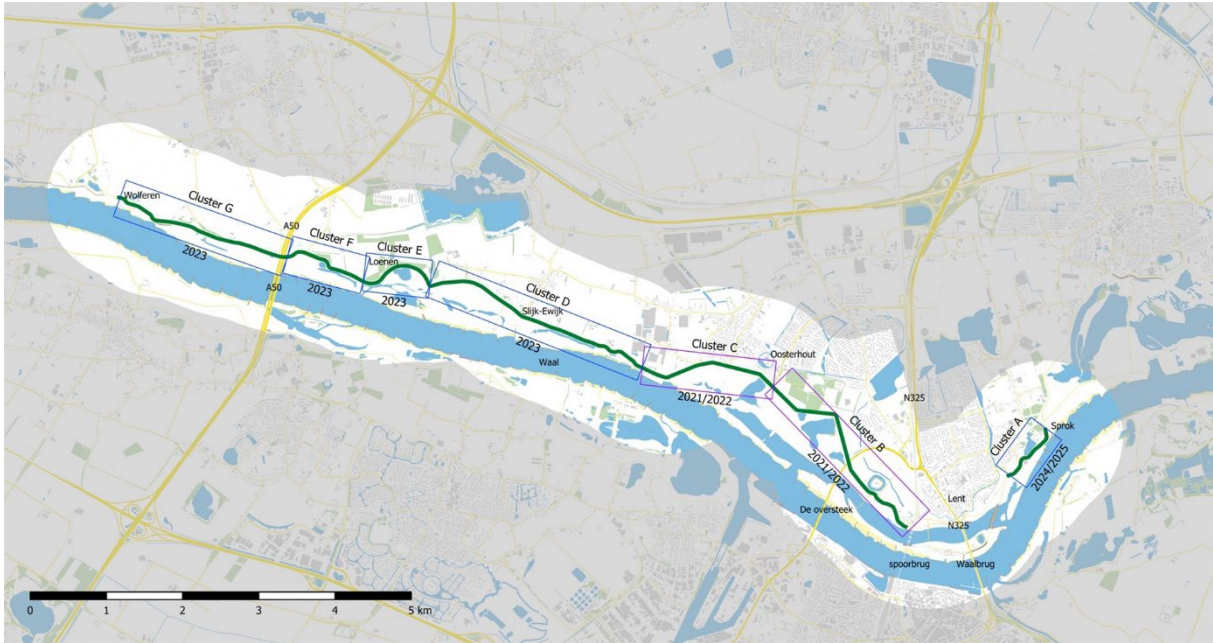


Collaborative governance and its effect on linking opportunities

A case study of the HWBP project Wolferen-Sprok



Dike reinforcement Wolferen-Sprok (Waterschap Rivierenland, n.d.)

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Image front page: Dike reinforcement Wolferen-Sprok by Waterschap Rivierenland (n.d.)

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Abstract

The Netherlands is vulnerable to flooding, as not only the sea forms a threat but also the rivers. The HWBP is currently the largest programme to increase water safety, where they work in a 'sober' and 'effective' way, meaning that only measures for water safety are subsidized. Linking opportunities are experienced as hard to implement within water safety measures. Linking opportunities contribute to the goal of the dike reinforcement and can be carried out simultaneously with the dike reinforcement project, offering a mutually beneficial situation. Successful linking opportunities can enable cheaper and faster projects in the area, or the area can achieve a greater spatial quality at the same cost. The dike reinforcement of Wolferen-Sprok has many users and tasks within the area, and thus many visions and ideas to include. The water board Rivierenland has, next to local developments, a big task of their own in creating a safe area against water. Linking opportunities can offer a bridge between the local developments and the task of the water board, taking into account the plans/wishes from the stakeholders. This research uses the framework of Emerson et al. (2011), to gain insight into the collaboration needed for the implementation of linking opportunities. The framework offers a better understanding on how the collaboration between the different stakeholders enable the optimal integration of linking opportunities in the preferred alternative of project Wolferen-Sprok. So are factors such as an active approach, common interest, commitment, and acquiring the right people crucial in a successful implementation of linking opportunities. Furthermore, analysing the available linking opportunities at an early stage enhances the chances of success, as more time will be provided for the preparation of the linking opportunity.

Relevant keywords

Mixed-use, water management, room for the river, HWBP, collaborative governance, linking opportunities, spatial quality, Rijkswaterstaat, dike reinforcement project.

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1 Introduction to research topic, objectives, questions

1.1 Research context

The Netherlands is vulnerable to flooding, as not only the sea forms a threat but also the rivers. The rivers in the Netherlands have to process a lot of water, fed by rain and melt water as is the case of the Rhine branches including the Waal. Due to climate change, there are more frequent periods of heavy rain and meltwater. This causes the water levels in the rivers to rise to extreme levels, as was the case in 1993 and 1995. Especially in 1995, it was the case that dikes were not strong enough for the extreme weather, causing the province of Limburg to flood. These events were followed by dike reinforcements and new dikes, for the Rhine branches and the Meuse had to be able to discharge larger quantities of water. This was followed by the program Room for the River in 2000, giving rivers more space as to store and discharge more river water and move along with the consequences of climate change (Ministerie van Infrastructuur en Waterstaat, 2024). The Dutch are known as competent water managers, a reputation based on a long series of civil engineering innovations, but is increasingly given relief by the knowledge on how to connect the use of water, our cultural identity and the attractiveness of our landscapes and cities. The program of Room for the River is an example of one of these innovations, including various ambitions concerning nature, culture and recreation, next to the goal of water safety. Furthermore, it is determined that the river area is one of the few parts of the Netherlands that has improved over the past decade. The success of the planning process of the program can be explained by the ambition the government had formulated in advance: improving spatial quality as a secondary objective in addition to improving water safety. This gave speed and pleasure to the collaboration between authorities and parties involved. A joint ambition resulted in successful projects, which were not budget overrun. Because of the high pace of the implementation, the program even proved that combining quality in a program does not necessarily have to be expensive (Alkemade et al., 2020). As the Netherlands keeps on facing new challenges in the field of water safety, freshwater supply, water quality and nature, it is important to remain alert and take measures on time (Hoogwaterbeschermingsprogramma, 2019; Ministerie van Infrastructuur en Waterstaat, 2024). Furthermore, there are many area users and tasks in the Dutch river area, such as shipping, agriculture, housing and housing construction, recreation, agriculture, entrepreneurship, nature, freshwater supply and urbanization. Also issues such as sustainable energy generation and nitrogen must also be taken into account (Ministerie van Infrastructuur en Waterstaat, 2023). A large sum of money will be invested in order to tackle current and future challenges in good order. It is hereby important to emphasize the importance of linking other ambitions next to the goal of water safety task, as is done in the previous Room for the River program (van Hattum et al., 2014). These ambitions concern the field of nature, economy, environment, cultural history, and spatial quality, which have been included in the investment sum in order to achieve greater social returns (van Hattum et al., 2014). Currently the Hoogwaterbeschermingsprogramma [Flood Protection Program] (HWBP) is the largest implementation programme of the Deltaprogram, which is aimed to ensure water safety to the norm of the 'Waterwet'. The HWBP is mainly done through water authorities and Rijkswaterstaat, who manage the primary dikes which do not comply with the safety norms set in the 'Waterwet'. These need to be improved in the year 2050 (HWBP, 2019). The Integrated River Management (IRM) is used as the current approach in the water safety tasks. This approach works on the tasks in the areas of water safety, water quality, nature and economic development, freshwater supply and smooth and safe passage of shipping. River widening still plays a central role in this approach. However, in order to ensure that all primary flood defences comply to the legal standards by 2050, more than thousand kilometres of flood defences have to be reinforced, as stated by the HWBP. The focus of the

Rijkswaterstaat and the water boards is on ensuring that all primary flood defences comply. In order to achieve this, the HWBP is investing much more than the Room for the River program. The government investments are so extensive, that there will be explored to what extent the HWBP, the water board Rivierenland, or other stakeholders, can contribute to the public interest. There is much debate as to who is responsible for the spatial result of the water projects, as it is not included into the program as a main goal. The central government sees itself mostly as a subsidy provider and not as the responsible party, resulting in the government having no obligatory requirements for simultaneously improving water safety and spatial quality, other than that it may not deteriorate (Alkemade et al., 2020). In addition, the motto of HWBP is 'sober and efficient', where ambitions of other authorities can add their ideas to HWBP projects. Flood protection with a sober approach can increase social added value in addition to the necessity of high water safety. It can give a quality boost to an area, which linking opportunities can offer (Alkemade et al., 2020).

The area of Wolferen-Sprok is in a unique position, having been a part of the project of room for the river, but its dike is currently reinforced by the HWBP. The project cannot be seen separately from spatial developments surrounding the area, as the reinforcement task entails the challenges around maintaining and strengthening existing qualities, as the area consists of local businesses, the Natura 2000 area, and has a great recreational value. Furthermore the reinforcement tasks can solve bottlenecks in the area by identifying linking opportunities (Franssen & Struckman, 2017). Linking opportunities can arise from collaboration between different stakeholders and can be relevant surrounding the reinforcement of dikes are currently: dealing with water safety differently (making houses water proof, multi-layer safety); the shift from static dikes to more dynamic forms of defence (building with nature); globalization and thus increased dependencies; localization as a counterpart to globalization (increasing attention to local identity); lastly technologization meaning that technological developments are rapidly taking place, making more data accessible (Franssen & Struckman, 2017; Rivierenland, 2019).

The dike reinforcement of Wolferen-Sprok has many users and tasks within the area, and thus many visions and ideas to include. The water board Rivierenland has, next to local developments, a big task of their own in creating a safe area against water. Linking opportunities can offer a bridge between the local developments and the task of the water board, taking into account the plans/wishes from the stakeholders. This can entail the redevelopment of an area, economic opportunities, developments concerning nature, and strengthening recreation and tourism (Franssen & Struckman, 2017). An example of a linking opportunity which is meant to strengthen recreation and tourism, is an idea created by the Dutch company ANWB. This idea entailed creating a common road stretching up to 80 kilometres long and made broader to enhance the use for biking and hiking (Soepboer, 2020). It is important to consider local developments together with the task of the water board in order to shape possible linking opportunities. A coherent area development must therefore be central, wherein interactions between the stakeholders are needed in order to achieve an environment with a high performance, having to include more than the goal of water safety in order to achieve it (Franssen & Struckman, 2017). The framework of Emerson et al. (2011), can offer a great insight into the collaboration needed for the implementation of linking opportunities. The framework offers a better understanding on how the collaboration between the different stakeholders enable the optimal integration of linking opportunities in the preferred alternative of project Wolferen-Sprok.

1.2 Problem statement

The implementation of linking opportunities can be regarded as an important step in the environmental management process, as it integrates the various ambitions of stakeholders within the project. This can result in a social foundation for the primary plan (Van Hattum, et al., 2014). However, the management of the HWBP programme wants to work 'sober and efficient' (HWBP, 2019, p. 14). This means that the focus within HWBP projects is on the primary food defence, wherein only the costs for the necessary measures are covered by the HWBP and in which it is strived for to keep the costs to a minimum (Rijkswaterstaat, 2021). Ambitions of other authorities can free ride with HWBP, provided that they pay for it themselves. This leads to possible unused opportunities (Alkemade et al., 2020). This raises the question: to what extent there is room left for linking opportunities, as there was in the previous programme 'Room for the River' where equal weight was given to water safety and spatial quality. Linking opportunities can hereby be explained as possible additional goals or ambitions within the project area by initiators, next to the goal of water safety (van Hattum, et al., 2014). Furthermore, there is much debate as to who is responsible for the spatial quality within water projects. The central government sees itself mostly as a subsidy provider and not as the responsible party. This results in the government having no requirements for simultaneously improving water safety and spatial quality, other than that it may not deteriorate (Alkemade et al., 2020).

It is important for initiators to investigate the issues at stake and the ambitions available within the project area. The fact that the HWBP only has a water safety objective, does not mean that the planning process does not pay attention to spatial quality. The program does, after all, contain the demand that spatial quality of the existing situation must not deteriorate. This does not result in the ambition to create the most beautiful plan, but results in a defensive approach in spatial planning quality as an assessment framework for technical solution (Alkemade et al., 2020). This choice leads to a long and complicated planning process, missing opportunities for smart, integrated solutions. In the exploration phase, a Spatial Quality Framework is often drawn up, providing criteria for the technical solutions. However, this appears insufficient in creating a integral design process in conjunction with technology. When the quality framework degenerates into checklists that separate calculations and drawings, does it lead to a slow planning process with unnecessary additional costs. In addition, it is questionable whether the most suitable and cost-efficient solution is found (Alkemade et al., 2020).

In HWBP projects, there already is attention drawn to integral area development, including linking opportunities (van Rijswijk, 2014). A process that would include linking opportunities is able to create many opportunities for more beautiful landscapes, higher spatial quality and more interests in addition to water safety. Project-based working turned out to be a method that challenges the implementation of linking opportunities. In a project, a goal, a budget and a timetable have been agreed and are often contractually recorded (Klostermann, 2019). However, the HWBP suffers from persistent instability in the implementation process. Projects often don't progress since the start of the HWBP, leading to structural under-exhaustion and large fluctuations in the multi-year budget of the HWBP Projects. Projects are often postponed to a later year and crowd out the financial space for the growth of new projects. In addition, some program years suffer a financial strain with the available budget. The HWBP alliance thus risk achieving the goals for 2050 if this trend of slowdown and instability is not reversed (Breunissen et al., 2021). Linking would thereby lead to further delays, adjustments to the objectives and a budget shortfall. Quality is often the dominant driving force in the administrative management of HWBP projects, acquiring support and realizing linking opportunities often take more effort and time than previously thought. Linking opportunities are hereby thought to form a risk to achieving the water safety task. For these reasons, project managers often try to avoid linking opportunities and opt for traditional solutions. Sufficient resources are often

lacking in the form of knowledge and a good inventory of the costs and benefits (Klostermann et al., 2019). Furthermore, the HWBP makes linking extra difficult, as it must go cheaper and faster. This makes it increasingly difficult to implement linking opportunities (Breunissen et al., 2021). However, there are some success stories such as IJssel Vechtdelta, Marken and the Island of Dordrecht which are known for its co-creation that resulted in an integrative area. However, these successful stories about the implementation of linking opportunities in projects are still scarce (Ellen & Van Buuren, 2014).

It is thus difficult in HWBP projects to implement linking opportunities, as it entails a lot of uncertainty regarding the extensive collaborative process organized within the HWBP. Sufficient knowledge concerning the implementation of linking opportunities is lacking, as it is not clear to what extent and how these collaborative processes enable the optimal integration of linking opportunities in the preferred alternative of Wolferen-Sprok. This research focusses therefore on the benefits and barriers of implementing linking opportunities, especially on the collaboration with the involved actors of the HWBP project Wolferen-Sprok. Through this case, it is central to discover in what extent the linking opportunities are optimally implemented and the challenges concerned in the implementation of the opportunities by exploring the factors that influence the implementation of linking opportunities. The research focusses on the role of collaboration and the extent in which this can contribute to the implementation of linking opportunities. This will be researched through the case of the project of Wolferen-Sprok, which previously was a part of the room for the river project and is currently one of the projects of HWBP. Then lessons will be drawn and possible recommendations will be formulated for the integration of linking opportunities.

1.3 Research Aim and questions

In this research, the focus lies on the linking opportunities that can arise from collaborative governance within the HWBP project of Wolferen-Sprok. There will be a focus on the extent that these linking opportunities are optimally implemented and the challenges concerned in the implementation of the opportunities. The research will then specify on the role of collaboration and the extent in which this can contribute to the implementation of linking opportunities. This will be researched with the case of the project of Wolferen-Sprok, which previously was a part of the room for the river project and is currently one of the projects of the HWBP.

The central question of this research will be as follows: To what extent does collaborative governance enable the optimal integration of linking opportunities in the preferred alternative of project Wolferen-Sprok? Which will be answered by the following sub questions:

- Which linking opportunities can be identified within the project of Wolferen-Sprok and which opportunities have been implemented?
- How does the system context influence the collaborative process of identifying and integrating the linking opportunities in the project of Wolferen-Sprok?
- Which drivers of linking opportunities can be identified and how do they influence the collaborative process of identifying and integrating the linking opportunities in the project of Wolferen-Sprok?
- How do the collaborative dynamics influence the collaborative process of identifying and integrating the linking opportunities in the project of Wolferen-Sprok?

1.3.1 Reading guide

Following this introduction, this research discusses the societal and scientific relevance in Chapter 2. This is followed by the literature review in Chapter 3, which focusses on explaining the concept of linking opportunities, and the theoretical framework. The theoretical framework hereby explains the theory provided by Emerson et al. (2011). Furthermore does this chapter include the operationalisation of this research, followed by the conceptual model. The methods that are used in this researched are explained in Chapter 4, which includes the approach that is used in this research and the philosophy behind it. Chapter 5 presents the results of this research, which is structured according to the framework of Emerson et al. (2011). The results thus first include the drivers, then the collaborative dynamics and lastly the collaborative action. Finally, Chapter 6 includes the conclusions that can be drawn from the results and answers the research questions. The reflection, limitations and recommendations complete this last chapter.

2 Societal & scientific relevance

2.1 Societal relevance

The focus within this research lies on the linking opportunities that can arise from collaborative governance and in what extent this enables the optimal implementation of linking opportunities.

Through the analysis concerning the collaborative process of Wolferen-Sprok, we can learn more about linking opportunities and to what extent these can arise from the collaborative process. This can be relevant surrounding the reinforcement of dikes which are currently dealing with water safety (making houses water proof, multi-layer safety); the shift from static dikes to more dynamic forms of defence (building with nature); globalization and thus increased dependencies; localization as a counterpart to globalization (increasing attention to local identity); lastly technologization meaning that technological developments are rapidly taking place, making more data accessible (Franssen & Struckman, 2017; Rivierenland, 2019). It is thus a relevant subject as to how to achieve a more integrated and multi-purpose area as it is currently not yet clear on how the collaborative governance structure can be best facilitated in order to achieve the optimal implementation of linking opportunities. As the implementation of linking opportunities can be regarded as an important step in the environmental management process as it integrates the various ambitions of stakeholders within the project, it is important to create a better understanding of the factors that influence the implementation of these opportunities. This understanding can further contribute in the ability to create a social foundation for the project and enhancing the spatial quality (Van Hattum, et al., 2014).

By analysing how this collaboration is taking place in the case of Wolferen-Sprok, more practical and in-depth knowledge will thus be gained on the collaboration processes that comes with the implementation of linking opportunities. This has as goal to improve spatial quality by aligning the needs of the different stakeholders.

2.2 Scientific relevance

Integral project plan have already been discussed greatly, but the implementation of linking opportunities is relatively new in the Netherlands. The implementation of the opportunities appears to be a challenge. There have been studies to policy analysis and empirical research, as is done by van Hattum et al. (2014). However, this research wants to offer new insights by combining the research of linking opportunity with the theory of collaborative governance, as extensive collaboration is required with its implementation.

The HWBP's structure is project-based, which is difficult for the implementation of linking opportunities. A project-based structure entails that a project, a goal, a budget and a timetable have been agreed beforehand and are often contractually recorded. Linking multiple goals to the project would hereby lead to delays, adjustments to the objectives and a budget shortfall. In addition, HWBP wants to work 'sober and efficient' (Klostermann et al., 2019). Linking opportunities are thus difficult to successfully implement, as they are not financially supported by the HWBP. A successful implementation relies heavily on collaboration between the stakeholders for its success. By involving different stakeholders in the project, creating and utilising, the quality of the decision is believed to improve van Hattum et al., (2014). Furthermore, little is known on how the collaborative governance framework should be best facilitated. As Emerson et al. (2011) describes, more research is needed to identify and explain the causal mechanisms that drive collaborative initiatives. Projects often don't progress since the start of the HWBP, leading to structural under-exhaustion and large fluctuations in the multi-year budget of the HWBP Projects. The HWBP suffers from persistent instability in the implementation process (Breunissen et al., 2021). Sufficient resources are often lacking in the form of knowledge and a good inventory of the costs and benefits (Klostermann et al., 2019).

As it is not clear to what extent, and how, the collaborative processes enable the optimal integration of linking opportunities in the preferred alternative of Wolferen-Sprok, this research contributes by analysing the collaborative governance structure of the implementation of linking opportunities. In addition, this research focusses on the extent that these linking opportunities are optimally implemented and the challenges concerned in the implementation of the opportunities. New factors can be added to the collaborative governance framework of Emerson et al. (2011). This research thus contributes by providing a better understanding of the factors that influence the collaborative process and the effect these factors have on the optimal implementation of linking opportunities.

