
WATER SAFETY OBJECTIVES, AN OPPORTUNITY FOR AREA DEVELOPMENT?

A collaborative approach for integrating linking opportunities within the
Hoogwaterbeschermingsprogramma



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Preface and acknowledgements

This research is executed to fulfil the graduation requirements of the masters' programme 'Spatial planning', with the specialisation 'Cities, Water and Climate Change' at Radboud University Nijmegen. I was engaged in researching and writing this Masters' thesis from September 2019 to March 2020. The research was undertaken as part of a research internship at Arcadis Netherlands B.V.. In coordination with Arcadis, I formulated the research question and proposal, which would be relevant for the company as well. For me personally, I have learned a lot from the research process and results. I gained skills and more expertise on fields that I will take along in my further career. For me it has been very interesting to dive into specific spatial planning practices and project processes. The conversations I had with the respondents, but also colleagues at Arcadis, gave me more insight and knowledge of the spatial planning practice and made me very enthusiastic to bring my career within the spatial planning practice further. The research process has been iterative and many steps were taken leading to this final result.

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Summary

The Netherlands faces various current and future challenges regarding water safety. The Hoogwaterbeschermingsprogramma (HWBP) is the largest current implementation programme of the Deltaprogramma, aimed at increasing water safety to the norm set in the 'Waterwet'. The objective is stated as 'sober, robust and effective' which means water safety measures and integration efforts are financially covered. Nowadays, it seems hard to implement linking opportunities within water safety measures. Linking opportunities are opportunities to include other objectives than water safety of other initiators in the project. It becomes clear from the scientific literature often there is still chosen for traditional solutions, which do not implement occurring linking opportunities (van Hattum, et al., 2014).

The aim of this research is identifying the perceived barriers and benefits for implementing linking opportunities within different projects of the Hoogwaterbeschermingsprogramma (HWBP). The main question that is formulated for this purpose is: *"Which barriers and benefits can be identified for implementing linking opportunities in water safety measures?"*.

The theories of policy integration as a process and collaborative governance are the theoretical framework that is at the basis of this research. It is used to research a collaborative process aimed at integrating ambitions and policies.

To be able to answer this research question a qualitative case study is conducted. Three distinctive projects are researched with a comparing case study. One of the cases is a reference case and two cases are still in development in an exploratory phase. The reference case is HWBP Kustwerk Katwijk, the other cases are HWBP Noordelijke Maasvallei (Baarlo- Hout-Blerick) and HWBP Sterke Lekdijk (Wijk bij Duurstede-Amerongen). In this case study research, in-depth interviews are conducted and a desk-research is carried out. In total 17 interviews are conducted. The respondents are each involved in one of the cases. For each case there were site visits as well.

It became clear from the literature review and interviews that the cases have similarities as well as differences on the field of linking opportunities. Different factors are perceived as important for the collaborative process of implementing linking opportunities. It became clear from this research that commitment is a central factor for implementing linking opportunities. When there is commitment on implementing linking opportunities, each actor perceive the bargaining for the mutual gains is the right way to achieve the desired outcomes (Ansell & Gash, 2007). At a certain moment in time, when the preferred alternative will be set, all the cases need a certain commitment. With this commitment a certain clarity is needed. A financial clarity and a clarity of which risks could occur are perceived as needed for the initiator of a linking opportunity, as well as the respective water authority. This process has been visible in all cases, but has been dealt with differently because of other factors. To achieve this clarity it is important to have an open, honest, transparent interaction and communication. The organisation culture and personal factors are of influence on this, as well as the leadership style and role. An important factor that can help in this is the way in which the collaboration is giving shape. When there is a closer collaboration between the actors that are initiating the linking opportunity and the water authority, there seems to be a clearer shared understanding and the ambitions can be aligned better. The increased interaction and communication is beneficial in this. It increases the amount of perceived trust between the policy actors as well. Besides that, it is also perceived as important for the decision-making process to inform and involve the decision-makers well prior to the moment the decision has to be made. Active involvement and providing up-to-date information are beneficial for this. A barrier that has

