
	3.9 op welke manier geven jullie via het koepeltraject terugkoppeling aan het ministerie?

Appendix 5: Example final code framework pilot 3

pilot 3 codes

17 Codes:

- BN_barriere_nieuweGLB
- BN_embedding_adviseurRVO
- BN_embedding_financial
- BN_embedding_visieLNV
- BN_innovation1_BIO+EUwetgeving
- BN_innovation1_BIO+EUwetgeving_uitvoering
- BN_innovation2_barriere
- BN_innovation2_BIOpraktijk+GLB
- BN_innovation2_BIOpraktijk+GLB_uitvoering
- BN_innovation3_boer_stimuleren_GLB
- BN_learn_anderepilot
- BN_learn_eigen_communicatiekanalen
- BN_projectdesciption_goal
- BN_projectdescription
- BN_trans_GLB
- BN_trans_koepelproject
- BN_trans_lobbyist

Appendix 6: Example final code framework pre-evaluation

dv 2 voorevaluatie

48 Codes:

- ev_GLB_doelen_brede_interpretatie
- ev_planvorming_concrete_activiteiten
- ev_projectplan
- ev_projectplan_diendoel
- ev_projectplan_eisen
- ev_projectplan_eisen_begrotingh
- ev_projectplan_eisen_concretebijdrage_doelstelling
- ev_projectplan_eisen_diendoel
- ev_projectplan_eisen_probleemomschrijving
- ev_projectplan_eisen_publiciteitsvoorwaarden
- ev_projectplan_eisen_realisatie_uitvoering
- ev_projectplan_eisen_risicosvaststellen
- ev_projectplan_eisen_samenwerking
- ev_projectplan_eisen_selectiecriteria
- ev_projectplan_voorbereiding
- ev_punten
- ev_punten_effectiviteit
- ev_punten_efficiëntie
- ev_punten_haalbaarheid
- ev_voor_innovatie_synergie_voordeel
- ev_voor_innovatie_tov_GLB
- ev_voor_innovatie_tov_transitie
- ev_voor_koppeling_experimenteergebied
- ev_voor_potentiëlebijdrage
- ev_voor_projectplan_uitgewerkt
- ev_voor_punten
- ev_voor_punten_berekening
- ev_voor_punten_effectiviteit_tov_doelstellingen

- ev_voor_punten_efficiëntie
- ev_voor_punten_haalbaarheid
- ev_voor_punten_innovatie_tov_GLB_doelstellingen
- ev_voor_selectiecriteria
- ev_voor_selectiecriteria_samenwerking
- ev_voor_vertaalbaarheid
- ev_vooraf_soorten
- subsidie_voorschrift_doelen
- subsidie_voorschrift_flexibel
- subsidie_voorschriften
- subsidie_voorschriften_activiteiten
- subsidie_voorschriften_genoeg_punten
- subsidie_voorschriften_innovatieve_producten
- subsidievoorschriften_nieuwe_activiteit
- subsidievoorschriften_soortenorganisatie

Appendix 7: example final code framework translation to policy (excluding codes from pilot projects)

translation to policy

54 Codes:

- trans_barriere_EU
- trans_barriere_fraude
- trans_barriere_GLB_kringloop
- trans_barriere_inhoudvswet
- trans_barriere_stikstof
- trans_brede_interpretatie_GLB_doelen
- trans_eco_regeling
- trans_gebiedsaanpak_water/bodem
- trans_GLB
- trans_GLB_instrumentarium
- trans_GLB_instrumentarium_eenvoudige_wijze_nutrientenkringloop
- trans_GLB_kritiek
- trans_GLB_kritiek_geenvereisten
- trans_GLB_kritiek_telaat
- trans_GLB_kritiek_weinig_geld
- trans_inpassen_NSP_datum
- trans_inzet_GLB_instrumenten_NSP
- trans_koep_breedleren
- trans_koep_CAP_mid_term
- trans_koep_gezamelijke_terugkoppeling
- trans_koep_GLB
- trans_koep_jaarlijksrapportEU
- trans_koep_kleinprojectteam
- trans_koep_landelijke_rapportages
- trans_koep_no_influence_knowledge_insitutes
- trans_koep_ondersteuning_beleid
- trans_koep_subject_to_political_processes
- trans_koep_tussenpersoonLNV+RVO

- trans_koepeltraject
- trans_koepeltraject_gemeenschappelijke_boodschap
- trans_KPI_discussie
- trans_laag_niveau_nutrientenkringloop
- trans_maatschappelijke_prestaties_belonen
- trans_nieuwe_GLB
- trans_nieuwe_samenwerking
- trans_NSP
- trans_NSP_end_date_2021
- trans_pilots_anderbeleid
- trans_pilots_vanbelang
- trans_politiek_momentum
- trans_prestatiegericht_beleid
- trans_puntensysteem
- trans_vermindering_uitvoeringslasten
- trans_via_koepeltraject
- trans_wisselwerking_subsidies