3 Literature review & theoretical framework

3.1 Literature review

3.1.1 Linking opportunities

In the Netherlands, there are often various policy goals included in the field of water, such as water safety, water quality and water supply. These can be executed within different policy programmes and different levels of governance (national, regional and local). So can the HWBP work on a national level which are executed regionally, while initiatives as linking opportunities can be executed locally (van Hattum, et al., 2014). Linking opportunities is a concept introduced by the HWBP. It can be described as opportunities for residents or companies in economic or spatial terms, which do not directly contribute to the goal of the dike reinforcement: water safety (Franssen & Struckman, 2017; Rivierenland, 2019). The definition of linking opportunities, as described in the EIA by Soepboer (2018), is:

“Linking opportunities are additional objectives of partners in the region other than water safety or including a water safety objective from a project of a partner within the region.”

Linking opportunities can be carried out simultaneously with the dike reinforcement project and offer a mutually beneficial situation. Successful linking opportunities can enable cheaper and faster projects in the area, or the area can achieve a greater spatial quality at the same cost. Investigating possible linking opportunities is part of the broad exploration phase of the HWBP projects, and financed from the HWBP itself. Additional costs that the linking opportunity entails, are to be financed from other sources (van Rijswijk, 2014).

Linking opportunities, ideas from stakeholders, administrative wishes, cultural-historical requirements and/or nature development initiatives are integrally interwoven with the assignment, creating an integrated design. This includes making connections through scales and across sectors, which linking opportunities are a part of (van Rijswijk, 2014).

There are six aspects identified through the literature study on scientific and policy literature concerning the HWBP.

Functions of space

The main objective of the HWBP is to establish a certain standard of water safety (van Rijswijk, 2014). Linking opportunities can add to the main objective and create new and/or other functions of space.

Initiators

The initiators of a HWBP programme are often individual water authorities or Rijkswaterstaat (van Rijswijk, 2014). Next to the initiators concerning water safety measures, there are also initiators of linking opportunities. These can be public initiators such as municipalities or provinces, or private initiators such as companies or civil society groups with different objectives.

Different interests

A lot of interests are at stake in an integral plan. The actors involved are both actors that have an initiative within the project or the stakeholders involved in the development of the project. For example, people living in the project area or an environmental organisation that wants to achieve less impact on the environment within the project.

Participation and stakeholder engagement

Linking requires early involvement of the stakeholders, preferably before the start of the project. When the program starts the discussions within the regions early, parties can identify linking opportunities together with other tasks (van Rijswijk, 2014). The nature, scope and complexity of the

project are important within the participation process (van Rijswijk, 2014). It is important to consider how participation is given shape within the project, who is involved/integrated and whether they are involved from the start.

Objectives and aims

There is a clear distinction between integration efforts and linking opportunities. So are integration efforts aimed at compensation, prevention or decreasing of negative consequences of the area. Linking opportunities are, however, aimed at improving the spatial quality of the area (van Rijswijk, 2014). It is therefore important to distinct the purpose of the development within the project.

Financing

Within the financial framework of the HWBP, there also has been made a distinction between linking opportunities and integration efforts. A sectoral budget for the water safety program has been made for integration efforts as part of the primary project. Increasing the spatial quality is not part of the aim of HWBP 'sober and efficient' and is therefore not regarded as an integration effort. Improvements or increasements of spatial quality is thus seen as a linking opportunity, which needs additional financing (van Rijswijk, 2014). HWBP focusses on 'logical, simple and specific' integration efforts. There are, however, exceptions on this approach if it can be logically and effectively substantiated for the specific problem. A project asks for a locally specific customisation, depending on the specific location, nature, scope, complexity and the process that it endures. It is stated in the finance regulation that measures within the process and execution are considered if part of the water safety objective. Therefore, it is not possible to decide which would be part of the financing and which would need additional financing on a general basis (van Rijswijk, 2014).

3.1.2 Collaborative governance

The definition of collaborative governance, used by Emerson et al., is "the processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished" (2011). Emerson et al. hereby created a definition that can be used for broader analytical constructs in public administration. The term collaborative governance regime shows a system in which cross-boundary collaboration represents the predominant mode for conduct, decision making, and activity (Emerson et al., 2011).

3.2 Theoretical framework

The framework used to analyse the participation process of Wolferen-Sprok, is the framework for collaborative governance. This framework provides a conceptual map for situating and exploring elements of cross-boundary governance systems.

3.2.1 Collaborative governance frameworks

As this research aims to understand the collaborative process of the implementation of linking opportunities, it is fitting to apply a collaborative governance framework. Two collaborative governance frameworks include the Collaborative Governance theory of Ansell and Gash (2008) or the collaborative governance framework of Emerson et al. (2011). The definition of governance by Emerson et al. refers to the act of governing, this can be in the public sector as well as in the private sector. Specifically, it can be seen as a set of coordinating and monitoring activities that enables collaborative partnership or institution (2011). This definition is broader than other definitions of collaborative governance, such as the one provided by Ansell and Gash (2008) defining it as: “A governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making-process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets.” (p544). The framework of Ansell and Gash (2008) hereby focusses on formal, state-initiated arrangements, and the engagement between government and non governmental stakeholders. In addition, frameworks such as ‘Consensus building and complex adaptive systems’ by Innes & Booher (1999) or the framework ‘Citizen-Centred Collaborative Public management’ by Cooper et al. (2006) are, like many frameworks, difficult to generalise. Meaning that the frameworks are often inapplicable in different settings, sectors, scales, policy arenas and process mechanisms. Emerson’s framework captures a larger range of emergent forms of cross-boundary governance and extends beyond the focus on the public manager or the formal public sector. This framework includes community collaboratives which are involved in collective resource management and can be applied to participatory governance and civic engagement. This framework does incorporate many of the components presented in other frameworks, but shows them in a way that represents the casual relationships among the different dimensions and its components and elements (Emerson et al., 2011). In the analysis of the case of the HWBP project Wolferen-Sprok, this approach fits best to the research goal. As it is the aim of this research to understand the dynamics of the collaborative governance process, and the focus of Ansell and Gash is more on the structural aspects, the framework of Emerson et al. (2011) is a better fit. A generalizable framework is needed for the application to the specific case of Wolferen-Sprok, as it covers local data concerning implementation process of linking opportunities, as well as national data when focusing at the general system in which the implementation occurs. This framework in addition will fit to the case study of Wolferen-Sprok, as it is more directed to public agencies, whereas the framework of Ansell and Gash focusses on nonstate stakeholders (Ansell and Gash (2008)).

3.2.2 The framework for collaborative governance

Figure 1 illustrates the system context, which is affected by the collaborative governance regime (CGR). The system context includes the political, legal, socioeconomic, environmental and other influences that affect and are affected by the Collaborative Governance Regime (CGR). These influences can include resource conditions which need improving, increasing, or limiting; or the political dynamics within communities; socioeconomic and cultural health and diversity, etc. (Borrini-Feyerabend 1996; Emerson et al., 2011). The system context is illustrated as a surrounding three-

dimensional space, where the external conditions can influence the dynamics of collaboration, such as opportunities and constraints, at any time during the CGR (Emerson et al., 2011).

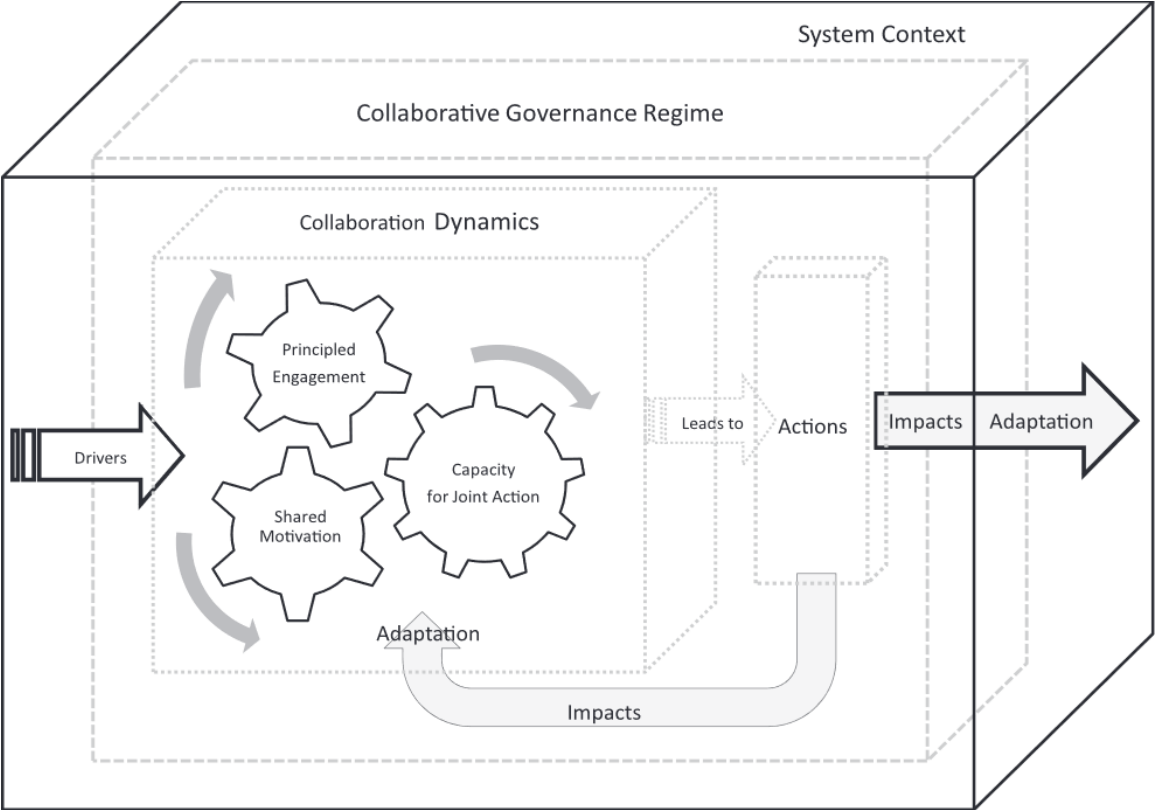


Figure 1 The integrative framework for collaborative governance (Emerson et al., 2011).

The CGR is made by and driven by drivers emerging from the system context. They help initiate the CGR and give the framework a direction. However, the components of the collaborative dynamics and the collaborative action can influence the effectiveness of the CGR, shaping the quality and extent of the CGR itself. The CGR uses the word ‘regime’ to emphasize the public decision making in which cross-boundary collaboration is the prevailing pattern of behaviour and activity. The Collaborative Dynamics include the three interactive components: principled engagement, shared motivation, and the capacity for joint action. These components can produce the action to implement the shared purpose, wherein action can then lead to impacts and potentially adaptation, within and outside of the CGR framework (Emerson et al., 2011).

System context

The system context is build from multiple contextual layers of political, legal, socioeconomic, environmental and other influences. This creates opportunities and constraints that influence the CGR. So are a few chief elements that influence the nature of the CGR the policy and legal frameworks (such as administrative, regulatory or juridical frameworks); conventional channels and authorities; political dynamics and power relations within communities and in different levels of government; degree of connectedness within and across existing networks; historic levels of conflict among stakeholders; and socioeconomic and cultural health diversity. It is the surrounding three-dimensional space, since the conditions can influence the CGR at any time during the process and open up new possibilities or impose new challenges (Emerson et al, 2011).

Drivers

Narrowing down the influences are the drivers, which are the more specific drivers of collaboration. The drivers are essential, as they are the direct cause of the collaboration successfully unfolding. The drivers consist of leadership; consequential incentives; interdependence and uncertainty (Emerson et al., 2011).

Leadership refers to an identified leader who has the position to initiate and help secure resources and support for the CGR. The leader hereby may be a member of one of the parties or the deciding official or may be located within a trusted boundary organization. It is, however, necessary that they possess commitment to the collaborative problem solving, have a willingness not to advocate for a particular solution, and exhibit impartiality with respect to the preferences of participants (Bryson, Crosby, and Stone, 2006).

Consequential incentives refer to the internal drivers for collaborative action, such as problems, resource needs, interests, or opportunities. Or it refers to external drivers, think of situational or institutional crises, threats, or opportunities. These incentives are consequential as it affects the participants, or the timing or pressure for solutions. The absence for attention can hereby have a negative effect on the collaborative action. It is necessary that the incentives exist to induce leaders and participants to engage together (Selin and Chavez, 1995).

Interdependence refers to whether individuals or organizations have to collaborate in order to accomplish something. This can be seen as the ultimate consequential incentive (Gray, 1989).

The final driver, uncertainty, is a foremost driver for the management of wicked societal problems. In the case that uncertainty cannot be resolved internally, it can be a driver for groups to collaborate in order to reduce, diffuse, and share risk. This driver is also related to the driver of interdependence, since the uncertainty leads to organizations or parties needing each other. In the case where there was no information shortage, the organizations and parties will likely act independently in order to pursue their interest or respond risk. In addition, individual uncertainty concerning the conventional avenues for solution or satisfaction which can rely on the production of the intended result (Koppenjan and Klijn, 2004).

Collaborative Dynamics

The collaborative dynamics, together with collaborative action, influence the development of the CGR as well as the degree to which it is effective. The essential drivers influence the participants in the form of a reduction of the initial formative costs of collective actions that are produced over time. The various elements embedded within the collaborative dynamics, are principled engagement, shared motivation and joint capacity.

Principled engagement includes different stakeholders over time at different points and take place through virtual formats, face – to – face, cross – organizational networks, or private and public meetings. It can occur over time and includes different stakeholders and different points. By principled engagement, people with different content, relations and identities, try to solve problems, resolve conflicts, or create value within the institutional, sectoral or jurisdictional boundaries (Cahn, 1994; Cupach and Canary, 1997; Lulofs and Cahn, 2000). First, it is important to identify the stakeholders, wherein each stakeholder bring its own characteristics (such as different individual attitudes, values, interests, knowledge, cultures, missions and mandates). It is important within the collaborative dynamics to include the ‘right’ people. Inclusion and diversity are important for not only the organizing principles, but also for instrumental reasons. The right people give voice to multiple perspectives and different interest and allow for a well thought out decisions with a broader view of who will benefit or be harmed (Beierle and Cayford, 2002; Sirianni, 2009). The four process elements are: discovery, definition, deliberation and determination. The four process elements can be seen as a dynamic social learning process wherein partners can develop a shared sense of purpose and a

shared theory of action in order to achieve it. Discovery refers hereby to the ability to reveal the different interests, concerns and values, as well as identifying the relevant and significant information together with its implications. In a later phase, it may also include the joint fact – finding and more analytic investigation (Ehrmann and Stinson, 1999; Ozawa, 1991). Definition refers to the continuous effort to build shared meaning. This can be done by articulating common purposes and objectives; agreeing on the concepts and terminology participants use to describe and discuss problems and opportunities; clarifying and adjusting tasks and expectations of one another; and setting forth shared criteria with which to assess information and alternatives (Emerson et al., 2011). Deliberation refers to candid and reasoned communication. The quality is depended by skilful advocacy of the individual and represent interests and the effectiveness of conflict resolution strategies and interventions. It is especially important when differing interests and perspectives are at stake (Emerson et al., 2011). Deliberation is hereby not the aggregation of interest, but requires a thoughtful examination of issues, listening to each other's perspectives, and coming to a public judgment on what represents the common good (Roberts, 2004). Lastly, determinations refer to procedural decisions and substantive determinations. Hereby are substantive determination often considered as one of the outputs of collaboration or conflict resolution. They are in an ongoing CGR often made over time and integrated in the framework as a repeating element (Emerson et al., 2011). The elements together create a dynamic cycle during principled engagement and create and reinforce shared motivation and build the capacity for joint action (Emerson et al., 2011).

Shared motivation is the self-reinforcing cycle concerning the elements: mutual trust, understanding, internal legitimacy, and commitment. Shared motivation emphasizes the interpersonal and relational elements within the collaborative dynamics, which is sometimes referred to as social capital. It is partly created by principled engagement, but can in addition contribute to the principled engagement process by reinforcing or accelerating it (Emerson et al., 2011). With the element 'mutual trust' is meant: a process that happens over time, where parties work together, get to know each other and thereby prove that they are reasonable, predictable and dependable to each other (Fisher and Brown, 1989). This can lead to mutual understanding followed by legitimacy and as the final result, commitment. Furthermore, it enables people and organisations to cross personal, institutional and jurisdictional borders and understand the different interests, needs, values and constraints of other's (Bardach, 1998; Ring & Van de Ven, 1994; Thomson and Perry, 2006). The second element 'mutual understanding' is the ability to understand and respect others' positions and interests, even in the case when the stakeholders might not agree (Emerson et al., 2011). This then results in the third element 'legitimacy', which can be seen as the confirmation that participants are trustworthy and credible, together with compatible and interdependent interests that results in motivation for an ongoing collaboration (Provan and Milward, 1995). This ongoing collaboration can then further reinforce confidence in the legitimacy and efficacy of the collaborative dynamics and further lead to 'shared commitment', which is the fourth element. This last element can enable stakeholders to cross organizational, sectoral and/or juridical boundaries that will in turn enable them to commit to a shared path (Emerson et al., 2011).

The aim of collaboration is to create a desired outcome that could not individually be accomplished. The CGR therefore has as goal: the enhancement of the capacity of oneself and others in order to achieve a common purpose. Joint action is this coordinated effort of multiple parties working towards a common goal. The capacity for joint action can be seen as the intermediate outcome of the interacting cycles of principled engagement and shared motivation. It involves the deliberate and strategic alignment of activities, resources and objectives among stakeholders in order to achieve the shared outcome. With the development of joint capacity, the engagement of the cycles can be strengthened and can create more effective actions and impacts. The effectiveness of joint action often hinges on the elements: procedural and institutional arrangements, leadership,

knowledge and resources. These elements help generate and sustain capacity for joint action and must be sufficient enough to accomplish the common purpose (Emerson et al., 2011).

The first element 'procedural and institutional arrangements' refers to the range of process protocols and organizational structures needed to manage the collaborative process. These are the formal and informal rules, norms and procedures which guide the collaborative process. These rules, norms and procedures can be distinguished at the intraorganizational level (how a specific group governs and manages itself) and at the interorganizational level (how groups govern and manages together in the CGR and integrate with external decision-making authorities). The second element 'leadership' can guide the collaborative effort by facilitating communication, resolving conflicts and maintaining the momentum of the joint action. They can play a part in articulating a shared vision and motivate participants in their commitment to the common goal. Leadership, as is stated earlier, can also play a role as an external driver. Joint action relies on the third and fourth element 'knowledge and resources', for sharing knowledge and resources helps to build a comprehensive understanding of the issues at hand and enhances the capacity of the collaborative group to develop solutions. Collaboration requires the aggregation, separation and reassembly of data and information, wherein it is important to keep generating new shared knowledge. Knowledge is a combination of information, understanding and capability. These factors combined have the ability to guide actions. In the framework, 'knowledge' refers to the social capital of shared knowledge, which has been weighed, processed and integrated with the values and judgments of the stakeholders. Furthermore, resources can be financial resources, as well as material resources. Collaboration between stakeholders can enable sharing and leveraging scarce resources. These resources can include financial stimulations, time and liberty, but can also entail power. Often it is the case of the factor 'power' to be distributed unevenly across the stakeholders (Emerson et al., 2011).

Collaborative action

Collaborative actions are the steps taken to implement the shared purpose of the framework. It is seen as the major outcome of a linear process that can be internal and external to the regime (Emerson et al., 2011).

Collaborative outcomes

The collaborative actions lead to the collaborative outcomes, including the impact and possible adaptation. The actions extend to the impact, specified as the results on the ground. The impacts depend on the context and change, but its aim is to change the pre-existing or projected conditions in the system context, which can eventually lead to adaptation. Adaptation is hereby the transformation of a complex situation or issue. This transformation can occur in the system context, in the CGR or in the collaboration dynamics (Emerson et al., 2011).

3.3 Operationalisation

This research entails the concept of collaborative governance, looking at the framework of Emerson et al. (2011). The variables below are derived from this framework, shown in table 1, and aim to understand the collaborative process of the implementation of linking opportunities in Wolferen-Sprok. The variables are divided in different dimensions and further specified in indicators. The indicators show what is meant with the dimensions and how it can be measured. The operationalisations of the variables lead to the following conceptual model, as is presented in figure 2, showing the interaction between the factors that contribute and are part of the collaborative process of the project Wolferen-Sprok. The factors can influence the outcome of a project, which in this case is the agreements concerning linking opportunities within the project.