been perceived on giving financial clarity is the allocation of budgets among initiators of linking opportunities, specifically municipalities. It is perceived that it would be beneficial when the ambitions of involved policy actors would be insightful at an early stage. However, this is perceived as very difficult for the policy actors to identify at such an early stage. Besides, the linking opportunities need to fit within the project planning and may not cause delays. Therefore the linking opportunities need to be made specific and the time frames need to be adjusted to the water safety objective in order to be successfully implemented. Because of the HWBP objective it is harder for municipalities to allocate budget for implementing the linking opportunity. The HWBP objective and its financial framework do not cover linking opportunities. Municipalities need to bring budgets forward in planning or have to overthrow budgets, which is not always an easy task, although the idea can be logical to implement. Besides that, in the project planning there is only a short time for initiators to make their linking opportunity specific and allocate budget.

Recommendations that can be formulated are aimed at improving the process to successfully implement linking opportunities on these different perceived factors. Beneficial for the process is an open, honest, clear and transparent communication. This can be positively influenced by the leadership within the process. A leadership style which gives responsibilities to other actors and involves them in the collaborative process can have a positive influence on this. It is important to communicate and make agreements in advance so the expectations the actors have of each other are clear. Another positive influence could be to consider the collaboration process and governance structure. It is perceived as beneficial that when a linking opportunity is likely to be implemented to involve the initiator of this linking opportunity to an increasing extent. Financially the HWBP objective can cause barriers for implementing a linking opportunity. It could be considered to give more time for initiators to make their initiative or ambition specific and to allocate budget. It could be considered to what extent this commitment is needed in the exploratory phase, and which aspects of the commitment could be given in later phases. Other suggestions that were given for dealing with the HWBP objective when implementing linking opportunities, is to set up a fund for linking opportunities that are perceived as favourable at a national or provincial level or at each individual water authority. Besides that, the stakeholder engagement management is regarded as being important for the project. It is important to bring in the wishes to the project and the decision-making process. Therefore the stakeholder engagement management should not only be part of the stakeholder engagement manager, but should be carried collaboratively within a project organisation. It helps if a water authority has an organisation culture and starting point in which the involvement of local actors is important.

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1. Introduction

In this chapter the research is introduced by stating the research problem that is the starting point of this research. From this research problem statement the research aim and questions are derived, which will be presented in section 1.2. In section 1.3 there will be illustrated how this research is socially and scientifically relevant.

1.1. Research problem statement

The Netherlands faces various current and future challenges on the field of water safety. In order to improve and maintain the water safety, measures have to be taken. One of the programmes that is established for implementing water safety measures in the Netherlands is the Hoogwaterbeschermingsprogramma (HWBP). The HWBP has the societal task to maintain the water safety in the Netherlands, and is currently the largest implementation programme of the Deltaprogramma¹. In the HWBP mainly the water authorities and Rijkswaterstaat are involved. Together these authorities manage the primary dikes in the Netherlands. The HWBP is aimed at improving the primary dikes that do not comply with the safety norms which are set in the 'Waterwet'². The flood defences need to be improved so they meet the safety norms in the year 2050 (Hoogwaterbeschermingsprogramma, 2019).

The costs for improving the dikes operated by Rijkswaterstaat are entirely carried by the Dutch state. The costs for the construction and improvement of the dikes operated by the water authorities can get a subsidy of 90 percent of the estimated costs (Hoogwaterbeschermingsprogramma, 2019).

The management of the HWBP programme has the goal to warrant for a water safety reinforcement task, which is realised in a 'sober, effective and controlled' way (Hoogwaterbeschermingsprogramma, 2019, p. 14). From this formulated goal the question rises whether there is (financial) room for 'meekoppelkansen', as there was in previous projects such as in the Ruimte voor de Rivier programme. The Ruimte voor de Rivier programme had a double project objective with an equal weight given to both water safety and spatial quality (van Hattum, et al., 2014). In this research 'meekoppelkansen' will be translated as linking opportunities. Linking opportunities are possible additional goals or ambitions by initiators that can be realised within a project area. These goals or ambitions can be very diverse. There are different criteria under which the linking opportunities can be developed. These are further elaborated in chapter two. For instance, an ambition could be to improve the spatial quality or to develop nature (van Hattum, et al., 2014). An ambition can be regarded as linking opportunity when it is regarded as an ambition that is additional to the HWBP objective. For linking opportunities it is important that initiators of the primary project investigate what issues are at stake and what the ambitions are in their project area. In each HWBP project there is attention to integral area development, which includes linking opportunities as well (van Rijswijk, 2014). Eventually the competent authority, the respective province, is responsible for approving the integration and spatial quality of the water safety measure (van Rijswijk, 2014). Besides linking opportunities there are 'inpassingsopgaven', in this research translated as 'integration efforts'. These integration efforts and linking opportunities have to be