Variables	Dimensions	Indicators
System context	Legal frameworks	EIA, Water Visions & framework water
	Historical context	Instances of conflict in the past
Drivers	consequential incentives	Perceived opportunities internally and externally
		Perceived situational or institutional crises
		Perceived threats
	interdependence	Perceived (mutual) dependence of actors on each other
	uncertainty	Perceived insecurities
		Existing or expressed need to reduce, diffuse, and share risk
Collaborative dynamics – Principled engagement	discovery	Individual and shared interests, concerns and values
		Frequency of meeting where collaborative parties share the interests, concern and values
		Identification and analysis of relevant and significant information (and its implications)
	definition	Common purpose and objectives
		Common values
		Clear tasks and expectations
		Shared criteria (in which to assess information and alternatives)
	deliberation	Ability to represent the common good
		Effectiveness of conflict resolution strategies and interventions (reaching a developed understanding)
	determination	Procedural decisions

		Substantive determinations
Collaborative dynamics – Shared motivation	mutual trust	Perception of trust in other actors (reasonable, predictable and dependable)
		Confidence in reliability and truthfulness of others
	Mutual understanding	Ability to understand and respect other’s position and interests
	Internal legitimacy	Compatible and interdependent interests
		Perceived ambition
		Perceived power imbalance
	Commitment	Ability to cross organizational, sectoral and/or jurisdictional boundaries
		Perceived commitment to a shared path
Collaborative dynamics – Capacity of joint action	Procedural and institutional arrangements	Formal and informal rules and protocols
		Organizational structures
	(Facilitative) leadership	Ability to empower actors
		Consensus building
		Trust building
		Involvement of actors
		Ability to initiate and help secure resources
		Perceived support for a CGR
		Willingness not to advocate for a particular solution
		Extent of commitment (to collaborative problem solving)
	resources	Acquisition of human, technological, financial, and other resources needed to achieve the CGR’s collective purpose
Collaborative action	Agreements concerning linking opportunities	Number of integrated opportunities included in the preferred alternative

Table 1: Operationalisation

3.4 Conceptual model

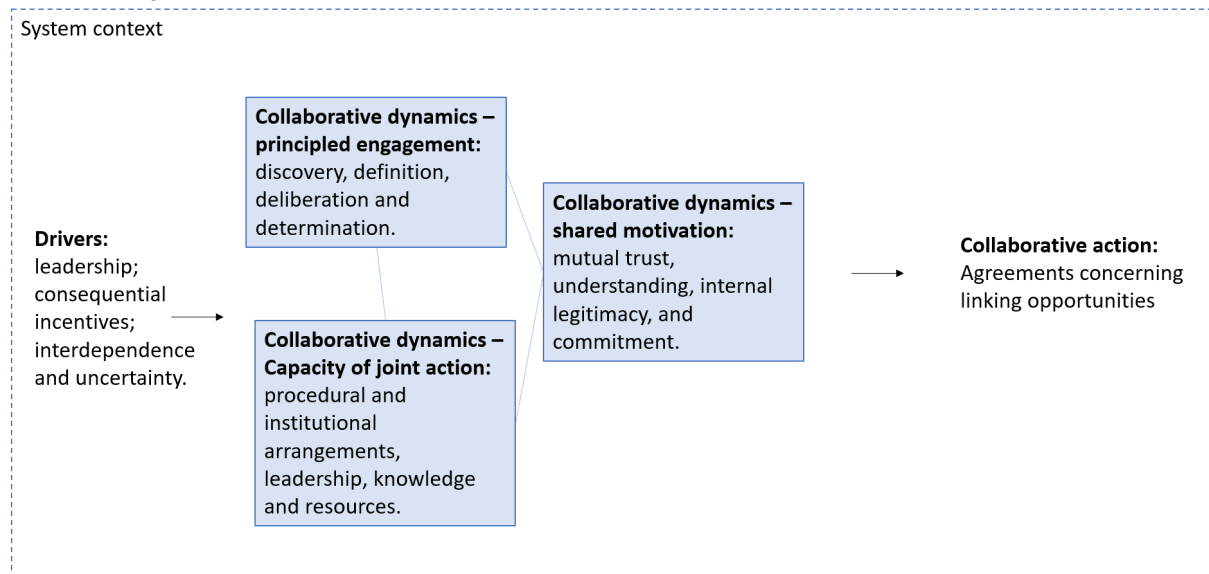


Figure 2: The integrative framework for collaborative governance in the case Wolferen-Sprok.

In able to understand the different relationships between the elements, further elaboration of the conceptual model is needed. There is chosen, within this model, to combine the different concepts into seven variables: drivers, principled engagement, shared motivation, capacity of joint action, and collaborative action. This model is derived from the framework of Emerson et al. (2011) and adjusted to the case of the dike enforcement of Wolferen-Sprok. The different elements are closely interconnected, as can be seen in figure 2. So does the system context influence every element within the collaborative governance framework and sets out the ground-rules in which the collaboration takes place. The drivers are formed by the system context and established or heavenly influenced by the elements: leadership; consequential incentives; interdependence and uncertainty, affect the eventual collaborative dynamics. These in turn are connected by a blue line, indicating the cycle between these components as each affects the other. In this research, the emphasize lies on the collaborative dynamics, therefore the effect the components have on each other will be analysed within this research. The collaborative dynamics in the case of Wolferen-Sprok, results in the collaborative action: agreements concerning linking opportunities. Hereby, agreements concerning linking opportunities focusses on the number of integrated opportunities included. It is important to know when linking opportunities are optimally implemented in order to determine how the collaborative process of the project Wolferen-Sprok has performed. Linking opportunities can arise from the collaborative process, or out of developments from the direct environment (Waterschap Rivierenland, 2017). The optimal implementation, as understood in this research, is when enough room is perceived within the collaborative process for all stakeholders to present their ideas. Furthermore, the implementation will be considered optimal when stakeholders are satisfied with the collaborative dynamics of the project Wolferen-Sprok and the agreements resulting from it.

In order to understand the different variables and dimensions presented in figure 2, a further elaboration of the model is needed to understand why and how certain factors of the theoretical concepts are used in this research.

3.4.1 Factors around the system context

The interconnectedness of the different variables are context specific, since the system context can create opportunities and constraints that influence the system context. By identifying the drivers and analysing the collaborative dynamics, it is important to take into account the system context. This covers the contextual layers of political, legal, socioeconomic, environmental and other influences. According to Emerson et al., (2011), it can create opportunities and constraints that influence the integration of linking opportunities resulting from the collaborative dynamics. Since the drivers and the collaborative dynamics are context specific, similar dike reinforcement of that from Wolferen-Sprok will differ due to the different contextual layers of political, legal, socioeconomic, environmental and other influences of the system context (Emerson et al., 2011). Hereby the indicator EIA is mainly used for identifying linking opportunities and references to spatial quality. The indicators Water Visions & Framework Water are used for references to spatial quality and specifically mentions of linking opportunities.

3.4.2 Factors around the drivers

The variable 'drivers' is a more narrow perception of the system context and includes leadership, consequential incentives, interdependence, and uncertainty. Drivers are seen as the direct cause of a successful collaboration (Emerson et al., 2011). The variables concerning the drivers are mostly applied to governmental water management sites, such as Rijkswaterstaat, HWBP, and water board Rivierenland. Furthermore, decision-making documents are used, such as the water management program of the HWBP 2022 – 2027, spatial quality framework Wolferen-Sprok, EIA, and the integral research onto the preferred alternative Wolferen-Sprok.

Leadership is a variable that refers to the actor who is in the position to initiate and secure resources and support for the collaboration (Emerson et al., 2011). Since it is apparent in dike reinforcement projects who takes up the leadership role, as the waterboard Rivierenland is in the lead in this case, this factor is further explored in the collaborative dynamics. However, in decision-making documents and government sites, there is a focus on what role the different stakeholders play concerning leadership.

The variable consequential incentives refers to the internal and external drivers for collaborative actions (Emerson et al., 2011). This will be measured by indicating which problems, resource needs, interests, opportunities and threats are perceived within the project Wolferen-Sprok. Within the decision-making documents and government sites, there is a focus on what is needed for an optimal implementation of linking opportunities. Furthermore, the various interests, opportunities and threats are based on the documents and complemented with interviews from experts and initiators of linking opportunities.

The driver interdependence refers to the extent to which stakeholders have to collaborate in order to achieve something (Emerson et al., 2011). The perceived dependence of actors on each other is thus measured and is determined by the interviews, in which the experts and stakeholders describe the extent of their dependence on each other.

The variable uncertainty can be a result of interdependency, as uncertainty results in the need for actors to collaborate (Emerson et al., 2011). The extent of uncertainty within the project is measured through interviews. These determine to what extent the stakeholders feel uncertain with the implementation of linking opportunities and what is the cause of this uncertainty. Furthermore, the interviews determine whether the stakeholders had existing or expressed needs to reduce, diffuse, and share risk.

3.4.3 Factors around the collaborative dynamics: principled engagement, shared motivation and capacity of joint action

Principled engagement

It is important within principled engagement to know who the stakeholders are and who they represent. A general agreement in practice is that getting the right people to the table is important to achieve more thoughtful decisions. Therefore, the research includes who is involved with the project. This is based on the EIA in which the various linking opportunities are described and the initiator involved. In addition, the linking opportunities 'Hospitable Waaldijk' and 'Buildable Dike' are further explored, providing a clear picture of the ambitions of these initiators. Furthermore, the example of the linking opportunities allows the thorough exploration of the engagement between the initiators and the water board. The interviews are based on the indicators of the dimensions discovery, definition, deliberation and determination, in the interviews. The indicators are able to get a clear picture of the collaboration process.

The variable discovery refers to the different interests, concerns and values of the stakeholders of the project Wolferen-Sprok, as well as identifying the relevant information with its implications (Emerson et al., 2011). This variable thus determines which interests, concerns and values were present within this specific project. Furthermore, the research focusses on the frequency of the meetings and the extent in which the relevant information has been discussed. The way in which this information has been identified and analysed, is also included by the information provided by the EIA and interviews.

Definition, Stated by Emerson et al. (2011), focusses on the effort to build shared meaning. According to Emerson et al. (2011), this can be done by describing and discussing problems and opportunities. This can be determined by articulating common purposes and objectives; agreeing on the concepts and terminology participants use to describe and discuss problems and opportunities; clarifying and adjusting tasks and expectations of one another; and setting forth shared criteria with which to assess information and alternatives. In this research, interviews are able to provide the information concerning the various objectives, tasks and expectations of one another. The shared criteria can be gathered through decision-making documents of the project of Wolferen-Sprok, together with the interviews.

Deliberation refers to the quality of the conversations held in the collaborative process. These conversations are influenced by the extent in which the stakeholders possessed the necessary skills for a successful implementation of linking opportunities. The skills used for these conversations are influencing the quality of the conversation and the effectiveness of conflict resolution strategies and interventions. Thoughtful examination in meetings is important in order to represent the common good (Emerson et al., 2011). It is therefore important to measure the effectiveness of the conflict resolution strategies by determining whether a developed understanding has been reached. This can be done through interviews, which are able to explore whether this was the case, together with the reasoning behind it. Furthermore, interviews can explore whether the stakeholders thought the project represented the common good in relation to the linking opportunities.

Determination covers all the procedural decisions and substantive determinations. The decisions made by the stakeholders is therefore included, as they are often the outputs of conflict resolutions (Emerson et al., 2011). These can be derived from the decision-making documents and complemented by data gathered from the interviews. The interviews enable a more detailed description on the reasoning around decisions made within the project.

Shared motivation

The variable shared motivation emphasizes the interpersonal and relational elements within the collaborative dynamics (Emerson et al., 2011). The elements mutual trust, understanding, internal legitimacy, and commitment are considered important within this variable.

Mutual trust is a process that happens over time and grows when parties get to know each other. They hereby prove to each other that they are reasonable, predictable and dependable (Fisher and Brown, 1989). In addition, trust enables stakeholders to cross personal, institutional and jurisdictional borders and understand different needs, values and constraints. The perception on this matter is therefore measured through interviews, which focus on the matter of trust and its effect on the collaboration.

Mutual understanding is the ability to understand and respect each others' positions and interests, even when disagreeing. This is measured by the perceived ability to understand and respect other's position and interests. This is determined through interviews that focus on whether the interviewees felt understood and/or the extent they were able to understand the position of other stakeholders.

Internal legitimacy is seen as the confirmation that participants are trustworthy and credible. Legitimacy arises when it is combined with compatible and interdependent interests (Provan and Milward, 1995). The perception on the extent the interests were compatible and interdependent is therefore measured, together with the variables 'perceived ambition' and 'perceived power imbalance'. This is done through interviews, that focus on the compatibility and interdependency of initiatives and its effect. In addition, the various ambitions are questioned in the interviews and the perceived power imbalance, together with the effect the variables may have.

The variable commitment is seen as a key factor in the collaborative process where stakeholders commit to a shared path. It enables participants to cross organizational, sectoral and/or jurisdictional boundaries (Emerson et al., 2011). The extent in which this has been done in the project can be measured using the data gathered from the interviews. The interviews include whether the interviewees were committed to the shared path, and whether they thought other stakeholders were committed. The effect this has on the implementation of linking opportunities is also explored through the interviews.

Capacity for joint action

The variable capacity of joint action can be seen as the coordinated effort of the various stakeholder to achieve a common purpose, in this case achieving agreements concerning linking opportunities. Together with the variable principled engagement and shared motivation, it forms a continuous cycle wherein capacity of joint action is seen as the outcome of the cycle. This variable involves the deliberate and strategic alignment of activities, gathering resources and achieving objectives needed to achieve the eventual shared outcome (Emerson et al., 2011). It involves the variables: procedural and institutional arrangements; (facilitative) leadership; knowledge; and resources. The data is gathered through a combination of decision-making documents and interviews.

Procedural and institutional arrangements covers the process protocols and organizational structures that are needed to manage the collaboration (Emerson et al., 2011). These procedural and institutional arrangements will be measured by establishing the relevant formal and informal rules and protocols, and the organizational structures. The data is mainly gathered using the governmental website of the HWBP and the water board Rivierenland, but is complemented with the interviews from experts and the stakeholders. The interviews are able to offer a greater insight into the effect the formal and informal rules/protocols and organisational structures have on the implementation of linking opportunities.

The variable (facilitative) leadership guides the collaborative effort by facilitating communication, resolving conflicts and maintaining the momentum of joint action (Emerson et al.,

2011). It is therefore measured through the perceived ability of the stakeholder in the lead to empower actors, build consensus, build trust and involve other stakeholders. It is in addition measured by measuring the perceived support from the leader for the linking opportunity, whether the leader was able to initiate and secure resources, whether there was opted for multiple solutions, and the perceived commitment. The data on these indicators are gathered through interviews, where there is a focus on the extent in which there was a leadership role present in the collaboration and which effect the indicators had on the implementation of linking opportunities.

Knowledge can be seen as the currency of collaboration, this variable includes the understanding of the linking opportunity and capability to execute it successfully. Knowledge has the ability to guide action and has to be weighed, processed, and integrated with the values and judgment of the participants (Emerson et al., 2011). Through interviews, the perceived social capital of shared knowledge is measured by determining the perceived expertise in the project and its effect on the implementation of linking opportunities.

Resources include financial and material resources, however it can also entail power dynamics as resources can be undistributed unevenly across the stakeholders (Emerson et al., 2011). The perceived power imbalance, time, liberty and financial simulations are relevant resources for the project of Wolferen-Sprok and is therefore measured using data gathered from the interviews. Furthermore, there is a focus in the interviews on how the resources were gathered and which effect this had on the implementation of linking opportunities.

3.4.4 Factors around collaborative action

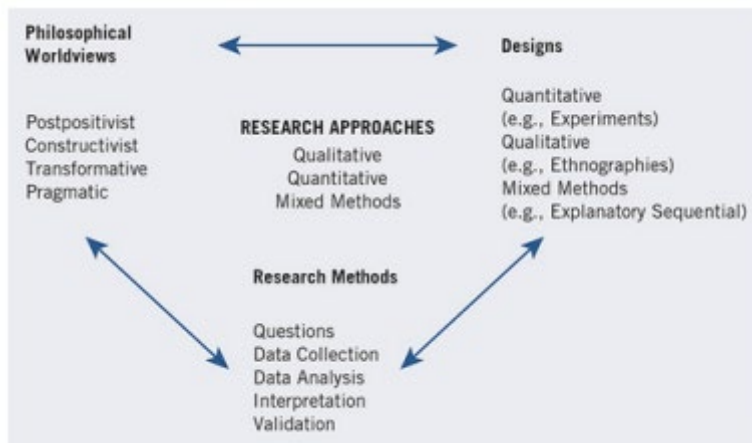
Collaborative action is the steps taken in order to implement the shared purpose. It can be seen as the outcome of the collaborative process (Emerson et al., 2011). This is measured by determining the numbers of integrated opportunities included in the preferred alternative using the EIA, in which the various linking opportunities of the project Wolferen-Sprok have been described.

4 Methodology

The research approach covers the plans and procedures for the research, going from broad assumptions to detailed methods of data collection, analysis and interpretation. The decision-making process of this research can be explained by the approach that is used to study the research topic. This should include the philosophical assumptions of the researcher, the research design, the research methods of data collection, analysis and interpretation. This selection is based on the research problem (Creswell, 1994), in this case looking and to what extent collaborative governance enables the optimal integration of linking opportunities in the preferred alternative of Wolferen-Sprok.

4.1 Research philosophy

It is important to consider the researcher's philosophical worldview in planning a study, for the assumptions that may be included within this study. The research design is related to this worldview, and the specific methods or procedures that follow the approach into practice (Creswell & Creswell, 2023).



The worldview can be described as the principles that guide action. The term worldview is chosen for its global perspective and is used as a general philosophical orientation about the world and the nature of this research. Hereby, Creswell & Creswell distinguishes four worldviews: postpositivism, transformative, pragmatism, and constructivism. A postpositivism worldview is often used in more quantitative research types, for it studies the causes that influence the outcomes as found in experiments. A transformative worldview focusses on an action agenda for reform, that influences the participants live. This worldview that the research is intertwined with politics and a political agenda. The pragmatic worldview arises out of actions, situations, and consequences and emphasizes on the research problem and questions. It uses all approaches available to understand the problem and is therefore a mix between qualitative and quantitative methods. Lastly, constructivism focusses on the subjective meaning of the experience of individuals, directed toward certain objects or things. This worldview is the view the research applied, for it is important to explore the subjective meaning of the individual stakeholders in the collaborative dynamics in the project of Wolferen-Sprok. Each actor has another perception on the collaboration, as their own world view differs from each other. The actors interact in their own way in the collaboration and shape it by doing so. The subjective reality of these actors is thus important to understand the general collaborative dynamics and the motives, actions, and intentions behind it. The worldview of the stakeholders is based on the historical and social perspectives, where meaning is bestowed upon

us by our culture. The researcher is part of the research, as the interpretation in which the data is analysed, is shaped by the researcher's own experiences and background.

4.2 Research approach

The approach in a research is qualitative, meaning that it uses words rather than numbers, for numbers are commonly used in quantitative studies. This research, as is typical for a qualitative study, will be conducted in the form of a case study. This is done through the case of the dike reinforcement project of Wolferen-Sprok. A case study can offer an in depth study of the governance process, gaining specific information about the case. The approach is thus fully qualitative, using data from the interviews and policy documents to gain information for the research. Qualitative research is an approach that explores and understands the meaning individuals or groups can give to a problem. A qualitative research aims to explore and understand the meaning of individuals or groups to a social or human problem (Creswell & Creswell, 2023).

The aim of this research is to achieve an understanding of linking opportunities and to what extent collaborative governance can influence this. The research thus has an inductive style, focussing on the individual meaning and hereby portraying the complexity of the situation and the importance of it. The data is typically collected in the participant's setting and the analysis build from particular to more general themes. Interpretations are gathered around the collected data from the interviews, hereby focussing on individual meaning and the importance of rendering the complexity of the collaborative process of Wolferen-Sprok (Creswell & Creswell, 2023). A deductive approach test theories, builds into a study protections against bias, control for alternative or counterfactual explanations, and seeks to generalize and replicate findings. This is often done in a more quantitative research, there is however no rigid division between deduction and induction (Creswell & Creswell, 2023). In this case, there is a clear conceptual framework formulated and used to collect and analyse the data, which fits into the category of a deductive research. The variables are operationalised as to measure and research the variables, mentioned in chapter 3. It is not the aim to generalise the data within the research, as it uses a qualitative approach by carrying out a case study. In addition, this research uses a qualitative approach in the form of a single case study. This means that it is not possible to generalise the data collected for this research.

The research has an inductive style as it aims to understand the individual meaning of a complex situation. However, as the research uses a theoretical starting point it falls within a deductive research. As this research describes the experiences of the individual about a phenomenon, this research can be described as a phenomenological research (Creswell & Creswell, 2023). A phenomenological approach is an essential aspect of human science to contribute to scientific theories. As this approach aims at understanding and acknowledging phenomenology, it is in line with the aim of this research to discover the social phenomena, and thus the collaborative governance of the project Wolferen-Sprok (Neubauer et al., 2019).