¹ National programme of the Dutch state aimed at goals regarding water. Specifically water safety, the availability of fresh water and the spatial adaptation and planning are important pillars of the programme (Deltacommissaris, 2020).

² A Dutch national law aimed at preventing and decreasing the occurrence of flooding, water scarcity, the protection and improvement of the quality of water systems and the fulfilment of societal functions by water systems (Kenniscentrum InfoMil, 2020).

clearly defined and differentiated in its implications. Integration efforts are efforts that are made to compensate, decrease or prevent negative consequences of the primary project in the surrounding environment (van Rijswijk, 2014). For instance, if trees are lost due to the development of a dike, these trees can be compensated elsewhere in the project area as part of the primary project. The distinction between integration efforts and linking opportunities is important to make. Integration efforts are part of the primary project in the form of compensation, prevention or the decreasing of negative consequences of measures. Linking opportunities are not part of the primary project, but can be included separately as an added value. Financially the linking opportunities are supported by external initiators, while integration efforts are financially part of the primary project.

Linking opportunities can have an added value to the spatial quality and can have direct and possibly indirect benefits. Within water safety measures linking opportunities are not utilised to a satisfactory extent. It could be stated that many linking opportunities can be found, but due to various reasons they are not integrated in the primary projects (van Hattum, et al., 2014). In practice water safety measures have priority above any other ambitions, according to van Hattum et al. (2014). An innovative or integral approach can bring insecurities and risks to the primary project. These risks are mostly found in time, budget and effectiveness according to van Hattum et al. (2014). Because of this approach and the risks there is mostly chosen for traditional solutions, in which linking opportunities are not utilised (van Hattum, et al., 2014). Linking opportunities are of importance in the environmental management process, for the integration of ambitions within the project creates a social foundation for the primary plan (van Hattum, et al., 2014). The thought behind linking opportunities fits with the Dutch Environmental Act which will be implemented in the year 2021. In this law there will be more emphasis on integral project development in which there will be more focus on the local situation and more room for local initiatives (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019). That is why this research also takes both the local context and the initiatives into account. In appendix 1 an elaboration of, for this research relevant, policies is included. It is included if more contextual information on policies is needed for reading this research.

In this research the perceived benefits and barriers of implementing linking opportunities are central. This research focuses specifically on the integration of the policies and collaboration of involved actors of HWBP projects in which linking opportunities will possibly be implemented. Due to the formulated task of the HWBP the question rises whether there is room for linking opportunities. Factors that determine if linking opportunities are implemented or not will be identified for different actors. It will be researched to what extent the policies and the interests at stake, that are formulated for the different projects, are regarded as integrated by involved actors, and which factors they identify as being a barrier or a benefit for the project and thus for the inclusion of linking opportunities in the project. In this research it is central to identify which barriers and benefits to the collaborative and integration process are perceived by involved actors. This will be done by using the theories of policy integration and collaborative governance. There will be elaborated upon these in chapter 2. Recommendations will be formulated for the integration of linking opportunities into primary water safety measures based on the results. In this way conditions or factors can be formulated that are of a negative or positive influence on the inclusion of linking opportunities in the primary project.

1.2. Research aim & questions

This research contributes to the knowledge regarding the research problem. The research aim follows from the research problem that is stated. The research aim defines specifically what purpose this research has. The research aim is:

The aim of this research is to get an insight in the perceived benefits and the barriers of linking opportunities in water safety measures that are part of the HWBP.

This research contributes to the knowledge on linking opportunities, its policy and the theories of policy integration and collaborative governance. The knowledge that is obtained can be used for practical implications. Recommendations to the practice can be derived from the research results. Therefore, the research can possibly contribute to, and give an insight in, policy strategies regarding linking opportunities. Conditions or factors that are either a positive or negative influence on the inclusion of linking opportunities in the projects can be formulated. From this research aim the following main question can be derived:

“Which barriers and benefits can be identified for implementing linking opportunities in water safety measures?”