4.3 Research Design

The aim of a research design is to create a plan and avoid a situation in which the evidence does not address the research questions. Components of a research design are therefore the questions; the possible propositions; the case; the logic linking of the data to the propositions; and the criteria for interpreting the findings (Yin, 2017). Data will be gathered through an in depth case study, as interviews are often the primary manner to gather information in a phenomenological approach. Case studies are a design of inquiry found in many fields, especially evaluation, in which the researcher develops an in-depth analysis of a case, often a program, event, activity, process, or one or more individuals. Cases are bounded by time and place (or setting), and researchers collect detailed

information using a variety of data collection procedures over a sustained period of time (Stake, 1995; Yin, 2009, 2012, 2014). This research will consist of a single case, as it fits the aim of the research to study the phenomenon of the collaboration around linking opportunities. A single case is most fitting as it enables to explore the collaboration governance framework of Emerson et al. (2011) and explore new connections in a careful way, creating a deeper understanding of the subject (Dyer & Wilkins, 1991). As is often the case in case studies, questions should capture the how and why of a process, as is the aim of the research question chosen within this research (Yin, 2017). A proposition in this research is the use of the theoretical framework, of which the collaborative variables are derived from, and which has been proposition to form a sufficient picture of what a collaboration entails. In addition, it will be assumed that the collaborative governance influence linking opportunities in any way. The research will be designed with an embedded design, including different organisations (Yin, 2014), such as the waterboard Rivierenland, the HWBP, and individual initiators. Furthermore, the research will be in accordance with the conceptual model, structuring the data on the hand of the variables. This design makes sure the collected data answers the research questions in a clear manner.

4.3 Case selection

The dike Wolferen Sprok is located in the river area of the Netherlands and is chosen as a reference case, for it has a remarkable difference between urban and dynamic surroundings around the student city Nijmegen and the quiet and sheltered character of Oosterhout and Loenen (Waterschap Rivierenland, 2020). The case study concerns the dike reinforcement case of Wolferen-Sprok. The area has a big water safety task and has previously been part of the program: Room for the River. As the HWBP is the current program to ensure water safety in the Netherlands, it was required for the case to be part of this program. In addition, water board Rivierenland has taken up a third of the tasks within this program, making them one of the biggest stakeholders within the organisation (Franssen & Struckman, 2017). As the area of Wolferen-Sprok is in a unique position, having rich historic and spatial elements, currently part of the HWBP program, and carried out by the water board Rivierenland, this case would be a good representative for this research. Furthermore, linking opportunities are not part of the main task of the water board Rivierenland. This makes it an interesting case to explore the extent in which there is room for the implementation of linking opportunities. The dike reinforcement of Wolferen-Sprok has various visions and ideas to include, such as the 'Hospitable Dike' and the 'Buildable Dike', which require an extensive collaborative process. Furthermore, it was necessary for the case to be completed in order to get a full overview of the collaboration that has taken place. As the project is just finished, it was possible to obtain an extensive amount of data through interviews since the information was not yet forgotten. Therefore, interviewees were able to elaborately explain the collaborative dynamics within this project.

4.4 Data collection

In this research, multiple data collection strategies are used in the form of interviews and gathering policy documents.

4.4.1 Interviews

Interviews were conducted with experts and professionals working on the HWBP project of Wolferen-Sprok and stakeholders active in the participation process. This research used a purposefully sample methods, wherein the researcher searched actively for individuals who will best help them understand the research problem and the research questions. In addition, interviewees were obtained via a snowballing method, wherein the participant give a recommendation of other

potential interviewees (Creswell & Creswell, 2023). The interviews were semi-structured, which allowed the interviewees to elaborate on relevant topics. In addition, semi-structured interviews made sure the necessary data was obtained, in which there was room to add question or elaborate if necessary. The questions were directly derived from the variables mentioned in the operational framework in chapter 3. The interviews helped to gain knowledge about the collaborative dynamics and information that was not available to obtain through scientific literature or in decision-making documents. The interviews were held with active stakeholders in the HWBP project of Wolferen-Sprok, included the municipality of Nijmegen, who were in charge of the linking opportunity of the 'Buildable Dike', or the municipality of Overbetuwe who were in charge of the linking opportunity the 'Hospitable Dike'. In addition, stakeholders from the water board Rivierenland were included, such as the Environmental manager of Wolferen-Sprok and the contractor, hereby creating a sufficient picture of the collaborative dynamics of the project. Furthermore, experts and professionals such as the Senior Advisor Water and Environment Union of Water Boards, and the Climate advisor of the HWBP, provided additional information about the system in which the case of Wolferen-Sprok took place. In figure 3, an overview of the interviewees has been made.

The interviews lasted an hour each and had as goal to gain knowledge about the collaborative dynamics and additional information to the decision-making documents. Interviewees were made aware of the consent form at the beginning of the interview, wherein the interviewees signed a consent form in agreement with the recordings and use of the data. Interview guides were often adapted to the interviewees role in the collaboration and the knowledge that was gathered from previous interviews and new sources of information. The interview guides are provided in appendix 1.

Function	Institution	Interview date	Length recording
Environmental manager Wolferen-Sprok	Waterboard Rivierenland	07-05-2024	1:15
Contractor Wolferen-Srpok	De Betuwse waard (GMB)	24-05-2024	0:55
Area developer Buildable dike	Municipality Nijmegen	03-06-2024	0:45
Project leader Hospitable dike	Municipality Overbetuwe	05-06-2024	0:45
Senior advisor water and environment	Union of Water Boards	09-06-2024	1:15
Climate advisor	HWBP	21-06-2024	1:10

Figure 3 Interviewees and their functions, institutions and date of interviews. The fourth column shows the length of the recording, excluding off-record conversations.

Policy documents

Policy documents can add to the view of the stakeholders and add concrete information about the decision-making and frameworks in which the case of Wolferen-Sprok takes place. The policy documents that were used, included:

- Projectplan Waterwet Dijkversterking Wolferen-Sprok
- Integrale scopebepaling waterveiligheidsopgaven
- Watervisie 2050
- Programmaplan HWBP 2019-2023
- Waterbeheerprogramma 2022-2027

The aim with the documents was to gather data about procedural and institutional arrangements and the ambitions of the HWBP and the water board Rivierenland. These documents helped to determine to what extent attention was given to linking opportunities and what role the organisations had in the success of the opportunities. Furthermore, decision-making documents were collected to see what has been done on linking opportunities in the project of Wolferen-Sprok. These documents included:

- Integrale verkenning Dijkversterking Wolferen-Sprok en Dijkteruglegging Oosterhout
- Milieueffectrapport - verkenningsfase (fase 1)
- Belevingswaardenonderzoek Wolferen-Sprok
- Ruimtelijk kwaliteitskader Wolferen-Sprok
- Goedkeuringsbesluit dijkversterking Wolferen-Sprok
- Samenvatting MER fase 2 - Dijkversterking Wolferen-Sprok

Together, the documents formed the basis to which the information surrounding the collaboration added, creating a full picture of the system context, the drivers of linking opportunities, and the collaborative dynamics. Each document has been analysed as is described in chapter 3.

4.5 Data Analysis

After the data has been collected, it is analysed using Atlas.ti. This software allows coding the interview transcripts and documents used in this research.

The interviews and documents are analysed using a deductive approach to coding. This means that the interviews and documents were coded through an existing research framework (Atlas.ti, 2024), namely the framework of Emerson et al (2011). The set of predefined codes based on the research framework were applied to the documents gathered, in which words, sentences and paragraphs were coded using the variables provided by the conceptual model. While coding the text, the researcher kept the research questions in mind. Additional codes were added in addition to the predefined variables of the conceptual model. The research is thus guided by the theoretical framework, which helped to organize the analysis and point to relevant contextual conditions as well as explanations around relevant data (Yin, 2017).

Next, the data is analytically coded, which includes categorising the codes and distinguishing the important information to the additional information. So were overlapping codes combined to create a clear list of the relevant data (Atlas.ti, 2024). However, many of the predefined codes were used, as much of the collected data fitted well into the framework provided by Emerson et al. (2011). If necessary, a network could be created with the data to create a clear picture of the information gathered. By analytically coding, the possible opportunities and pitfalls were made clear. As the research took over the structure of the conceptual model, and the variables were sorted beforehand, the data required little sorting.

4.6 Research validation and ethics

As is presented by Yin (2014), there are four tests common in social science methods to test the validity and reliability of a research. The first test concerns construct validity, which identifies whether the correct operational measures for the concepts are being studied. Secondly, internal validity is often tested in explanatory or causal studies. However, this research has a descriptive style and is thus not seeking to establish any causal relationships, resulting in this concept not being tested within this research. Thirdly, external validity tests whether and how a case study's findings can be generalized. Lastly, the reliability demonstrates the operations of a study, such as the data collection procedures, and whether they can be repeated resulting in the same results (Yin, 2014).

The criteria for construct validity is to define the specific concepts and to identify operational measures that match the concepts. This research insures that by having a clear theoretical framework and operationalisation as starting point. From this framework, operational measures are derived, hereby lowering the chance of bias from the researcher. It is clearly defined what is understood with linking opportunities and what is understood with the optimal implementation of linking opportunities. Furthermore, different forms of data collection are used from different sources. These are compared and combined, and clearly and transparently documented. These steps increase the construct validity within this research.

Furthermore, external validity tests whether the findings of the research can be applied beyond the current study (Yin, 2014). However, it is not the aim of this research to be generalizable to all HWBP projects. This research aims to derive lessons from this particular setting that could possibly be applicable to a more generalising extent. This research thus does not strive for external validity and the results will therefore not produce a theory that will be generalisable to other cases.

Lastly, reliability has as goal to minimize the errors and biases in a study. It focusses on the extent to which research findings remain the same if it is replicated by a later researcher. However, this will rarely occur in case studies, since they are bound by time and place (Yin, 2014). Therefore, the general need is to document the procedures of the research. Other factors to ensure the reliability of the research, is the time of conducting the questionnaire. Friday afternoons can for instance give different results than a Monday morning, as the enthusiasm of the interviewee can differ in time (Yin, 2014). Therefore, many options have been given to the interviewees to determine the date, ensuring a time in which both parties are comfortable in the interview. Furthermore, there can be an observer error in which different insights about the data can be perceived (Yin, 2014). Therefore, the interpretations of the data can be checked by the interviewees, in which they have signed a consent form in agreement with the analysis and use of the data gathered by the interview.

5 Findings

5.1 System context

The system context, consisting of legal frameworks, the historical context, and special influences, outlines the context in which the collaboration takes place. It entails the challenges faced by water boards and the characteristics of the dike at Wolferen-Sprok. These legal frameworks, historic and spatial are often the basis, or even drivers, for linking opportunities (Environmental manager Wolferen-Sprok, 2024).

The upcoming years, major challenges will be faced by the water boards that need to be solved in a sustainable way, as is stated in the Bestuursakkoord water (2011). The government, together with the Association of Dutch Municipalities, the Interprovincial Consultation, the Union of Water Boards and the Association of Water companies in het Netherlands, have concluded the Administrative Agreement on Water in 2011. This agreement is still used by the HWBP to set up their goals. Hereby, agreements were made between the organisations aimed to increase the effectiveness of water management. This required investments, both short and long term, in the field of safety against flooding, good freshwater supply, urban water management, the water chain, and improving the water quality in accordance with the European Water Framework Directive (Rijkwaterstaat, 2011).

It is determined that the Waal dike between Wolferen-Sprok does not comply with the legal requirements standards for high water safety. This means that the dike is too low in parts and not stable enough for future requirements (Soepboer, 2020). A dike reinforcement is increasingly part of a broader area development and combined with linking opportunities. This broader area development concerns the values of an area, for different interests are met. The broader area development has to be done within the legal framework of the HWBP. All water boards and Rijkwaterstaat pay 50 percent of the total dike reinforcement task, called 'dike account'. This contains the total HWBP budget. As is laid down in law, water boards can receive a subsidy from the HWBP for 90 percent of the estimated project costs for regular dike reinforcement measures. The other 10 percent is a project related contribution from the water board. Water boards are fully responsible to pay for innovations themselves (Rijkwaterstaat, 2023).

According to the agreements made in the Bestuursakkoord water (2011), fewer resources are available. The government, as decentralised authorities, have targets to deal with less resources to carry out the tasks, requiring a more efficient approach for water management. This approach aimed at achieving good quality at lower costs and less administrative burden by working sober and efficient. Necessary investments should hereby not lead to a sharp increase in local costs for citizens and companies (Rijkwaterstaat, 2023).

The dike Wolferen-Sprok is located in the river area of the Netherlands and is chosen as a reference case for it has a remarkable difference between urban and dynamic surroundings around the student city Nijmegen and the quiet and sheltered character of Oosterhout and Loenen. The dike is located in an area that is subject to urban growth around Nijmegen, landscape development of the municipality of Overbetuwe, nature development in the floodplains, and measures that create more room for the river. It is an area in which these various developments have to be taken into account, in which the dike reinforcement project can play an important role. Aside for the prevention of flooding, the dike has to connect access roads for local traffic, a recreational cycling and walking route, inner and outer dike functions and a connection between different landscapes and places. The river is characterised by it's panorama view and has the dike great historical and natural value, where relics of old dike breaches and drowned villages are found (Franssen & Struckman, 2017). Part of the dike is connected to the northern boundary of the Natura 2000 area 'Rijntakken', which is also part of the Green Development Zone and the Gelders Nature Network. Landgoed Loenen, Landgoed Oosterhout and the area north of Sprok, have been designated as valuable nature reserves. The Loensche area

was redesigned for nature and recreation at the end of 2014, where more attention has been paid to improve spatial quality. In 2015 Oosterhout's values were designed for nature development (De Bruin & Van Driel, 2022). The dike reinforcement between Wolferen and Sprok consists of three subareas: Slijk-Ewijk which consist of the hamlet of Wolferen, Loenensche Buitenpolder and the village of Slijk-Ewijk; Oosterhout which consist of Buitenplaats Oosterhout till the campsite 'De Grote Altena'; and Lent which consist a part of Sprok and the hamlet Lent on the westside of the crossing (Waterschap Rivierenland, 2020).

5.2 Drivers

Strengthening the dike offers opportunities to realize other area tasks simultaneously. These can be initiatives by both the waterboard, as well as other parties. It is next to water safety and integration tasks important for a dike reinforcement to include the area tasks. The water board has to consider which linking opportunities can be included in the water safety task and whether it provides additional value (De Bruin & Van Driel, 2022). Drivers, such as threats, perceived dependence, insecurities, expressed need to reduce, diffuse, and share risks, are needed for the creation of linking opportunities. The final choice that decides whether an opportunity is fit to link with the dike reinforcement, follows from an estimate of financing, admissibility, planning, feasibility, support in the environment and support from administrators (De Bruin & Van Driel, 2022).

5.2.1 Perceived opportunities in the case of Wolferen-Sprok

The water board Rivierenland has actively searched for linking opportunities that could be included in the design. They have established various opportunities that could add social value. For these opportunities, space is offered to third parties to implement their ideas into the dike reinforcement project. In the preparatory phase, the water board Rivierenland has inventoried the opportunities within the region. This resulted in a number of linking opportunities to be integrated into the assignment (De Bruin & Van Driel, 2022).

Gastvrije Waaldijk

The ANWB has initiated the linking opportunity: the Gastvrije [Hospitable] Waaldijk in collaboration with the water board and the municipalities involved. The opportunity includes a new road design for the northern Waaldijk between Gorinchem and Nijmegen. This consists of a basic profile and focal points (recreational nodes). The municipality of Overbetuwe designated nine locations as junctions. The new road design responds to further development of recreational and tourist functions of the dike. In addition, the design allows the space required for the road design. The available space for the focal points is determined within the project of Wolferen-Sprok (Soepboer, 2020).

Flowery dikes

Staatsbosbeheer and the water board wanted to realize flowery dikes on the Waaldijk between Wolferen and Sprok, creating a linking opportunity. After completion of the dike reinforcement, when the dike had sufficiently strengthened, the water board switched to development management of the dike vegetation (Soepboer, 2020).

Installing fiber optic cables

Two private individuals wished to have a fibre optic cable route installed simultaneously with work on the dike. However, there lacked a clear initiator to manage this linking opportunity. Installing a fibre optic cable network was thus not included in the design (Soepboer, 2020).

Parking spaces at Sprok and relocation of catering establishments

The municipalities Lingewaard and Nijmegen recognized that parking was a challenge on the dike of Sprok. They saw an integrated task in which parking, catering and (recreational) facilities between the Spiegelwaal and Lingezege park are viewed together so that spatial quality can be improved. The linking opportunity could possibly reconstruct the catering industry at Sprok, which has been analysed. However, the construction permit could not be obtained and the procedure took longer than the Water Act project plan. There was thus too much uncertainty to include this possibility into the design (Soepboer, 2020).

Dike crossing of large grazers Sprok

ARK nature development and Staatsbosbeheer wanted to allow the large grazers that maintain the nature reserves and floodplains, to pass near Fort Lent towards Lent. This linking opportunity is related to the reconstruction of the catering industry at Sprok. Without this linking opportunity, there

was no room for a dike crossing for large grazers. Because the reconstruction of Sprok is not included in the design, the dike crossing is also not included in the design.

Housing location De Stelt Oost

The municipality of Nijmegen is developing the De Stelt Oost residential area on dike section 4. The residential area is part of the cooperation agreement between the municipality and the water board. The design was created in close consultation between the municipality and the water board. Housing construction takes place outside the free space profile. The water board is therefore cooperating in constructing the relevant part of the dike (the inner dike verge) in anticipation of the dike reinforcement on the basis of a water permit. This is recorded in a realization agreement. The water board has a cooperation agreement with the municipality of Nijmegen. The design is in line with this, creating another linking opportunity (Soepboer, 2020).

Housing De Stelt Zuid

Strengthening the dike at De Stelt Zuid has a great deal in common with housing construction. There is a combined dike design that was created in close consultation between the municipality and the water board. The water board has a realization agreement with the municipality of Nijmegen, which includes attention to the transition of De Stelt Zuid and dike section 4. This is part of the autonomous development, not of the design and is thus not a linking opportunity (Soepboer,2020).

Housing Dike zone (Hof van Holland/Woenderskamp)

The municipality of Nijmegen wanted to create residential areas near and on the dike in the area between the dike and the already designated residential areas Hof van Holland and Woenderskamp. Strengthening the dike had thus a great deal in common with housing construction there, as the projects overlapped. The design of the so-called 'Buildable Dike' was therefore drawn up in close consultation between the municipality and the water board. The water board wanted to cooperate in constructing the relevant part of the dike (the inner dike slope) in anticipation of the dike reinforcement, but also included the design of a minimal berm as a backup in this dike reinforcement. The water board has a cooperation agreement with the municipality of Nijmegen regarding the realization of the buildable dike. This agreement was included into the dike reinforcement design and thus created a linking opportunity (Soepboer, 2020).

Oosterhout Country Estate

The line of sight from the dike to the back of the country estate, was interrupted during the previous dike reinforcement. The owner of the estate wishes to restore the view to the landscape. The possible linking opportunity aimed to widen the dike structure so that trees can return to their original width. In the plan elaboration, a sheet pile wall was chosen here, so that this linking opportunity is outside the plan area and is not included in the design (Soepboer, 2020).

Housing Hoge Wei

This opportunity concerned an autonomous housing development. The measures were located at some distance from the dike and therefore do not form major interfaces for the dike reinforcement. Small connection opportunities, such as exits and cycle paths, were inventoried. However, no concrete linking opportunities have been inventoried. During the dike reinforcement, the housing plans already had been realized (Soepboer, 2020).

De Danenberg Landscape Park

The Landscape park 'De Danenberg' is located at some distance from the dike and therefore does not constitute major interfaces for the dike reinforcement. However, small linking opportunities were explored and developed. So were linking opportunities aimed to create additional exits and cycle paths. However, no concrete opportunities were found during the plan development (Soepboer, 2020).

Redevelopment of the Loenense Buitenpolder

The measures taken during the redevelopment of the Loenense Buitenpolder are part of an autonomous development. The foreland improvement took place in 2018-2019. Possible linking opportunities were explored, such as entrance and exit ramps or a parking lot. Research had been conducted into linking the construction of the parking lot. However, this led to objections from local residents, resulting in the linking opportunity to not be included into the design (Soepboer, 2020).

Loenen Estate

Staatsbosbeheer wanted to strengthen the (recreational) connection between the outer polder and the estate with a walking path, making the entrance to the estate more visible by installing a temporary parking lot in the Loenense Buitenpolder project at the entrance to the estate. This was to be realized on the outside of the dike. An entrance and exit on the dike for a walking path were already possible within the destination and do not require to be included into the design (Soepboer, 2020).

Landscape development plan

The municipality of Overbetuwe considers it important to pay special attention to the landscape of the rural area. That is why the Overbetuwe council adopted the Landscape Development Plan (LDP) in September 2010. The main goal of the LDP is to develop a strong cohesion in the landscape. This creates a recognizable landscape with its own identity. The municipality encourages residents, land owners and volunteer organizations to maintain and enhance the quality of the landscape. No concrete opportunities were found during the plan development, resulting in no linking opportunities included in the design (Soepboer, 2020).

Yard plantings

The municipality of Overbetuwe wanted to maintain and enhance the landscape quality of the rural area and increase its natural values. They did this together with residents of the rural area and associations that are active in the landscape. One way to do this is to bring back yard plants. This, however, was not included in the design (Soepboer, 2020).

5.2.2 Drivers

The area in which the waterboard of Rivierenland is in the lead, includes many stakeholders. It is important to quickly establish the degree of dependency in order to establish linking opportunities. Linking opportunities are greatly dependent on the stakeholders involved, especially the waterboard as they are the organisation in the lead of the area. A linking opportunity has to be included in the dike reinforcement project, where good collaboration is important to make the necessary agreements. The water board is dependent on the initiators as well, as linking opportunities are a means to improve the quality of the area, making it an important aspect to consider (Contractor Wolferen-Sprok, 2024; Environmental manager Wolferen-Sprok, 2024).

Linking opportunities arise from initiators in the project area, in which an opportunity presents itself by the activities surrounding the dike reinforcement. By combining different projects, the quality of the environment can improve when done in an efficient manner. This means that there will be less disturbance in the environment by executing activities at the same time (Contractor Wolferen-Sprok, 2024; Environmental Manager Wolferen-Sprok, 2024). It is therefore important for the linking opportunity to be part of the dike reinforcement project for it to link together (Senior advisor water and environment Union of Water Boards, 2024). If it is done effectively, the result can reduce the project costs without delay (Contractor Wolferen-Sprok, 2024; Environmental Manager Wolferen-Sprok, 2024). However, implementing linking opportunities can face many challenges, as its success depends greatly on a clear initiator, where it is necessary for the opportunity to be presented at the right time, with an elaborate plan and in which the finances are in order. In addition, the

collaborative dynamics mentioned in chapter 5.3 influence a successful implementation of the opportunities greatly.

One of the biggest challenges with linking opportunities is determining the initiator of the opportunity. HWBP has tasked people within the waterboard to investigate certain linking opportunities, but without a clear initiator, the linking opportunity will not take place (Environmental manager Wolferen-Sprok, 2024). The presence of an initiator, who has the position of leader, has the ability to initiate and help secure resources, gain support for the opportunity, search for solutions and hereby extent the commitment of the opportunity (Emerson, et al. 2011). Without an initiator, the resources needed are often not gained and will not be included in the design. It is often the case that an opportunity with no clear owner is perceived as a good plan for too long, costing a lot of time and energy along the way (Environmental manager Wolferen-Sprok, 2024). Many opportunities have failed to be implemented for this reason, such as the instalment of the fibre optic cable route as there was no initiator managing the opportunity (Soepboer, 2020).

However, even when there is a clear initiator, the dike reinforcement has a few rules to which the initiator has to abide. So is it important that the schedules between the opportunity and the dike reinforcement project match, meaning that the right information is provided at the right time (Contractor Wolferen-Sprok, 2024; Senior advisor water and environment Union of Water Boards, 2024). Dike reinforcement projects often have a very tight schedule (Climate advisor HWBP, 2024), were initiators often lack the experience on how to organise the opportunity and are not used to follow this schedule. In addition, they are often unaware as to what is expected from them and unaware of the rules they have to abide by according to the Contractor Wolferen-Sprok (2024):

As far as I am concerned, the rules of the game are very clear, but I am always quite busy explaining to the other side how those rules of the game work. And that is true from beginning to end. And that's simply because you are dealing with people who want an end product but don't know how to get there.

It almost expected for the initiator to present their plan concretely almost two years before the dike will be realised. It is therefore important for initiators to present their ideas on time. The Water board has been tasked by the HWBP to make an integral scope at an early stage. When opportunities present itself, it is important to quickly start working out the details, making it therefore easier for the other party to follow the schedule. The environmental managers are often the first to sit down with the initiator to discuss the plans (Climate advisor HWBP, 2024). The environmental manager Wolferen-Sprok adds to this, stating:

So you immediately have to consider whether the opportunity is still on time or if it a passed station. And if it is still in time, you make good agreements right away about: when do you need which decisions to ensure there is still a chance for it to work? And that is essentially what you should focus your energy on, that the moment you say yes to an opportunity you can work it out quite quickly.

This means that the opportunity need to quickly set up a plan, meaning establishing a clear owner of the opportunity, an overview of the finances, and a feasible plan at an early stage so that the dike reinforcement can still take this plan into account in the further elaboration of the project plan. When the opportunity starts too late, they often fail to be included in the project (Climate advisor HWBP, 2024; Contractor Wolferen-Sprok, 2024).

And then it is true that a dike reinforcement is very tightly planned, has a very clear timetable with the target of then and then are we done. If the other party cannot arrange its money or its decisions

in time, the water board has to say at a certain point that they have to pay. If they don't then the water board can't include the opportunity. That is often the bottleneck (Climate advisor HWBP, 2024).

Furthermore, initiators often have last moment changes that are not able to be implemented anymore, or causing much uncertainty and thereby decreasing the quality of the opportunity (Climate advisor HWBP, 2024; Contractor Wolferen-Sprok, 2024). Linking opportunities can be very uncertain, as it is often difficult to prepare for them. Uncertainty is an important driver, as much uncertainty will affect the successful implementation of linking opportunities. The first uncertainty is that the EIA only describes the opportunities in a couple of short sentences, making the meaning of the opportunity difficult to understand for the executor (Contractor Wolferen-Sprok, 2024). Furthermore, challenges can appear unexpected. It is always the question whether linking opportunities are financially working out as is initially thought. The risks of linking opportunities are smaller if the plan is concrete in time. However, it is often unclear how the project will develop at an early stage, making it difficult to concretely plan the opportunities and establishing the finances in time (Environmental manager Wolferen-Sprok, 2024). In addition, the division of tasks are often unclear in this stage too. There can be uncertainty about who has to come up with the plan or how the costs will be divided. Furthermore, an opportunity can always entail unexpected risks, so can there be objections from the environment or there can be pollution in the ground, as is seen in the opportunity 'Redevelopment of the Loenense Buitenpolder'. The Climate advisor HWBP (2024) states:

I would like to allow linking opportunities, but the risk means I will soon have to explain to the Council of State why we are creating a nature reserve there. I don't want that, so the project also says, well, then we won't take this linking opportunity into account, because that poses far too many risks. Because our primary goal is to strengthen the dike and that must not be jeopardized.

Concerning the indicator existing or expressed need to reduce, diffuse, and share risk, the water board is not willing to jeopardize the water safety task by implementing linking opportunities, as it costs time, money and energy for the implementation. Linking opportunities require an extensive collaboration with many different stakeholders. It is always the question whether the right people, with the necessary expertise and ambition, are on board to tackle the challenges. Or whether those people are reliable, with the optimal organisational structure to work in. The collaborative dynamics can cause much uncertainty, which will be further elaborated in chapter 5.3. Lastly, linking opportunities are often uncertain because the people that are in the lead, often do not match the needs of the project. Taking therefore a lot of energy to keep the opportunity well managed. According to the contractor Wolferen-Sprok (2024):

But as we build, we see the initiators say: but wait a minute, I didn't mean it that way. Or at the last minute another insight comes along that makes them think that things can still be improved. Or at the last minute the money they need turns out not to be enough because it all turns out to be more expensive. Or there are objections from the environment about this linking opportunity and they had not really taken that into account. And then, for example, I am standing here with the asphalt machine on the dike and then I have to make that road and then that is no longer possible, because we don't know exactly yet.

5.2.3 Linking opportunities implemented in the case of Wolferen-Sprok

Even though many opportunities failed to tackle the challenges and uncertainties that come with the implementation. A few linking opportunities in the project of Wolferen-Sprok did succeed in overcoming this. The following linking opportunities have been included in the design, management and maintenance (De Bruin & Van Driel, 2022):

- 'Hospitable Dike.' The design allows for the space that is required for the road design and rest points;
- 'Flowery dikes.' If the grass surface is sufficiently firm after the dike reinforcement, the manager switches to development management for flowery dikes;
- 'Buildable Dike.' The water board established a cooperation agreement with the municipality of Nijmegen on the realization of a buildable dike.
- 'Loenen Estate.' For the desired improvement of the connection between outer polder and the estate, a new entrance and exit are taken into account over the dike for a new walking path.

Further explored are the linking opportunities 'Hospitable Dike' and 'Buildable Dike'. The Hospitable Dike is hereby an opportunity concerning multiple dike area's, including Wolferen-Sprok. The company ANWB initiated the opportunity to create a 80 kilometres long iconic, attractive, traffic-safe and sustainable (cycling) route that makes the river scene a nice experience, with cultural-historical relics visible on the dike and natural floodplains as a 'river park' for residents in the area (Gedeputeerde staten van Gelderland, 2021). The opportunity did come with a few challenges, as the ANWB had not come up with a concrete plan and did not participate in the execution of the plan. The plan initially had no initiator, but was adopted by the water board Rivierenland with support from the municipalities and province (Gedeputeerde staten van Gelderland, 2021). Creating a concrete plan was the largest obstacle, as the finances of the project appeared more expensive than initially thought (Municipality Overbetuwe, 2024). It was hard to create a common goal, as every municipality had their own demands. In addition, the main problem that arose was including citizens into the design, as people are disturbed by the work near their houses and wanted to participate with the project. Furthermore, many local measures had to be appointed, so needed parts of the dike and bicycle routes renovation and was a part of the division of the boulevard to be expanded. Ultimately, the plan came with disagreements about the finances. However, even though this plan came with many challenges and uncertainties, the opportunity was able to be realized through the collaborative dynamics, further elaborated in chapter 5.3, and is eventually seen as a success project in enhancing the spatial quality (Environmental manager Wolferen-Sprok, 2024; Municipality Overbetuwe, 2024).

The Buildable Dike, is an opportunity initiated by the municipality of Nijmegen. The municipality had already planned to build the neighbourhood in the area of the dike reinforcement project, before it was known that the dike had to be reinforced. This created an unique opportunity where the two projects overlapped, but could be combined by making the neighbourhood in the area of the dike. In first instance, the housing project was made impossible as the differences between the projects were difficult to combine. However, the water board and the municipality did manage to come to an agreement and were able to find solutions to the challenges. These challenges concerned a difficult financial conversation, as both projects involved a lot of money. In addition, there were many technical challenges as the dike reinforcement came with many criteria. Houses on the dike can influence the water safety negatively, making the problem difficult to solve. The water board wanted to ensure the dike would still be safe and reliable if combined with the housing project. In addition, the protection zone surrounding the dike made it difficult for the houses to be build, for the protection zone has many criteria in which the area has to abide by. In the surrounding zone, it was for instance not possible to build a basement in the houses, as hollow spaces in the dike are not allowed. Furthermore, there had to be space to spare, as to ensure the possibilities for future

development. Another challenge was that both the municipality and the water board involved many people with different opinions. These many opinions created many discussions, resulting in uncertainty as the agreements made were not always clear. The discussions included searching for solutions for the technical challenges, dividing the tasks and establishing the finances. This took a longer time than initially thought by the municipality Nijmegen. The housing project had a delay due to the discussions, but was still able to fit in the schedule of the project Wolferen-Sprok. Both parties were able to overcome the challenges and uncertainties, as there was a great dependency between the two partners (Municipality Nijmegen, 2024). In addition, the collaborative dynamics contributed to the success of this linking opportunity.

5.3 Collaborative dynamics

The collaborative dynamics distinguishes three categories: principled engagement, shared motivation and the capacity of joint action. Hereby, the engagement between different stakeholders over time is analysed, the interpersonal and relational elements, and the extent in which the collaboration is able to create a desired outcome that could individually not be accomplished (Emerson et al., 2011).

5.3.1 Principled engagement

The goals and ambitions of the stakeholders are an important factor in the success of linking opportunities. It takes effort to implement the opportunity and the extent to which an organisation finds it worthwhile can differ greatly between the stakeholders (Senior advisor water and environment Union of Water Boards, 2024).

The goals and ambitions of the HWBP are extensive and urgent, according to the HWBP (2019). The goal of the HWBP is to reinforce all primary flood defences in a sober and efficient manner by 2050, so that they comply with the legal standards as is laid down in the Water Act. To this end, the following ambitions has been set in the program plan of the HWBP (2019): Increase production to an average of 50 kilometres per year; limit the average costs per kilometre to 7 million euros per kilometre. From these ambitions, the alliance principles are formed (HWBP, 2019).

Alliance partners have jointly developed proposals to achieve further development of the HWBP. A plan was set out within this program to set out their joint vision of the HWBP's approach and describe the new working method. This is based on the HWBP alliance principles that has been established by water boards and the government. The alliance principles, together with the program plan of the HWBP, form the basis for achieving goals and ambitions in the coming years. To optimally perform, the HWBP has as goal for administrators and program management to work more closely together and join forces. By involving each other, organizing the primary processes transparently and efficiently, and seek collaboration on themes that determine successful projects, the HWBP's programmatic approach can be taken full advantage of. The collaborative ambitions aimed to realize ambitions in a sober and efficient way, require a close collaboration between the Rijk and the water boards that are in alliance with HWBP. In order to join forces in an efficient way, a shared set of norms and values are needed to give direction and guide the attitude and behaviour of those involved. The following joint values have been identified in the administratively established alliance principles from which all parties work (HWBP, 2019):

1. Best for Program: the parties act from a collective interest of the alliance as a whole and work together on socially optimal solutions for water safety;
2. Solidarity: the parties jointly contribute to the financing and implementation of the Dutch reinforcement task (regardless of individual interests, the parties are equal and jointly responsible);
3. Clear roles: the parties fulfil different roles in the HWBP (executor, financier, supervisor, framework setter) and sometimes combine them. They are role-oriented in the interests they represent;
4. Transparent: the parties are open to each other, if their individual interests conflict with the collective interests they discuss this;
5. Predictable and surprise-free: the parties make risks and issues open for discussion at an early stage, so that they can be jointly managed and result in carefully made decisions;
6. Reliable: the parties make clear agreements with each other and keep them.

The alliance principles together form the administrative directive of the collaboration within the HWBP, managing and organizing the alliance cooperation (HWBP, 2019).

As is made clear in an interview with the Climate advisor of the HWBP, linking opportunities have a clear criteria. The starting point for the dike reinforcement is that it must be properly integrated into the landscape, meaning that it is not made into a straight-on dike but considers carefully how it can fit in the environment. The old values should remain in the area, but the extent to which this is done is a small grey area. However, beautiful things can already be created by the old values. When extra values are added in the shape of linking opportunities, the initiator is responsible for the management and financing (Climate advisor HWBP, 2024). The HWBP does include sustainability and quality in projects in their goals, provided that it will not harm the main goal of water safety. This goal resulted in the development of the integral scope determination, that is developed to provide a tool for determining the scope for water safety tasks. With this scope is meant: the size of the study area and planning area and clarity about which tasks and ambitions in the area are or are not part of the water safety project. In this way, stakeholders can explore at an early stage of the project how the nature and scope of the flood risk management task relates to the area context (RWS-Ontwerpt, 2020). Even though the HWBP is not responsible for financing the linking opportunity in a project, the HWBP does finance the integral scope approach, meant to see which opportunities are available in the environment or what are possible opportunities in the future. They aid in this way to determine the opportunity earlier, providing better execution and financing of the opportunities (Climate advisor HWBP, 2024). From the project Wolferen-Sprok, the role of the HWBP is clear, they pay for the dike reinforcement and finance the research of linking opportunities. They are therefore not seen as an obstacle in the project of Wolferen-Sprok (Contractor Wolferen-Sprok, 2024; Environmental manager Wolferen-Sprok, 2024). The motto to work in a sober and efficient way is often clear in its meaning: everything that is not aimed at water safety is not subsidized. This does not mean that spatial quality of the project is unimportant. According the Climate advisor of the HWBP (2024):

So we say that it is important that a project tries to increase the added value with linking opportunities, provided that there are no additional costs and do not delay the project.

The HWBP works within legal frameworks, that holds them to what they are able to subsidize. As every cause is connected to a budget, theirs is meant for keeping dikes up to standard and therefore have the opinion that the responsibility lies within the project, initially the environmental manager, and the initiators of linking opportunities (Climate advisor HWBP, 2024; Senior advisor water and environment Union of Water Boards, 2024).

Furthermore, water boards differ in the way they work with the motto. The vision a water board has, plays a big part in the success of linking opportunities. The broader their vision is on their tasks, the faster they actively search for linking opportunities (Senior advisor water and environment Union of Water Boards, 2024).

The starting point for all activities and projects of the water board Rivierenland is formed by the core task to ensure safe dikes and a balanced water system. The emphasis of their water vision thus lies on the protection against water, contribution to the Flood Protection Program. They want to ensure a river area where residents can safely live, work and recreate in a beautiful living environment. In addition, they want to ensure a balanced water system between water supply and drainage, taking into account the different interests of nature, agriculture, recreation, business and residents. Furthermore, they want to ensure good water quality, as it contributes to a good living environment for people, animals and plants. This leads to the core values of the water board Rivierenland: competent, committed and reliable (Waterschap Rivierenland, 2022a).

According to the water board Rivierenland (2022a), competent stands for expertise, skill and craftsmanship. This craftsmanship is established by experiences, specialized and well-trained

employees. Furthermore, competent means knowledgeably searching for new solutions, using the resources available. Committed includes considering the interests of others, working together, keeping up with current developments, and taking the future into account. Lastly, reliable includes being true to your word. The water board Rivierenland aims at doing things right by working via an area-oriented approach. This includes bundling various tasks and place specific solutions (Waterschap Rivierenland, 2022a).

To ensure the aim of water board Rivierenland is achieved, the water board has to have a good organizational design to contribute to the best possible realization of their tasks and serve the customers optimally. The water board therefore emphasizes on a number of principles that guide them towards an optimal task performance and business operations (Waterschap Rivierenland, 2022a). This results in the following principles:

1. **Effective task performance:** Rivierenland focusses on a number of concrete tasks in order to deliver effectively a good quality performance that contribute to a safe and liveable river area. Effective in this case means: an optimal package of measures implemented, with which the desired effects are achieved within the set periods;
2. **Efficient business operations;** Rivierenland aims for the most efficient execution as possible. When setting goals and choosing measures, they consider the costs involved, leading to a safe and liveable river area at the lowest cost;
3. **Sustainability:** Rivierenland aims at achieving the set goals with as minimal impact on the environment, including the climate. It also relates to future orientation. The measures implemented are of sustainable nature so that the objectives of a safe and liveable river area can also be guaranteed for future generations at minimal costs. Flood defences and water systems therefore are aimed to be robustly designed;
4. **Collaboration:** Rivierenland aims at having an open mind about the activities within and outside of the river area. This enables the water board to respond at an early stage to new developments and opportunities for an optimal task performance. In addition, the water board wants to take the interests of other organizations into account in order to realize them. Collaboration also means that the organizational interests of the water board does not stand alone, but is always aligned with the aims of the water board, such as safety against flooding, clean and sufficient ground and surface water and safe roads for good accessibility;
5. **Customer focus:** Rivierenland aims for an optimal service to customers, which do not only include the citizens that requests a specific service, but concerns citizens in general. In addition, they strive for a certain quality level for its customers versus the associated costs. For individual costumers, this concerns the level of service provided, including information distribution and participation;
6. **Legality and reliability:** Rivierenland is a government organization with a number of specific tasks. These tasks are executed within the existing frameworks of provincial, national and European policy. Abiding by the law is a precondition for being a reliable government organization. In addition, acting reliable also means that as an organization you stick to agreements, you pay attention to the interests of others, consider the interests seriously, and establish employees have integrity.
7. **Professional organization:** Rivierenland can only achieve its vision with a professional organization, with responsible and professional employees and managers. This means that the task at hand is carried out with sufficient expertise. In addition, it means that there are adequate facilities (tools, information, housing, etc.) and proper management (leadership, management instruments) provided for the implementation of the tasks.

The main objective of the project is that the Waal dike between Wolferen and Sprok meet the legal standards for high water safety. This creates a protected area against flooding, so that residents

and values behind the dikes will be protected for a longer period of time from the Waal (Soepboer, 2020). The water safety task of the water board Rivierenland is large, as they have many dikes to reinforce in the river area (Senior advisor water and environment Union of Water Boards, 2024). Linking opportunities are not part of their core tasks, resulting in a less active approach to linking opportunities. However, they do have an open mind about the activities within and outside the river area as is stated in their fourth principle (Waterschap Rivierenland, 2022a). This means that linking opportunities have to be actively initiated by the initiators themselves (Contractor Wolferen-Sprok, 2024). However, they do have a policy on the criteria of linking opportunities but primary test for risks to water safety (Environmental manager Wolferen-Sprok, 2024). The initiators have the responsibility over the management of linking opportunities and the financing of it (Waterschap Rivierenland, 2022b). Even though linking opportunities are not part of the core tasks of the water board Rivierenland, having a policy concerning linking opportunities does mean that the water board can respond enthusiastically if a good opportunity is presented. The policy works as a tool on how to deal with opportunities, so discussions internally can be prevented (Environmental manager Wolferen-Sprok, 2024). The environmental management keeps relationships with the environment and stakeholders in balance during the project. Hereby the environmental manager is responsible for the contact with the environment (Ministerie van Infrastructuur en Waterstaat, 2023). In order to tackle the challenges mentioned in chapter 5.2, regular consultations have to take place with the stakeholders (Climate advisor HWBP, 2024), meaning citizens, organisations and authorities relevant for the project. The amount of consultations differs greatly, and have not been determined in the linking opportunities of the 'Hospitable Dike' and the 'Buildable Dike'. The authorities which are relevant for the implementation of linking opportunities, include the province in which the project is active, Rijkswaterstaat, and surrounding municipalities. These consultations will be controlled from the project. The water board informs these authorities about their own work and compare the work of the authorities at an early stage. Resulting from this comparison can be opportunities to combine different projects. The hospitable dike, together with the buildable dike, are example of opportunities that have presented themselves in this way (Environmental manager Wolferen-Sprok, 2024).