For answering this question, the following sub questions are formulated:

“Which sorts of linking opportunities can be identified?”

“In what way is dealt with linking opportunities in the current situation?”

“Which factors are perceived as being a benefit and by whom?”

“Which factors are perceived as being a barrier and by whom?”

“Why are these factors perceived as a benefit or a barrier and by whom?”

“Which actors or factors can either positively or negatively influence linking opportunities?”

This research focuses on the perception of different involved actors in the project areas. These actors are the competent authorities (decision-makers), the project team (project management/stakeholder engagement management) and initiators of linking opportunities. The specific cases and specific involved actors will be elaborated on in chapter 3 of this research.

By answering these questions policy integration theory can be applied to a specific spatial and local context and can be linked to the theory of collaborative governance. The theory can thus be modified and adjusted for this spatial context. In this way recommendations can be made for the practice and relevant findings for further research can be found.

1.3. Scientific & Societal relevance

1.3.1. Scientific relevance

Linking opportunities are relatively new in the Dutch policy. However, there have already been researches conducted in the past that touch on the topic of integral plans. There are also relatively new researches that focus on Dutch 'meekoppelkansen' specifically. These mainly focus on a policy analysis and empirical research on certain case studies, such as van Hattum et al. (2014). These researches do not link back to institutional and governance theories, like the theory of policy integration and collaborative governance. This research is embedded in the current policy and links the policy and empirical data to scientific theories on governance.

Nowadays decision-making includes to an increasing extent actors that are operating outside formal governments and state-based agencies (Stead & Meijers, 2009). Fish, Ioris and Watson (2009) argue that because of this shift, new spaces of policy-making have come to existence. As Fish, Ioris and Watson (2009) state, integration of management and sectors needs the development of a new collaborative approach to governance. The paper of Fish, Ioris and Watson (2009) is focused on integrating water and agricultural management. Although the content of the policy fields that are needed to be integrated according to these authors are different from the policy fields within this research, the governance models are highly relevant and can be useful outside this specific context. Fish, Ioris and Watson (2009) describe this new approach as a governance that is able to cope with '*scale dependencies and interactions, uncertainty and contested knowledge, and interdependency among diverse and unequal interests*' (Fish, Ioris, & Watson, 2009, p. 5623). This research contributes to the development of such a model and approach, that Fish, Ioris and Watson (2009) describe. They state the development of a new approach to governance is needed, for conventional models are unlikely to apply to these circumstances (Fish, Ioris, & Watson, 2009). Candel and Biesbroek (2016) identify as well several challenges to integrate policies when current societal issues, which are complex, are approached with more traditional policymaking in governance systems.

For this reason the governance model of collaborative governance is combined with certain approaches of policy integration within this research. In this way this research contributes to the development of a collaborative approach to governance that is linked to the integration of policies, which makes it scientifically relevant, but can therefore be of societal relevance as well.

The theory of collaborative governance is more often used in this field of study. For instance, Fish, Ioris and Watson (2009) use a specific model of collaborative governance. However, a combination of this theory with the theory of policy integration is not yet present in the scientific literature as far as is identified in this research. Therefore, the theoretical framework of this research is unique as it combines the process of integration of different policies with the context of the collaborative process in which amongst others the local actors and context are of importance.

The theoretical concept of policy integration is applied in specific, strongly spatial contexts in this research. This concept is to a lesser extent applied to a specific local and spatial context, and even to a lesser extent to a spatial context regarding water safety. Therefore, the application of the theoretical concept to this specific spatial context can be relevant for gaining theoretical insights regarding policy integration and practical insights regarding water safety policy.

As stated in the Deltaprogramma of 2019 the policy on linking opportunities is aimed at climate- and spatial adaptation (Staf Deltacommissaris, 2018). Most of the already existing researches on linking opportunities are specifically focused on linking nature development to the primary water

safety measures (van Hattum, et al., 2014; Veraart, Vos, Spijkerman, & Witte, 2014). There is a lack of researches that are focused on linking spatial adaptation and quality initiatives to water safety measures, which this research does.