Principled engagement in the case of Wolferen-Sprok

The hospitable dike is initiated by the ANWB, but carried out by municipalities and the water board Rivierenland. Initially, the stakeholders did not have a common goal and the opportunity lacked a concrete plan. All parties involved had their own interests, and namely the finances were difficult to sort out. However, after many consultations, the water board took up the lead and the municipalities supported the organisation. This has been done by forming a letter of intent, followed by a cooperation agreement, which eventually created a masterplan. This plan was the basic idea of the road, making it possible to achieve cooperation agreements concerning the finances. However, by progressing gradually more, using the letter of intent and the cooperation agreements, the interests gradually aligned too. The various stakeholders put a lot of energy into getting the provinces, the water board and the municipality on the same page. However, the citizens around the dike had to agree too in order for the project to succeed, which appeared to be a big issue as well. This could be resolved by inviting the various stakeholders for regular meetings, creating support for the plan. When the price of the project had risen and the project dealt with a shortage of staff, the stakeholders resolved this together with the environment (Environmental manager Wolferen-Sprok, 2024; Municipality Overbetuwe, 2024). One of the principles of the HWBP is to work with clear roles and combine them where necessary. Linking opportunities require flexibility in order to work, where combining different roles can be necessary for a successful implementation of linking opportunities. This was also necessary in the case of Wolferen-Sprok, where the contractor took up the role of environmental manager over and managed the communication with the municipality

Overbetuwe. In this case, the ANWB, who was initially responsible for the design and organisation, appeared not to be able to facilitate the opportunity due to a lack of resources. When the opportunity was unavoidable, as many agreements had already been established, the water board tasked the contractor to manage the communication. The contractor agreed and ensured that the rules for linking opportunities were followed and properly understood by the stakeholders. In addition, the contractor was in charge for the division of tasks. This approach ensured that decisions were agreed upon within the schedule of the dike reinforcement project (Contractor Wolferen-Sprok, 2024). This shows that roles can be flexible when a common goal is reached. The cooperation, according to the municipality of Overbetuwe, is found to be a success due to a quick response between the stakeholders and understanding of each other's interests, where the parties knew that a solution to the challenges and uncertainties could be found (Environmental manager Wolferen-Sprok, 2024; Municipality Overbetuwe, 2024).

The buildable dike concerned of a cooperation between the municipality Nijmegen and the dike reinforcement of the water board Rivierenland. There was a lot of criticism, as the concept is new and the projects initially did not match (Environmental manager Wolferen-Sprok, 2024; Municipality Nijmegen, 2024). However, when two projects do not match it can turn out to be an opportunity (Environmental manager Wolferen-Sprok, 2024). Even though there were many challenges between the two project, mentioned in chapter 5.2., a cooperation agreement between the municipality of Nijmegen and the waterboard was reached. This required many consultations about solutions to the technical problems, and the distributions of tasks and finances. The agreement established that the municipality was in charge of 200 meters of the dike, on which houses would be build. The plan of the municipality was initially to build around 900 homes, but this could not be achieved in combination with the dike reinforcement. Of the 900 houses, the municipality had to compromise to 600. Furthermore, there was much financial discussion about selling land to the water board. Both parties eventually had to compromise, as both wanted to reduce the costs to a minimum. The water board was financially setback, as they wanted a lower price for the land. The municipality wanted to have a higher price and more buildings. However, they were still able to come to an agreement as both parties saw the importance of working together (Environmental manager Wolferen-Sprok, 2024; Municipality Nijmegen, 2024).

5.3.2 Shared motivation

The success of linking opportunities greatly depends on the ambitions of the initiators and the party that is in the lead (Senior advisor water and environment Union of Water Boards, 2024). The ambitions of the waterboard, as is described in chapter 5.3.1, will give a picture on how open they are for the implementation of linking opportunities. The water board does not have linking opportunities in their core tasks, but describe their willingness to implement the opportunities if they present themselves (Environmental manager Wolferen-Sprok). They do thus not actively search for opportunities (Contractor Wolferen-Sprok), but are open for a collaboration as it is their principle to have an open mind about the activities within and outside the river area (Waterschap Rivierenland, 2022a). It will become more of an issue if the initiator who has to pay for it, does not try their hardest to make the opportunity a success (Climate advisor HWBP, 2024).

Stakeholders are greatly dependent on each other when it comes to linking opportunities, with lots of challenges and uncertainties. The different interests have to be compatible for an linking opportunity to present itself. The interests have to be combined in order to form an opportunity. Even though many different interests are connected to an opportunity, it will be based on one common interest that can benefit both parties (Contractor Wolferen-Sprok, 2024). There is thus a reason behind the formation of an opportunity, but to form a concrete plan, it is important to consider the integrity of each others interests carefully and know what's going on with the other

stakeholders. Only when you know each other's interests, is it possible to solve the challenges and work together to form a concrete plan (Municipality Overbetuwe, 2024). This is sometimes difficult to achieve, as interdependent interests can be strong, making it hard for the parties to mutually understand each other (Senior advisor water and environment Union of Water Boards, 2024). Despite the challenges and uncertainties, linking opportunities can still succeed with the right personal attitude of the stakeholders, meaning they are determined to find a solution that fits within the different interests (Climate advisor HWBP, 2024). According to the climate advisor of the HWBP (2024):

How are we going to manage the linking opportunity? And that depends on the people who are present in the discussions. One person is open to it and wants to be very enthusiastic. Another says, this is not part of my job, I don't get involved.

In practice, linking opportunities require flexibility from the stakeholders to prevail despite the challenges. Flexibility requires a certain amount of commitment, as the stakeholder has to be motivated enough to take up a different role and put time and energy in it. Furthermore, it is important to have trust in the process and be motivated enough in order to achieve flexibility in roles (Contractor Wolferen-Sprok, 2024). This emphasizes the importance of having the right and motivated people on board in the success of linking opportunities.

Mutual trust is another important aspect in the success of linking opportunities. Because linking opportunities can be very uncertain, you often have trust on each other that the agreements will be carried out. If it appears that the other party is untrustworthy, it will come at the cost of the linking opportunity. This is in itself one of the risks of implementing linking opportunities (Contractor Wolferen-Sprok, 2024).

So then you kind of get to the stage where you get into a boat together and I have to hope that the boat doesn't sink and he has to hope that I can row a little (Contractor Wolferen-Sprok, 2024).

Stakeholders often do not know the rules to implement the opportunity, or do not respect these rules if their interests are bigger than the opportunity. This, for instance, happens often with politics where principles can change often. This creates untrust in the collaboration, according to the Contractor Wolferen-Sprok (2024):

For me that is unreliable, he says: that's just how I am. But no matter how it turns out, I don't know where I stand.

The effect from an unreliable collaboration comes in the shape of negative financial consequences and a delay in time. Both most importantly, it has an effect on the atmosphere of the current collaboration, as well as future collaborations. It can undermine the principles of cooperation and have a negative effect on the job satisfaction (Contractor Wolferen-Sprok, 2024). When a chance is defined, the stakeholders initially do trust each other. However, it is not always the case that the parties stick to the agreements. Furthermore, it is often unclear if stakeholders are able to live up to the agreements (Environmental manager Wolferen-Sprok, 2024).

When I sit at the table with the province on a project. I cannot spend the money on behalf of the water board, so I think it is a very good idea and I completely agree with the colleague from the province. And then I say, well, you pay. I pay half and then we both go to our supporters and they say: have you gone completely crazy?

It is therefore important, according to the environmental manager of Wolferen-Sprok, to not surprise each other with unexpected decisions or ideas (2024).

And perhaps not surprising each other is the key: when you collaborate with parties and you surprise each other, tension arises (Environmental manager Wolferen-Sprok, 2024).

The water boards strive for a friendly relationship with the environment for as long as possible and has a principle to have transparent discussions. They try to resolve everything amicably, keeping the conversation positive and consider multiple possibilities. However, the water board is in the lead when it concerns the dike. It can therefore create an inequality in power, as they are the ones that determine the concrete project plan. This is also the case with the province, which is naturally more empowered than the water board. However, they can not force the water board to do something that is not in line with their core tasks (Senior advisor Water and Environment Union of Water Boards, 2024).

Shared motivation in the case of Wolferen-Sprok

The dike reinforcement of Wolferen-Sprok can be a starting point for opportunities to develop. Opportunities are important in the development of an area that is in the greatest interest of the stakeholders. Many problems and policies come together within this area, so can an activity such as a dike reinforcement be a starting point for other projects. So has Rijkswaterstaat a policy, the water board a policy, the province a policy and the municipality a policy, that general differ from each other. This results in an area with many conflicting interests. It is therefore nice when an opportunity presents itself, as the different parties can sit together and discuss what will prevail. This was the case of the hospitable dike and the buildable dike, as it required the dike to be rigorously redeveloped (Environmental manager, 2024).

The Hospitable dike started as a project, created by the ANWB, with no concrete plan. The water board took up the role to lead the project, with support from the municipalities. As is described in chapter ..., a concrete plan is an important driver in the success of linking opportunities. It required commitment to stick to the plan even though the ANWB stepped out (Environmental manager, 2024). As the municipalities generally liked the idea of road made for recreational uses, the commitment was found. However, many local measures had to be implemented, creating extensive discussion on how to design the road. A reliable cooperation was build by responding quickly to each other and establishing each other's interests. Many details had to come together, as there were many parties involved (Municipality Overbetuwe, 2024). Because the project included multiple project area's next to that of Wolferen-Sprok, the influence the water board had on the project was less than they were used to (Environmental manager Wolferen-Sprok, 2024). However, as the waterboard together with the municipality had already committed to this project, the shared motivation to be approached from a risk perspective (Contractor Wolferen-Sprok, 2024). According to the contractor Wolferen-Sprok (2024):

So we created a kind of shared goal in the form of risk management. And so the objective arose: Okay, it has to happen, this is what it should look like, would you like to arrange that for us? Then you go together with that goal in mind, this has to be done, make sure it doesn't become a problem. And that has become the common goal.

This common goal ensured the flexibility in the project that was necessary in the success of the opportunity, in which the contractor was able to take up the role and manage the communication between the parties (Contractor Wolferen-Sprok, 2024).

In the case of the buildable dike, the waterboard and the municipality initially were opposed to each other. They both had an independent task, but could not achieve it without each other. This resulted in the insight that they had to do it together. This was difficult to achieve, as there were many different interests as to how to execute the project. However, the shared feeling of needing to figure the difficulties out in order to connect the projects with each other greatly contributed to the success of the opportunity. According to the municipality of Nijmegen (2024):

We really can't do without each other, we actually have to have a joint project. And that shared feeling was there, despite the fact that it doesn't all happen automatically. That is quite special because a buildable dike does not happen that often. That shared feeling really helped with the result we achieved.

However, it required many discussions in order to align the different interests. There are many people involved in the water board and the municipality, and thus many interests to consider. As it was a new project, it required a lot of explanation as to what the municipality was up to and why. In addition the water board, as the municipality, is not a unity. This results in a lot of contradictory decisions within the companies. The water board is traditionally an organization that quite straightforwardly does their task, as it is important to ensure the safety of the dike. The municipality had a different interest, as almost on equal footing with the water board. This resulted in a challenge in the collaboration, as tensions arose between the interests of the municipality who thought it was important to build homes and the water board, who wanted to create a safe dike. With the help of an environmental manager who consults extensively on other parts of the dike reinforcements with the stakeholders affected by the reinforcement, the water board creates a sensitive attitude towards the environment (Municipality Nijmegen, 2024). However, the water board ultimately decides and thus the parties do not have an equal position. It is the initiator who has to ultimately comply (Senior advisor water and environment Union of Water Boards, 2024). This was the case with the agreement about the price of the land, as the municipality had a disadvantaged position. Preconditions of a dike can hardly be changed, and so the municipality had to settle for a lower price. Generally, the water board strives for a transparent collaboration. However, negotiations about money are often not transparent and both parties did not show their hand. This did not mean that there was a unpleasant and distrustful atmosphere in the collaboration (Municipality Nijmegen, 2024).

A challenge you often see in the river area, in which there is the transition from land to water, is that there are many competent authorities active within the same area. Many initiatives that are not devised by the competent authorities, often fail in the bigger picture of the different policies (Environmental manager, 2024).

5.3.3 Capacity for joint action

The capacity for joint action consists of the procedural and institutional arrangements, leadership and resources. Procedural and institutional arrangements concerning the subsidy scheme will be done in a sober and efficient manner. Arrangements have been made between the alliance on how to tackle additional costs, in which linking opportunities are part of. The structure in which the collaboration is taking place, greatly affects the possibilities. Furthermore, the extent in which the opportunities are facilitated by an organisation with a leadership role and whether the right resources are available, are crucial in the success of linking opportunities.

Procedural and institutional arrangements

The HWBP works in a sober and efficient manner. Sober, in the subsidy scheme, is described as only the costs of measures needed in order for the primary flood defences to meet safety standards and their legal integration into the environment. Hereby, management and maintenance aspects are an integral part of the consideration of an effective solution. Subsidy is given if the measures relate to a legal integration. If this is not the case, as is with linking opportunities, the water board or a partner has to pay for additional costs. Efficient, in the subsidy scheme, is described as the total costs of a primary flood defence during its entire (residual) lifespan minimized. Various solutions will be compared based on the costs of the net present value of the expected cash flows. The primary focus will be the water safety task. However, the HWBP has a social responsibility. Factors as sustainability and spatial quality will contribute to the desired result based on the objective and requirements. The scope, which are the ambitions of the area, must therefore be clear. Each solution has its own uncertainties and risks. It is therefore encouraged to consider the connection between the performance and risks. This results in the following definition of efficiency: efficiency is the optimal ratio between the costs on the one hand and the performance on the other hand (dike safety, spatial quality, environmental tasks, etc.), against acceptable risks (Rijkswaterstaat, 2021).

Projects costs will be divided between the HWBP and other partners, wherein the following rules concerning the distribution of costs have been set up. The first rule is that costs that are exclusively intended for the dike/water safety task are fully allocated to the HWBP. Secondly, costs that are exclusively intended for the river or the area are fully allocated by partners. Thirdly, costs that are intended equally for the river or the area and the dike are allocated 50/50 to the HWBP and the partners. Lastly, costs incurred for both the dike and the river/area are calculated based on two different formulas that depends on whether the focus lies on the dike or on the river/area (Rijkswaterstaat, 2022).

Furthermore, the HWBP developed the 'Integral Scope Determination of Water Safety Tasks', which is a methodology that provides the tools for determining the scope for water safety tasks. This means to study the entire area and planning area, provide clarity about which tasks and ambitions are present within these areas and determine if they are part of the water safety project. This scope should be done at an early stage of the project, preferably before the exploratory phase, as it is necessary for stakeholders to explore to what extent the nature of the scope relates to the area context. This can be done through design workshops that are meant to investigate which tasks are related to each other within the area. The ideas resulting from these workshops can create support about the scope of the project and the integration of tasks in the area. The results of the scope can thus make the ambitions of the area clear and help in setting up the project organization and governance of the water safety project (RWS-Ontwerpt, 2020).

By implementing the integral scope determination, an overview will first be made of the tasks that arise in addition to the water safety task. In determining which tasks can be linked with the water safety task, it is important to determine the scope. The HWBP distinguishes three levels within

the scope: area development, multi-purpose development, and spatial integration. Area development is hereby applied when large-scale tasks in the area have strong interactions and are therefore only able to be carried out in conjunction. The challenges are so great that this will mean a transformation of the landscape. An integrated vision is needed that enables the tasks in the area to reinforce each other. A multi-purpose development is the focus of this study, as it focusses on relating the tasks in the area to the water safety task. Area tasks can provide a solution for the water safety task. It includes what is needed to integrate the water safety measures into the landscape. However, area tasks can also have little or no relationship with the water safety task. This requires an integration that guarantees the spatial quality level of the initial situation of the area. Lastly, the spatial integration includes a spatial quality framework in which the dike reinforcement measures are integrated into the landscape and where the level of spatial quality of the dike environment is maintained or enhanced. The HWBP formulated ten steps necessary to reach conclusions about the appropriate scope, level of integrity and approach. These steps start with stakeholders and experts meeting to make an inventory of the challenges facing the area and end with determining the approach needed in preparation for the exploratory phase of a HWBP project (RWS-Ontwerpt, 2020). The HWBP encourages the investigation of linking opportunities by subsidizing a broad exploration of the opportunities in the area. After the exploration phase, it is clear what the scope of a project in terms of water safety will be and which other tasks, financed by partners, will be part of it. From the plan elaboration onwards, those partners must contribute to the additional costs of the plan elaboration and the realization phase as is described in the framework concerning the distribution of costs in linking opportunities by Rijkswaterstaat (2022). In practice, the parties often agree with the project during the assessment about a distribution key. This often does not require much discussion (Climate advisor HWBP, 2024). According to the climate advisor of the HWBP (2024):

People think about it for a while and talk about it for a while, but it is not that there are suddenly big differences. So we always argue for a distribution key of: this much percentage can be attributed to Rijkswaterstaat and this much percentage can be attributed to the dike reinforcement project.

Furthermore, the structure in which the water board works distinguishes five phases, imposed by the HWBP. In Wolferen-Sprok, the first phase 'initiation' entailed that the project was included in the HWBP program and thus substantiated the usefulness and necessity. Furthermore, it ensured the financing of the planning process. The assignment was expanded with research concerning a possible room for the river project at the dike of Oosterhout. The 'exploration' phase examined various solutions for the flood safety problem, leading to the ultimate decision by the water board on the preferred alternative. This is also the phase where the various opportunities within the area are discovered and investigated, in which it is determined whether they can be included in the realization phase. The plan was further elaborated in the 'elaboration' phase, which ensured that the preferred alternative received the level of detail necessary for the decision-making concerning the province and municipalities about the concrete plan. This includes looking at the Water Act, project plan, zoning plan and the permits. Moreover, the concrete plan must include the financing of the last realization phase. This last phase ensures that the area meets the safety standard again and ends with delivery and transfer to the water board's management organization. Furthermore, the design process consists of two phases: the exploration phase and the realization phase. The exploration phase funnels the process: the many opportunities of the area will be limited to a small number of alternatives and follow a decision with only one preferred alternative (Soepboer, 2018).

The water board Rivierenland works with the organizational structure 'integrated Project Management'. This structure has as goal to ensure that internal and external cooperation runs as smoothly as possible. This is carried out by the assigned project team (Ministerie van Infrastructuur en

Waterstaat, 2023). This structure makes clear which tasks are assigned to which member of the project team during all phases of the project. The five distinguished roles are filled out in the five different phases within a project. Each role is fulfilled by a different person, but has its own support team. The first role of project manager is aimed at guaranteeing quality, support and coordination. The project manager is ultimately responsible for achieving a good project result. The next role 'project controller' aims at managing risks and all management aspects within the project. The 'project controller' is responsible for identifying and managing integral risks. The environmental manager keeps relationships with the environment and stakeholders in balance during the project. Hereby is the environmental manager responsible for the contact with the environment. Next, the technical manager manages the risks from technology and organization. The technical manager is responsible for the technical and substantive input into the project. Lastly, the contract manager aims at managing the risks that may arise between the client and the market. This also applies during the purchasing phase. The contract manager is responsible for the contracts and the contracts of the various market parties (Ministerie van Infrastructuur en Waterstaat, 2023).

Leadership

The most important factor is that an opportunity must have an initiator who is responsible for the plan and the finances (Environmental manager Wolferen-Sprok). The water board is initially responsible for the integral scope, meant to inventory the various opportunities within the project (Climate advisor HWBP, 2024). The environmental manager of the project has the role of maintaining contact with the environment. If the opportunity develops and becomes concrete, later disciplines will become involved as well. So does the opportunity, next to being a good idea, have to work out technically as well. To ensure this, a contract manager is needed who manages the agreements concerning the opportunity (Climate advisor HWBP, 2024). The HWBP and especially the water board, can have a facilitating role in the implementation of linking opportunities. They can formulate policies on the dealings of linking opportunities, as both the HWBP and the water board have done. Furthermore, they can facilitate the collaboration between the parties and aid the smooth implementation of the opportunity within the dike reinforcement project by introducing the initiator to the rules (Climate advisor HWBP, 2024; Contractor Wolferen-Sprok, 2024; Environmental manager Wolferen-Sprok, 2024). The water board has a consultation structure in which various stakeholders come regularly together. However, the water board lacks an active attitude as linking opportunities are not part of their core task. Those who pay more attention to linking opportunities and approach initiators more actively, can facilitate the initiators more to the preconditions. The water board Rivierenland does take up this role and are open to implementing linking opportunities, but do it in a less active manner by sending an email or a setting up a meeting. This leaves the responsibility mainly to the initiator (Contractor Wolferen-Sprok, 2024).