Most of the already finished researches in this field of interest focus on other policy programmes than the Hoogwaterbeschermingsprogramma. They mainly focus on cases that fit within the Ruimte voor de Rivier policy programme. This policy programme has a different policy objective, in which linking opportunities fit more intrinsically and the linking opportunities are therefore regarded as generally positively implemented (van Hattum, et al., 2014). The Hoogwaterbeschermingsprogramma has another objective and its projects are researched to a lesser extent on linking opportunities (yet). This makes the research both scientifically and societal relevant. The aim of the Hoogwaterbeschermingsprogramma will be elaborated further for the societal relevance in section 1.3.2.

1.3.2. Societal relevance

The Netherlands is a low-lying country and is vulnerable to flooding and water-related risks. Climate change is unavoidable and different effects of climate change will have an impact on the Dutch society. Expected future effects are the rising sea level, land subsidence, reduced water availability and rising temperatures. One of the vital elements of the Deltaprogramme in the Netherlands is the protection against flooding. However, some flood protection measures are at the moment inadequate in some areas (Ligtvoet, van Oostenbrugge, Knoop, Muilwijk, & Vonk, 2015). A good implementation of the HWBP programme, to which this research can possibly have a contribution, is therefore of societal relevance to the Dutch society.

Integral plan development and linking opportunities are very topical within water safety policy, as is clear from the Deltaprogramma of 2019 (Staf Deltacommissaris, 2018). A research that links these themes and discusses its barriers and benefits could therefore be very useful in improving the policy practice and integrate policy. In the Ruimte voor de Rivier programme spatial quality was an objective next to water safety. In the current HWBP programme the primary goal is to reinforce the dikes in order to increase the water safety. The possibility to include additional developments in projects, is therefore smaller (Hartgers, et al., 2015). The costs of these other initiatives and the link with the primary plan will not be subsidised by the HWBP programme, but should be paid by other actors. However, there is room for actors in the plan area to bring in initiatives and these could be explored during the process of the specific HWBP project (Huijsmans, 2014; van Rijswijk, 2014). Linking opportunities can be involved in the HWBP project if it leads to reducing the costs and does not delay the project according to van Hattum et al. (2014).

Politically there is no consensus regarding linking opportunities of water safety with spatial, societal and economic measures (Deltanieuws, 2017). Some parties are concerned linking opportunities will become of too much importance instead of water safety, while others are worried that linking opportunities will not be incorporated at all. The minister of Infrastructure and Environment (in the year 2017) stated the importance of linking opportunities, but stated at the same time that water safety will always be the main priority (Deltanieuws, 2017). The minister stated that the fund for water safety measures should not be used for linking opportunities (Deltanieuws, 2017).

The HWBP programme, which can be currently regarded as one of the most important water safety programmes of the Netherlands, gives less room for linking opportunities although the relevance of linking opportunities is clearly stated. It is thus of societal relevance to research the

perceived barriers and benefits of the linking opportunities in the HWBP programme. In this way an insight is given in how these linking opportunities successfully can be taken into account in the HWBP programme, despite the sober and effective project aim.

This research takes the environmental act and its starting points into account, and links this to the practice of linking opportunities and integral project development (Ministerie van Infrastructuur en Milieu, 2016). In this way possible practical recommendations can be made for the implementation of the environmental act in these specific projects, which makes the research relevant for society.

This research focuses on specific spatial contexts. The integration of sectoral policies is seen as a main objective of the current spatial planning practice (Stead & Meijers, 2009). Nowadays, there is more and more attention given to the principle of policy integration. However, it remains often unclear what it exactly is, what it involves and how it can be achieved (Stead & Meijers, 2009). This research contributes to these questions occurring in the society. Spatial planning can play an integrating role and can set objectives that steer sectoral policies (Meijers & Stead, 2004). Current trends in the fragmentation of governance are an important challenge for policy integration. To promote a broader interest in the integration of policy amongst politicians and the public, a 'sense of need and openness to change and requires information, education and training' is needed (Stead & Meijers, 2009, p. 330). This research can contribute to this needed information and can do some recommendations for the spatial planning practice.

This research attempts to identify factors that contribute to or decrease the integration of policies, namely factors that facilitate or inhibit linking opportunities within HWBP projects. According to Stead and Meijers (2009) this clearly points to the gap present between the existing and desired situation in society. Desired is that linking opportunities will be implemented to an increasing extent. This research is societally relevant, for it identifies the factors that occur in this gap, and does recommendations to overcome this gap. These can be scientifically relevant for the further development of the theory of policy integration as well.

Within the new environmental act (Omgevingswet) that will be implemented in the Netherlands in 2021, the focus lies on integral plan development. The act has a more integral approach in contrary to a former more sectoral approach. Two of the starting points of the environmental act are to create more space for initiatives and to create customisation on a local scale (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019). This shows the current relevance of both linking opportunities and integration efforts, but also of the practical application of the theories of policy integration and collaboratives governance. By using both theories there is focused on how there is collaboratively worked on integrating ambitions, such as linking opportunities, at a local scale.

2. Literature review and theoretical framework

In this chapter the theories that are at the foundation of this research are elaborated. Besides that, there is an elaboration on the practical context of the research. In section 2.1 this is elaborated in order to understand the linkage between the practical context and the used theories. An aim of this research is to identify the perceptions the involved actors have regarding barriers and benefits to linking opportunities within the specific project they are involved. The perception on barriers and benefits will be identified by using the theories of collaborative governance and policy integration as a process. These theoretical concepts will be elaborated in section 2.2 and operationalised in section 2.3. By linking back to the research question and aim it will be made clear why the concepts are useful theoretical concepts for this empirical research.

2.1. Critical review of academic literature: Water safety and the Hoogwaterbeschermingsprogramma

A step that is needed prior the elaboration of the theoretical concepts of policy integration and collaborative governance, is to identify what a linking opportunity in the Hoogwaterbeschermingsprogramma entails. It is important to identify how they practically operate in the Hoogwaterbeschermingsprogramma and water safety policy and how they can be characterised. This section is used in order to be able to characterise linking opportunities that occur in the cases of this case study research.

2.1.1. The characteristics of linking opportunities within the Hoogwaterbeschermingsprogramma

The Netherlands has various policy goals within the field of water, such as water safety, water quality and water supply. These goals are made clear and are executed within different policy programmes on different levels of governance (national, regional, local). By combining instruments and resources different policy goals can be combined on a regional or local scale. For instance the national flood defence programme of HWBP can be executed regionally and can include local initiatives as linking opportunities. This in order to realise the policy goals in a more effective way on a smaller scale (van Hattum, et al., 2014).

Linking opportunities from the perspective of the HWBP can be defined as opportunities to include other aims than the water safety objective of partners in the region (van Rijswijk, 2014). From the policy and scientific literature different aspects of linking opportunities can be derived.

There are six aspects that together characterise linking opportunities for this research. These aspects are used to identify which linking opportunities there are in the projects. This can help in answering the first and second sub question of this research. The aspects are identified by a literature study on scientific and policy literature about the HWBP.

Functions of space

In the HWBP programme the main objective of the project is establishing a certain standard of water safety (van Rijswijk, 2014). This is the HWBP objective, which implements a water safety measure is thus an important function of that space. However, linking opportunities, can bring in new or other functions of space.

Initiators

The initiators of the HWBP programme are either individual water authorities or Rijkswaterstaat (van Rijswijk, 2014). Besides these initiators of the water safety measure, there are initiators of linking opportunities. Those could be all sorts of initiators. There could be public initiators, such as municipalities or provinces. Besides, private initiators could be involved as well. Private initiators could be organisations such as companies, but also local civil society groups that come with different objectives.

Different interests

Within integral plans there are a lot of interests at stake. The involved actors are both the actors that have an initiative within the project area and the ones that only have a stake in the development of the project. These are for example the people living in the project area or are people that are part of an environmental organisation that have an interest in a good implementation that has less impact on the environment.

A critique on linking opportunities, is that it suggests a hierarchical order. The primary goal has the priority and the linking opportunity is subordinate or is 'free-riding' on the primary goal (van Hattum, et al., 2014).