They quickly leave the ball and the responsibility there. And if it later turns out that we didn't understand each other properly, then it's also like: but that's not my fault, is it? I told you well and then you should have asked those questions better.

According to the contractor of Wolferen-Sprok, there was a weak coordination around linking opportunities in the first phase. They lacked an active attitude towards linking opportunities, resulting opportunities to not attain a promising state. However, this is also caused by the lack in active attitude from the initiators, as their motivation plays a crucial role in attaining a promising opportunity. However, the linking opportunities implemented were not the product of an active and constructive collaboration, but were mainly enforced from outside of the project (Contractor Wolferen-Sprok, 2024). The water board thus does not take the lead in implementing linking

opportunities. Leadership qualities, explored through the indicators ‘ability to empower actors’, ‘consensus building’, ‘trust building’, ‘involvement of actors’, ‘ability to initiate and help secure resources’, ‘perceived support for the CGR’, ‘willingness not to advocate for a particular solution’, and ‘extent of commitment (to collaborative problem solving)’, were not further explored in the case of Wolferen-Sprok.

It is, according to the environmental manager of Wolferen-Sprok, often the case with linking opportunities that if you act upon them, you quickly have the responsibility for it. This in turn can discourage an active response towards linking opportunities. When the stakeholders are not able to cover all the risks involved, they leave the water board responsible for it (Environmental manager Wolferen-Sprok, 2024). It is therefore a risk for the water board to take up linking opportunities, as happened with the hospitable dike. According to the environmental manager of Wolferen-Sprok:

“From a project perspective, it is best to consider related activities as linking opportunities and we will make it possible for that opportunity to actually be implemented. But it’s very strange when your project suddenly takes ownership of the opportunity. Because then, I don’t think that happened too consciously, but then you are suddenly also liable for all risks., including the finance” (Environmental manager Wolferen-Sprok, 2024).

It is therefore important to consider the consequences of an opportunity, especially the finances. It is often the case that the water board itself is responsible for the execution, but the initiator is responsible for acquiring the resources. The project of Wolferen-Sprok therefore made a distinction between a linking opportunity and creating possibilities for the future. In this way, the water board and an initiator can develop together or make it possible for a project to fit after the dike reinforcement. However, this distinction can only be made when the initiator is independent from the dike reinforcement project (Environmental manager Wolferen-Sprok, 2024).

Initiating an opportunity can be described as a very complicated process, wherein initiatives often are getting lost (Contractor Wolferen-Sprok, 2024). This is confirmed by the environmental manager (2024):

“If you are one of the competent authorities from the government and you have a good idea, that is already difficult. If you have a good idea out there, then it is very difficult.”

Facilitating linking opportunities can aid to a successful implementation, however it is required of the initiator to put a lot of effort into the implementation as well (Contractor Wolferen-Sprok, 2024; Environmental manager Wolferen-Sprok, 2024). Being owner of an initiative means to consider carefully what is needed for the linking opportunity in order to fit well into the dike reinforcement project. This demands something from the dike project itself, as the project must indicate clearly what is needed at what time, so the initiators can prepare for it (Contractor Wolferen-Sprok, 2024).

So if we both understand each other and what is needed, we ensure that the right people are there and the lines of communication are sufficiently open and transparent. Then the chance of success increases considerably (Contractor Wolferen-Sprok, 2024).

The consultations are thus important to get these needs clear and are managed by the environmental manager or, at times, the manager of the water board who can make a deal with the manager of the other party. This deal often consists of a clear distribution in tasks and resources. Linking opportunities often fail, but if both parties are committed, and thereby flexible, a solution is often found (Climate advisor HWBP, 2024; Environmental manager Wolferen-Sprok, 2024).

Resources

In order to make the implementation of linking opportunities successful, it is necessary to acquire the right resources. These resources include financial stimulations, the right people, the time and knowledge needed to implement it.

In the case of Wolferen-Sprok, the province has made people available to spend time on the research concerning linking opportunities. The water board has a policy that concerns what is meant with a linking opportunity and how to deal with them. In addition, the HWBP has the integral scope determination that informs water boards on how to deal with linking opportunities. This information enables the water board to see which opportunities are present in the area and encourages an active reaction from the water board when they are presented (Climate advisor HWBP, 2024; Environmental manager Wolferen-Sprok, 2024). In addition, information can be collected through the environmental manager community. This community enables environmental managers to share experiences and knowledge, for it is needed to acquire the expertise on linking opportunities in the exploration phase. Next to the knowledge within the HWBP, or the water board, it is important for the initiator to have enough knowledge on how to implement an opportunity itself, as it has to fit into the schedule of the dike reinforcement project. Linking opportunities often fail, as it can be complicated to know how the consultation structure of the water board works and where to register the linking opportunity (Contractor Wolferen-Sprok, 2024). Furthermore, linking opportunities often present themselves when you bring the various stakeholders together, who may have an influence or say in the project and see what is a feasible opportunity. It is therefore necessary to have someone who has the knowledge to bring these parties together, as is the role of the environmental manager (Environmental manager Wolferen-Sprok, 2024).

Next to the knowledge that is needed in order to explore the different linking opportunities, it costs time and energy to research and implement the opportunities. As linking opportunities differ from each other and it is difficult to prepare for them, it is necessary to have the right people, with the knowledge necessary for the implementation and the motivation to tackle the challenges and uncertainties that come with the implementation (Contractor Wolferen-Sprok, 2024; Senior advisor water and environment Union of Water Boards, 2024). The contractor of Wolferen-Sprok emphasizes the importance of collecting the right people in the project:

And that mix of people who are willing to do things for each other, who want to go the extra mile, who are enthusiastic, sociable, involved, and take responsibility to see it through to a successful conclusion (2024).

Linking opportunities do not necessarily have to cost the water board money and can even reduce the costs of the additional project, as it aligns with the work of the dike reinforcement. If it is done correctly, meaning a concrete plan presented on time, it will not result in delay or have negative financial consequences (Climate advisor HWBP, 2024). The initiator does need to establish a concrete plan by gathering the right people and having the budget available (Contractor Wolferen-Sprok, 2024; Environmental manager Wolferen-Sprok, 2024). The responsibility for requiring the resources needed to implement the opportunity, fully lies with the initiator. It is possible that the water board has made a budget available to aid the cause, however this differs between water boards. With the water board Rivierenland, the core task solely lies on ensuring the water safety task, as the area includes many rivers. They are thus reluctant in aiding linking opportunities financially (Senior advisor water and environment Union of Water Boards, 2024).

5.4 Collaborative action

HWBP has a clear statement, they will not provide financial support for the implementation of linking opportunities, but provides the investigation of linking opportunities by subsidizing a broad exploration. The water board Rivierenland, as well as the contractor, do not see this as an obstacle. Linking opportunities are therefore fully dependent on the initiator, with guidance from the water board and guidelines provided by the HWBP (Climate advisor HWBP, 2024; Environmental manager Wolferen-Sprok, 2024). They are hard to implement, as it requires the drivers of leadership; consequential incentives; interdependence and certainty to be present, and are greatly influenced by the collaborative dynamics. Of the 15 possible linking opportunities, as was initially determined in the EIA, four opportunities were eventually implemented in the project. These opportunities include flowery dikes, Loenen estate which improved the connection between the outer polder and the estate, and the linking opportunities 'Hospitable Dike' and 'Buildable Dike' (Soepboer, 2018).

6 Conclusion and reflection

6.1 Conclusion

The aim of this research is to find out to what extent collaborative governance enables the optimal integration of linking opportunities in the preferred alternative of project Wolferen-Sprok. With the results, lessons can be drawn for future collaboration around linking opportunities in water safety projects. In order to answer the central questions, there are four sub-questions. These will be answered in the following paragraphs.

Which linking opportunities can be identified within the project Wolferen-Sprok and which opportunities have been implemented? As many stakeholders are connected to the area of Wolferen-Sprok, it is necessary for the waterboard Rivierenland to collaborate with the environment in order for the dike to fit their needs. Opportunities can rise from this collaboration, in which more than the goal of water safety can be combined with that of the initiators. This resulted in 15 opportunities presented in the area, in which four have been implemented. The opportunities implemented were the Hospitable Waaldijk; Flowery dikes; Buildable Dike; and Loenen Estate. As to why many of the opportunities available within this research did not succeed in being integrated into the project, has been researched in this study. Furthermore, the collaborative dynamics of the linking opportunities of Hospitable Waaldijk and the Buildable dike have been further explored.

How does the system context influence the collaborative process of identifying and integrating the linking opportunities in the project of Wolferen-Sprok? The dike Wolferen-Sprok is located in the river area of the Netherlands and has a remarkable difference between urban and dynamic surroundings around the student city Nijmegen and the quiet and sheltered character of Oosterhout and Loenen. The dike is located in an area that has many cultural and historic qualities, in which the area is subject to urban growth around Nijmegen, landscape development of the municipality of Overbetuwe and nature development in the floodplains and measures to give more room to the river. Various developments have to be taken into account, in which the dike can greatly contribute. These developments and characteristics in the area offer the basis of linking opportunities and can act as drivers.

Which drivers of linking opportunities can be identified and how do they influence the collaborative process of identifying and integrating the linking opportunities in the project of Wolferen-Sprok? Drivers are seen as the direct cause of a successful or unsuccessful collaboration and includes leadership, consequential incentives, interdependence, and uncertainty. These variables were also of importance within the project of Wolferen-Sprok. The first driver that influences a successful implementation of a linking opportunity, is whether there is a form a leadership present. Qualities of the leadership role are seen in the initiator, as the owner of the linking opportunity is in charge of initiating and securing resources of the opportunity. However, there was no clear organisation in the lead of implementing linking opportunities. The second driver identified in the case of Wolferen-Sprok, was the driver of ownership. A linking opportunity arises from an initiator, who manages and finances the opportunity. Without a clear owner, linking opportunities are not able to be implemented into the project. Furthermore, a linking opportunity has to have a clear connection with the project that enables the link between the opportunity and the water safety project. A third driver concerns the alignment of schedules between the opportunity and the dike reinforcement project. This means that the opportunity has to be presented at the right time, with a concrete plan, in which the finances are in order. However, in practice the initiator is often unaware of their task and the rules by which they have to abide. The fourth driver is dependency, as the water board is greatly dependent of stakeholders to present their ideas. However, initiators are also depended on the water board as they are in the lead of the project. The final driver is uncertainty,

this includes the risk of delay and exceeding budget. It is often difficult to prepare for linking opportunities and agreements can have last moment changes. There is often a lack of information about the linking opportunity and it can be uncertain whether the finances are working out as initially thought. Furthermore, the division of tasks can be an uncertain factor as it can be unclear who initiated the opportunity and how the costs will be divided. This uncertainty will be smaller when the plan concerning the linking opportunity is concrete within the schedule of the dike reinforcement. However, there can be unexpected risks. So can the environment object or pollution in the ground unexpectedly be found. Lastly, a project in the area in which the water board of Rivierenland is active, concerns many parties. Projects in the area require an extensive collaboration with many stakeholders. It can be uncertain whether the right people, with the necessary expertise and ambition, are on board to in the collaboration. The drivers thus directly influence a successful implementation of linking opportunities. Many linking opportunities fail if the drivers 'clear ownership' and 'alignment of schedules', with a 'concrete plan' and 'clear tasks' are missing. The drivers can be seen as the basis on which the collaborative dynamics will build and determine whether a linking opportunity will be successfully implemented. Furthermore, they have influence on whether a opportunity is seen as an opportunity. The water board considers the idea a linking opportunity when its finances, permits, planning, feasibility, support from the environment and administrators, are in order.

This leads to the third question: How do the collaborative dynamics influence the collaborative process of identifying and integrating the linking opportunities in the project of Wolferen-Sprok? The collaborative dynamics influence the success of linking opportunities greatly, as the integration requires extensive collaboration. The collaborative dynamics distinguishes three categories: principled engagement, shared motivation and the capacity of joint action. Hereby, the engagement between different stakeholders over time is analysed, the interpersonal and relational elements, and the extent in which the collaboration is able to create a desired outcome that could individually not be accomplished. In the variable 'principled engagement' there has been determined who the stakeholders are and what they represent. The goals and ambitions of the stakeholders have thus been analysed and are seen as one of the most important factors in the successful implementation of linking opportunities. It takes effort to implement the opportunity and the extent to which an organisation finds it worthwhile can differ greatly between the stakeholders. The goals and ambitions of the HWBP are extensive and urgent: the HWBP wants to reinforce all primary flood defences in a sober and efficient way by 2050, so that they comply with the legal standards as is laid down in the Water Act. From this ambition, the alliance principles are formed as proposals to achieve further development in HWBP projects. In addition, the principles align with what is necessary in the collaboration around linking opportunities. The starting point for the dike reinforcement is that it must be properly integrated into the landscape, meaning that it is not made into a straight-on dike but considers carefully how it can fit in the environment. When extra values are added in the shape of linking opportunities, the initiator has to pay in the framework of the HWBP. However, the HWBP does include sustainability and quality in projects in their goals, provided that it will not harm the main goal of water safety. This goal resulted in the development of the integral scope determination, that is developed to provide a tool for determining the scope for water safety tasks. They aid by establishing opportunities at an earlier stage, providing a better chance at executing and financing the opportunities. From the project Wolferen-Sprok, the role of the HWBP is clear, they pay for the dike reinforcement and finance the research of linking opportunities, and are therefore not seen as an obstacle. Furthermore, it is clear what is meant with the motto to work in a sober and efficient way and results in no further obstacle. The HWBP works within a legal framework, that holds them to what they are able to subsidize. It is therefore difficult for them to aid linking opportunities financially, but do share information on how water boards can tackle the opportunities. The ambition

of the HWBP thus lays out the groundwork on which stakeholders, including the water board Rivierenland, can work. Water boards differ in the way they work with the motto of the HWBP. The vision a water board has also plays an important role in the success of linking opportunities. The broader their vision, the faster they actively search for linking opportunities. The starting point for all activities and projects of the Rivierenland water board is formed by the core task to ensure safe dikes and a balanced water system. The emphasis of their water vision thus lies on the protection against water, contributing to the Flood Protection Program, but does not focus on an active approach to linking opportunities. They want to ensure a river area where residents can live safely, work and recreate in a beautiful living environment. To ensure the aim of water board Rivierenland is achieved, the water board has to have a good organizational structure in order to contribute to the best possible realization of their tasks and serve the customers optimally. The water board therefore emphasizes on a number of principles that guide them to the optimal task performance and business operations. These principles do not focus on linking opportunities, but do ensure some of the conditions that is needed for them. So does the fourth principle include that the water board wants to have an open mind about the activities within and outside the river area. The water safety task of the water board Rivierenland is big, as they have many dikes to reinforce in the river area. Even though the water board Rivierenland lacks an active approach to linking opportunities, they do have a policy concerning linking opportunities, resulting that the water board can respond enthusiastically if a good opportunity presents itself. In practice, a shared ambition results in flexibility between the stakeholders. This means that challenges can be overcome despite opposing drivers, as unexpected solutions can be found. The success of the linking opportunities 'the Hospitable Dike' and 'the Buildable Dike', was due to the ability to understand each other's interests. A common purpose and objective is hereby the key variable in the success of linking opportunities in the case of Wolferensprok, as it is the link between the opportunity and the dike reinforcement project. Without a common purpose, the opportunity will not be able to link to the project. However, a common purpose and objective is greatly due to the effectiveness of conflict resolution strategies and interventions, that enables the collaboration to reach a developed understanding. In practice, this was due to a clear communication and a quick response between the parties.

Furthermore, shared understanding which is part of the collaborative dynamic 'shared motivation', emphasizes the interpersonal and relational elements within the collaborative dynamics. Many different interests are connected to an opportunity, but it depends whether there is one common interest that can benefit both parties to establish a linking opportunity. It is thus important to know which interests there are in the project and whether they are able to understand each other's interests. If this is the case, the stakeholders are greatly dependent on each other to battle the challenges and uncertainties that come with an opportunity. The more interdependent the stakeholders are, the harder it is to mutually understand each other. Once a common goal is determined and an understanding is established, commitment plays an important role in implementing a linking opportunity. Commitment creates a determination that enables the stakeholders to find a solution which fits the different interests. This commitment includes a certain flexibility, that enables an opportunity to prevail despite the challenges and uncertainties. Stakeholders can come up with unexpected solutions, as is the case in the hospitable dike in which the contractor managed the communication between the water board Rivierenland and the municipality Overbetuwe. Lastly, mutual trust is another important aspect in the success of linking opportunities. Because linking opportunities can be very uncertain, it is important to have trust in each other that the agreements will be carried out. If it appears that the other party is untrustworthy, it will come at the cost of the linking opportunity. This is in itself one of the risks of implementing linking opportunities, as an untrustworthy cooperation will have negative financial consequences, a delay in time, and an effect on the atmosphere of the collaboration. It is therefore important not to

surprise each other with unexpected decisions or ideas. The water boards strive for a friendly relationship with the environment for as long as possible and has a principle to have transparent discussions. In practice, it was found that the water board ultimately decides about matters concerning the dike reinforcement. Even though the water board strives for transparent and honest discussion, this variable is important to take into account as they ultimately make the decision whether the linking opportunity will be implemented in the dike reinforcement project.

Furthermore, the last variable capacity for joint action is based on the procedural and institutional arrangements, leadership and resources. As the HWBP works in a sober and efficient manner, subsidy is only given to the measures relating to a legal integration. If this is not the case, as is with linking opportunities, the water board or a partner has to pay for additional costs. However, the HWBP does have a social responsibility. Factors as sustainability and spatial quality contribute to the desired result, which is based on the objective and requirements. The scope, which are all the ambitions of the area, must therefore be clear. Each solution for the challenges of a linking opportunity, has its own uncertainties and risks. It is therefore encouraged to consider the connection between the performance and risks. Projects costs will be divided between the HWBP and other partners, wherein rules concerning the distribution of costs have been set up. Furthermore, the Integral Scope Determination of water safety tasks enhances the capacity of joint action, as it scopes at an early stage the opportunities available within an area. Discovering opportunities at an early stage will enhance a successful implementation of linking opportunities as it determines the various ambitions at an early stage, making it easier to prepare for the linking opportunity. The HWBP encourages this investigation of linking opportunities by subsidizing a broad exploration. After the exploration phase, it is clear what the scope of a project in terms of water safety will be and which other tasks, financed by partners, will be part of it. From the plan elaboration onwards, those partners must contribute to the additional costs of the plan elaboration and the realization phase as is described in the roadmap concerning the distribution of costs in linking opportunities. In practice, the parties often agree with the project during the assessment about a distribution key. The water board works in five phases, in which linking opportunities present itself in the exploratory phase. The organizational structure 'Integrated Project Management', with which the water board works, ensures that internal and external cooperation runs as smoothly as possible. The role of the environmental manager covers the communication around linking opportunities. The phases combined with the organizational structure, helps manage the collaborative process. The research done in the exploratory phase, in combination with communication through the environmental manager, thus increases successful implementation of linking opportunities. The variable leadership, previously included in drivers with the variable ownership, can be the party responsible for the plan and finances. However, the leadership role can take up different forms, provided by different parties. The water board is, in practice, not responsible for the management of the opportunity, but is responsible for the integral scope meant to inventory the various opportunities within the project. The HWBP, and especially the water board, can take up a leadership role in by facilitating the implementation of linking opportunities. They are able to formulate policies on the dealings of linking opportunities, as both the HWBP and the water board have done, or facilitate the collaboration between the parties. Furthermore, they are able to enhance a smooth implementation by providing information on the preconditions. The water board has a consultation structure in which various stakeholders come regularly together. However, the water board lacks an active attitude, as linking opportunities are not part of their core tasks. Water boards who pay more attention to linking opportunities, by having a broad vision, approach initiators more actively. They hereby are able to facilitate the initiators more to the preconditions in an active manner, resulting in more successful implementations of linking opportunities. In the case of Wolferen-Sprok, the responsibility lies mainly with the initiator. It is expected from initiators to take up the role of leadership, as they are

responsible in acquiring the necessary resources and managing the linking opportunity. In addition, their motivation plays a crucial role in acquiring a promising opportunity. When both the water board, as well as the initiator, lack an active attitude, the coordination around the linking opportunities result in unused opportunities. Being owner of an initiative means to consider carefully what is needed for the linking opportunity in order to fit well into the dike reinforcement project. This demands something from the dike project itself, as the project must indicate clearly what is needed at what time so the initiators can prepare for it. The water board sees it a risk to act upon linking opportunities, since acting upon them can leave the water board responsible for it. It is therefore important to consider the consequences of an opportunity, especially the finances. It is often the case that the water board itself is responsible for the execution, but the initiator is responsible for acquiring the resources. The water board manages the consultations that are needed to reach a consensus. Within these consultation it is important to get the needs clear and make a deal. This deal often consists of a clear distribution in tasks and resources. Linking opportunities often fail due to a lack of facilitation, but if both parties are committed, and thereby flexible, there often is a solution to be found. Furthermore, capacity for joint action includes acquiring the right resources. These resources include financial stimulations, the right people, time and knowledge needed to implement it. In the case of Wolferen-Sprok, the province has made people available to spend time on the research concerning linking opportunities. The water board has a policy that concerns what is meant with a linking opportunity and how to deal with them. In addition, the HWBP has the integral scope determination that informs water boards extra on how to deal with linking opportunities. This information enables the water board to see which opportunities are present in the area and encourages an active reaction from the water board when they are presented. In addition, information can be collected through the environmental manager community. Next to the knowledge within the HWBP or the water board, it is important for the initiator to have enough knowledge on how to implement an opportunity itself, as it has to fit into the schedule of the water board. Linking opportunities often fail, as it can be complicated to know what the consultation structure of the water board look like and where to register the opportunity to join. Furthermore, it is necessary to have someone who has the knowledge to bring parties together, as is the role of the environmental manager, in order for linking opportunities to present themselves. Furthermore, implementing a linking opportunity costs time and energy. It is crucial for the right people to be present, willing to put this time and energy into the opportunity. They have to possess the knowledge necessary for the implementation of the linking opportunity and the motivation to tackle the challenges and uncertainties that come with the implementation. The right people can add to the flexibility that is needed in a successful implementation of an opportunity. All in all, joint action can be most successful by investigating the linking opportunities at an early stage, determining them on time. This enables the linking opportunity to prepare a clear task distribution and a concrete plan on time.

To answer the main question: to what extent does collaborative governance enable the optimal integration of linking opportunities in the preferred alternative of project Wolferen-Sprok? It can be concluded that linking opportunities are fully dependent on the collaborative process, as it involves many stakeholders from within the water board as the area of the dike reinforcement project. Each of the drivers had an effect on a successful implementation of linking opportunities, in which ownership appeared the most important. Furthermore, the collaborative dynamics concerning: principled engagement, shared motivation and capacity for joint action, proved to be a great influence in a successful implementation of linking opportunities. The principled engagement emphasized the importance of a broad vision, resulting in an active approach towards linking opportunities. Even though the principles of the water board Rivierenland and the HWBP do agree with some of the necessary drivers for linking opportunities, the water board lacks an active approach resulting in unused linking opportunities. Furthermore, shared motivation proved an

important variable emphasizing the importance of a common interest that is needed in to establish a linking opportunity. In order to create a common interest, it is important to analyse which interests there are in the project and whether they are able to understand each other. Furthermore, effectiveness of conflict resolution strategies and interventions greatly influence whether the stakeholders are able to reach a common interest. Shared motivation also emphasizes on the importance of the variable 'commitment', which creates a determination that enables the stakeholders to find a solution which fits the different interests. This commitment can result to the flexibility which is required for linking opportunities to prevail despite the challenges and uncertainties. Lastly, the capacity of joint action emphasizes the importance of the procedural and organizational arrangements, as it greatly influences the opportunities in the area. It is determined that linking opportunities are not subsidized by the HWBP, but they do encourage discovering linking opportunities at an early stage by using the Integral Scope Determination of water safety tasks, which scopes at an early stage the opportunities available within an area. Discovering opportunities at an early stage will enhance a successful implementation of linking opportunities, as it determines the various ambitions at an early stage. Furthermore, it provides a better chance to execute and finance the opportunity. Next to the Integral Scope Determination, the importance of the variable leadership was emphasized, in which the water board can take up the role of informing the initiators. Many opportunities fail, as the expectations of the initiators is often unclear. Furthermore, it is often unclear which resources are needed for the implementation. Linking opportunities are directly linked to the dike reinforcement project and involve many discussions before an agreement can be reached, as the plan has to be concrete and the finances in order within a certain schedule. This process takes up much time and energy, and comes with unexpected challenges and uncertainties. So can linking opportunities lead to delay or exceed budget of the dike reinforcement. A successful collaboration is thus mainly explained by the people that have the knowledge and commitment to tackle the challenges in time. Through these people in the collaboration, the linking opportunity has a higher chance of it being 'optimally' implemented.

6.2 Reflection

The reflection reflects upon the theory and the methods used in this research. This will be discussed together with the limitations of this research.

6.2.1 Theoretical and methodological reflection

This research assumes that there is a relationship between the theory of Emerson et al. (2011) and the process of implementing linking opportunities. The results show that the framework fits well with the identified factors, so that most of the drivers and collaborative dynamics are in accordance with the gathered data. The framework of Emerson et al. (2011) is a broad framework, as it has a high number of elements and sub elements explaining the collaborative processes. This results that the researcher can be flexible with in choosing which elements are relevant for this particular research. The broad framework of Emerson et al. (2011) enables these factors to fit well into the research and add new factors where necessary. The results show that the process of implementing linking opportunities is dynamic and that the factors are strongly interdependent. It is therefore determined that the theories and operationalisation used in this research was a sufficient tool in the assessment of such a process. Furthermore, the broad theory enables this research to not only include local data, but also data from the general system by including data from the HWBP and using information from experts. A broad theory has proved a fitting tool in analysing the combination of local data, together with data from the HWBP and experts. However, as it does include a high amount of data from the local perspective, the framework is not able to present another process in the same way. Every process is different and obtains different factors that are bound to time and place, creating different results as cases differ in context. Furthermore, the framework is meant as a tool to better understand the process of implementing linking opportunities. It is thus important to consider that the conclusion of this research is not a solution for a more optimal implementation of linking opportunities, but is only able to draw lessons from this research which can be applied to other cases in which it is important to take ins context into account. It was hereby not the goal of this research to add to a further development of the framework of Emerson et al. (2011). However, the goal of the lessons is to contribute to the ability of implementing linking opportunities in a more optimal manner. The lessons can thus partly aid to a more generalisable extent. This research emphasizes on the factors that were of importance in the collaborative process of Wolferen-Sprok. Based on the findings, the factors that had the most influence on the optimal implementation of linking opportunities, included: common goal, effectiveness of conflict resolution strategies and intervention, and flexibility. In addition, the variable motivation is seen as the key variable in the success of linking opportunities. It is determined that motivation enhances the ability to find solutions to challenges and uncertainties. Further research can thus look more closely at the variable motivation and the different ways to achieve it.

The methods in this research was gathered from a combination of decision-making documents, data from governmental sites and interviews. As the research has been based on the collaborative governance theory of Emerson et al. (2011), the research had a clear structure from the start, providing data to be smoothly included into the research and obtaining the right information efficiently. As much data was gathered from documents and sites, the interviewees could be based on the data previously gathered. Each interviewee had another role in the collaboration, making it necessary to adapt each interview to the interviewee. The adaptations were complemented with new insights further in the research, in which new documents or sites were often recommended by the interviewees. This resulted in obtaining a full picture of the process, for important documents concerning the project were included. The interview guide was semi-structured, which appeared a strong method in obtaining the data as questions in interviews could cover any data still missing.

Furthermore, having the research based on a theory from the start provided an easy and efficient analysis of the data. The variables could be directly applied to the data, in which the theory made room to add new variables when necessary. As the structure of this research was based on the theory and the data was organized in the same way, this method was helpful to create a coherent narrative in the results as it was clear how the information should be presented. A deductive research was an efficient method for this case study, as it is structured and clear. However, an inductive study would create more flexibility within this research. This flexibility can result in unexpected conclusions, as the researcher can create its own theory. Having an inductive approach could enable a more open mind in analysing the data, as the patterns have yet to emerge. This could enable different insights than a deductive approach, wherein variables are open for interpretation and new patterns could be determined.

6.2.2 Limitations

This research consisted of only one case, combining this case with data from a national perspective by adding information derived from the climate advisor of the HWBP and the senior advisor Water and Environment of the Union of Water Boards, enabled a more elaborate picture of the CGR. However, as the data was collected from only one case, a representable picture of the CGR could not be obtained from the results and thus only lessons can be drawn from this particular case. Furthermore, not all implemented linking opportunities were explored. By obtaining more interviews from the initiators, there could be more insight into the collaborative dynamics. Investigating all the linking opportunities in the case of Wolferen-Sprok adds to a more complete case study in which more lessons can be drawn from the unexplored linking opportunities. Lastly, this research only briefly explores the programme level with an interview from the climate advisor HWBP and general input from the Environment and Climate advisor from the Union of Water Boards. This can be more elaborated by including more interviews on the national level by including the perspective of the Rijkswaterstaat. The Rijkswaterstaat has its own projects within the HWBP, but also have a financial role in subsidizing the program (Alkemade et al., 2020). The Rijkswaterstaat can thus elaborate more on the reasoning behind the 'sober and efficient' approach of the HWBP. Lastly, the variables provided by Emerson et al. (2011) and further obtained through the data of this research, are intertwined. The data could often be applied to more than one factor. However, to create a clear picture, it was necessary to divide the data clearly between the variables. This adds bias to the research, as it is the researchers own interpretation of which variable fits best with the data.

6.3 Recommendations

Further recommendations on the practice of implementing linking opportunities in HWBP projects, would be by establishing an active attitude from the water board, as well as the initiator. As some water board have a bigger water task than others, this attitude can differ greatly between the organisations. However, actively researching the linking opportunities is subsidised by the HWBP and thus accessible for all water boards. Furthermore, many opportunities are unused as it is the solely the task of the initiator to present their idea. More opportunities will come off the ground if the water board also acts upon them. As many opportunities fail due to the lack of knowledge, the water board can take up the task to inform the initiators more clearly and guide them towards a successful implementation of the linking opportunity. However, this active attitude requires people with motivation and knowledge to tackle these problems. As it still takes up much time, motivated people have to be gathered that acquire the knowledge and motivation to explore and manage linking opportunities. This motivation can increase if linking opportunities are part of the main tasks of the water board, creating more support within the organisation.

Recommendations for future research is to achieve a more representable picture of the CGR of the implementation process of linking opportunities by comparing the implementation process with more cases. Preferably, these cases are from different water boards, as more research can be done on the effect the various ambitions of the different organisations can have on the implementation of linking opportunities. So does the water board Rivierenland not include the implementation of linking opportunities as one of their main goals due to their big water task. However, smaller water boards are present that do include it as their main goals. The effect this has can be further explored in new research, as it was only shortly mentioned within this research. Furthermore, the HWBP objective is seen as another important aspect in the implementation of linking opportunities. As this research only included input from the HWBP briefly, it is interesting to further explore this topic at a national level and see how the process of collaborative governance can be applied higher up the system. In addition, it would be useful to apply the theoretical framework to other programmes and projects. This can identify new factors that can be applied to the HWBP programme, further exploring the collaborative dynamics in HWBP projects. Lastly, the interview concerning the Climate Advisor of the HWBP (2024) mentioned that sectorial organisation can be a limit in the collaboration around linking opportunities, as it requires collaboration across borders. As it was only briefly mentioned as a challenge in this research, this variable can be further explored.

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Annex 1: Interview guide

Introductie

1. Kunt u wat over uzelf vertellen?
2. Wat is uw functie in het project Wolferen-Sprok?

Drijfveren

De volgende vragen gaan over de drijfveren van de implementatie van meekoppelkansen en de bijbehorende uitdagingen.

Consequente stimulansen

1. In hoeverre vindt u dat het meenemen van meekoppelkansen in een project belangrijk zijn om te kunnen bijdragen aan het collectief belang?
2. Welke meekoppelkansen waren er mogelijk binnen het WS-project, intern en extern?
3. Welke problemen werden er ervaren in het project Wolferen-Sprok?
 - En welke factoren waren gunstig voor de implementatie van meekoppelkansen?
4. Wat is er nodig om meekoppelkansen mee te nemen in het project?
 - In het projectplan Waterwet Dijkversterking Wolferen-Sprok wordt over het belang gesproken van een duidelijke eigenaar en het inzicht op de financiering van een kans. Hoe heeft dit zich geuit in de meekoppelkansen in dit project?

Onderlinge afhankelijkheid

5. Hoe afhankelijk zijn de betrokkenen van elkaar bij het implementeren van meekoppelkansen in het project WS?
 - Welk effect heeft deze afhankelijkheid van actoren tussen elkaar uiteindelijk gehad op de implementatie van meekoppelkansen?

Onzekerheid

6. Welke onzekerheden ontstaan bij het verwerken van meekoppelkansen in het project WS?
 - Zijn deze onzekerheden terecht? Waarom wel/niet?
7. Bent u er mee eens dat meekoppelkansen zouden leiden tot vertraging en financiële problemen?
 - In hoeverre hebben meekoppelkansen binnen het project Wolferen-Sprok ook geleid tot vertraging en/of financiële problemen? Waarom wel of niet?

Leiderschap

8. Op welke manier worden afzonderlijke en gezamenlijke risico's aangepakt rondom de implementatie van meekoppelkansen?
 - In hoeverre is hier iemand verantwoordelijk voor de meekoppelkansen?
9. Hoe worden meekoppelkansen geïnitieerd?
 - In hoeverre is hier iemand verantwoordelijk voor?
10. In hoeverre was er steun voor het benutten van meekoppelkansen binnen de samenwerking?
 - Waarom wel en waarom niet?
 - In hoeverre kan een verantwoordelijke hier invloed op hebben?
11. Welk effect heeft het wel of niet verantwoordelijk stellen van een persoon/organisatie op de het creëren en implementeren van meekoppelkansen? Denk aan het zeker stellen van benodigde middelen (geld, ruimte) en aan het presenteren van meerdere oplossingen.

Collaboratieve dynamiek

12. Wie waren bij het project betrokken?
 - Welke organisaties/stakeholders maakten deel uit van het hoofdteam
13. Hoe is de samenwerking tussen de verschillende betrokken partijen in het algemeen verlopen?

Principiële betrokkenheid

Ontdekking

14. Met welke individuele en gedeelde belangen, zorgen en waarden moest er rekening gehouden worden binnen het project Wolferen-Sprok?
 - Welke van deze belangen vormden de meekoppelkansen in het project van WS?
15. Hoe is de informatie over de kansen in het project geïdentificeerd en geanalyseerd?
 - Waaraan moesten de meekoppelkansen voldoen?

Definitie

16. In hoeverre was er sprake van een gemeenschappelijk doel en welk doel was dit?
 - Waarom maken meekoppelkansen hier wel/niet deel van uit?

- In hoeverre heeft een gemeenschappelijk doel effect op de implementatie van meekoppelkansen?
- Hoe wordt in dit project omgegaan met het HWBP-motto nuchter en efficiënt?
- Waar ruimte voor de rivier wel ruimtelijke kwaliteit als onderdeel van het programma had, is dat niet het geval in het motto van HWBP. In hoeverre denkt u dat er ruimte over gelaten wordt voor meekoppelkansen binnen het doel van HWBP?

17. In hoeverre waren de taken en verwachtingen tussen verschillende belanghebbenden helder rond de implementatie van meekoppelkansen?

- Welke taken en verwachtingen waren er bij het creëren en verwerken van meekoppelkansen?
- Welke invloed heeft de helderheid van taken en verwachtingen gehad op de uiteindelijke implementatie van meekoppelkansen?

18. In hoeverre was de implementatie van het meekoppelkansen onderdeel van de gedeelde criteria bij de beoordeling van informatie en alternatieven?

- Waarom wel of niet?

Overleg

19. Heeft het project van Wolferen-Sprok het collectief belang optimaal vertegenwoordigd volgens u?

- Waarom wel of waarom niet?
- In hoeverre hebben de huidige meekoppelkansen hieraan bijgedragen?

20. Welke strategieën en interventies zijn er gebruikt bij conflicten rondom meekoppelkansen en hoe effectief waren ze?

Determinatie

21. Welke procedurele beslissingen zijn er genomen rond de implementatie van meekoppelkansen?

22. Welke inhoudelijke besluiten zijn er genomen rond de implementatie van meekoppelkansen?

Gedeelde motivatie

Wederzijds vertrouwen

23. Hoe was het vertrouwen tussen de actoren binnen samenwerking en hoe belangrijk is dit voor het creëren en benutten van meekoppelkansen (redelijk, voorspelbaar en betrouwbaar)?
24. Hoe werden belangen van de betrokkenen gewaarborgd binnen het samenwerkingsproces in het project van WS?
- Was er het vermogen om de positie en belangen van anderen te begrijpen en te respecteren?
 - Hoe kwam dit terug in de meekoppelkansen in het project?

Interne legitimiteit

25. In hoeverre waren de verschillende belangen in het samenwerkingsproces van project WS te combineren en onderling afhankelijk?
- Elke gemeente heeft zijn eigen bestemmingsplannen. Hoe is hier mee omgegaan in de samenwerking en hoe heeft dit zich uiteindelijk geuit op de implementatie van meekoppelkansen?

Inzet

26. Het HWBP heeft als waarden om rolzuiver te werken in het belang dat ze behartigen en hierbij soms rollen te combineren. In hoeverre is hier sprake van geweest in het project van Wolferen-Sprok?
- In hoeverre was er sprake van een geïntegreerde teamrelatie tussen technisch beheer en milieubeheer?
 - Hoe betrokken is de ruimtelijk ontwerper geweest bij het planningsproces?
 - Welk effect heeft deze manier van werken gehad op de implementatie van meekoppelkansen?

Capaciteit van gezamenlijke actie

Procedurele en institutionele regelingen

27. Welke formele en informele regels en protocollen waren er die van invloed zijn op de implementatie van meekoppelkansen?
- hoe heeft Waterschap Rivierenland zichzelf bestuurd en beheerd in het samenwerkingsinitiatief rondom het creëren van van meekoppelkansen?
28. Hoe ziet de organisatiestructuur van waterschap Rivierenland eruit?
- Welk effect heeft deze structuur op de implementatie van meekoppelkansen?

29. Hoe hebben de verschillende organisaties samen bestuurd en beheerd in de CGR om uiteindelijk meekoppelkansen te creëren?

- In welke mate zijn de verschillende organisaties geïntegreerd met externe besluitvormende autoriteiten?

(Facilitatief) Leiderschap

30. Was er een vorm van leiderschap binnen het samenwerkingsproces?

- In de literatuur staat dat een leider in staat moet zijn om de actoren te empoweren, consensus te creëren en vertrouwen op te kunnen bouwen. Hoe is het samenwerkingsproces gefaciliteerd met de geïdentificeerde leider/geen leider?
- Welk effect had dit op het creëren en implementeren van meekoppelkansen?

31. Op welke manier werden verschillende belanghebbenden betrokken?

- Had de aanwezigheid van een leider hier effect op?

Kennis

32. Is er voldoende sociaal kapitaal van gedeelde kennis waargenomen om te implementeren in het verbinden van kansen?

- Hoe heeft de beschikbare kennis uiteindelijk de meekoppelkansen beïnvloed?

Middelen

33. Was er sprake van machtsongelijkheid tussen de betrokkenen en heeft dit effect gehad op het creëren en implementeren van meekoppelkansen?

- Zo ja, welk effect heeft dit gehad?

34. In hoeverre hadden middelen zoals tijd, expertise, vrijheid en financiële prikkels effect op de implementatie van meekoppelkansen?

- Hoe worden die benodigdheden uiteindelijk verkregen?

Systeemcontext

35. In hoeverre beïnvloeden organisatorische, sectorale en/of jurisdictiegrenzen, zoals natura 2000, wro, omgevingsrecht, waterrecht, het vermogen om meekoppelkansen te realiseren binnen dit project?

36. In hoeverre beïnvloeden historische en ruimtelijke kenmerken het vermogen om meekoppelkansen te realiseren?

- Zo is de waaldijk van project WS ligt in het rivierengebied, langs diverse dorpen en lintbebouwing. Waar sprake is van veel land en glastuinbouw en is de dijk een belangrijk landschappelijk en cultuurhistorisch element, wat voorheen deel van het programma ruimte voor de rivier was. Welke kansen kwamen hier uiteindelijk in voor?

37. In hoeverre hebben vorige programma's, zoals ruimte voor de rivier, invloed op de realisatie van meekoppelkansen?
38. Hoe beïnvloeden nabije plannen rondom het projectgebied uiteindelijk de meekoppelkansen, zoals woningbouwlocaties, waterstaatkundige activiteiten, het programma Waalweelde, landschapspark De Daneenberg en project Stad Tiel?

Collaboratieve actie

39. Welke meekoppelkansen zijn uiteindelijk meegenomen in het eindproject?
- Waarom deze?
40. Hoe zou de samenwerking met zowel burgers als organisaties moeten verlopen om meekoppelkansen zoveel mogelijk te verwerken in het project?
41. In hoeverre denkt u dat de huidige manier van samenwerking heeft bijgedragen aan de implementatie van meekoppelkansen?
42. Wat zijn de grootste leerpunten over de implementatie van meekoppelkansen geweest?

Afsluiting

43. Heeft u nog opmerkingen of vragen over dingen die tijdens dit interview ter sprake zijn gekomen?
44. Kent u eventueel nog andere betrokkenen in het project die mij iets over dit onderwerp kunnen vertellen?