Participation and stakeholder engagement

For including linking opportunities it is important to include stakeholders in an early phase of the project. Preferably even before the start of the project. In this way linking opportunities can be identified and discussed in an early phase of the project (van Rijswijk, 2014).

The nature, scope and complexity of the specific project are of importance for the participation process (van Rijswijk, 2014).

With this aspect it becomes insightful how the participation is given shape in the specific project. Are initiators and other actors involved from the start, as is mostly the case with linking opportunities? And how are people involved/integrated in the project?

Objectives and aims

This research focuses on linking opportunities regarding the spatial quality of the project area. It is important to make a clear distinction between integration efforts and linking opportunities. Integration efforts are aimed at compensation of, prevention of or decreasing the negative consequences of the primary project. Linking opportunities are aimed at improving the spatial quality of the area (van Rijswijk, 2014). Therefore it is important to make a distinction what purpose a development serves. A viewpoint is that linking opportunities will develop synergies, in which the total benefits off all initiatives are higher than just the sum of the all initiatives.

Financing

The distinction between linking opportunities and integration efforts is also made within the financial framework of the HWBP. There is a sectoral budget for the water safety program in which integration efforts are part of the primary project and can be financed from this budget. Increasing the spatial quality does not fit the project aim of 'sober, robust and effective' and is therefore not regarded as an integration effort. Therefore an improvement or increasement of the spatial quality is regarded as a linking opportunity that needs additional financing (van Rijswijk, 2014). The essence of the sober, robust and effective approach is that the spatial quality and integration efforts are 'logic, simple and specific' (van Rijswijk, 2014). However, there are exceptions on this approach if it

can be logically and effectively substantiated for the specific project (van Rijswijk, 2014). It is stated that it asks for a locally specific customisation, for it is dependent on the specific 'location, nature, scope, complexity and the process that needs to be ran through' (van Rijswijk, 2014, p. 11). The financing regulation states that measures within the process and execution are considered when they are part of the water safety objective. It is thus not possible to decide which would be part of the financing and which would need additional financing on a general level (van Rijswijk, 2014).

2.2. Theoretical framework

This research intertwines two theories, namely policy integration and collaborative governance. These theories are intertwined for they complement each other on the fields that are needed for this research. This research focuses on barriers and benefits for the implementation of linking opportunities. These are identified within the project process. As will become clear from the elaboration of the theory of policy integration, this theory focuses on the integration of interests and ambitions on the level of policy actors. Ambitions of those actors could be combined for serving a shared interest, in which the boundaries and responsibilities of the individual actors are extended and crossed. This theory focuses on different levels of policy and is very applicable to a national or international level. Much studies are focused on how policies of different policy departments of a national government or at international level can be integrated. This research focuses on different levels of policy, for linking opportunities are mostly regional or local. The HWBP is a national programme, but is executed regionally or locally. A starting point for this research is that the local and practical execution of a project is inseparable from the local context in which the project takes place. Participation is in the current society more and more important. The theory of collaborative governance focuses on how actors in a certain area are collaboratively operating in a certain governance structure. The actors are as well policy actors, as local stakeholders. By using these two theories simultaneously it is researched to what extent ambitions that are brought in by (policy) actors can be integrated within the HWBP programme, and in which context and how the collaboration for this goal takes place.

As Meijers and Stead (2004) state, the decision-making processes are becoming increasingly complex nowadays. This is due to a variety of factors that can be identified in the current society. An important factor that can be identified is the increasing number and extent to which actors are involved in decision-making and policy processes. This factor can be addressed to the emergence of the information society and the increasing attention for public participation. Non-governmental organisations, pressure groups and agencies are to an increasing extent included in these processes. These developments make an integration of policy increasingly difficult (Meijers & Stead, 2004). Collaborative governance emphasises the role of participation in policy processes. It addresses the increasing role local stakeholders have in decision-making. The theory of collaborative governance can be used for researching the collaboration between the involved actors so the difficulties regarding the decision-making processes could be overcome.

In this research a theory of policy integration is used to identify to what extent and how the collaborative process of policy integration is taking place for the different (policy) actors. Additional to this theoretical concept of policy integration, concepts of the theory of collaborative governance are used to identify the extent to which the public participation and stakeholder engagement is part of this decision-making process and how the collaborative process between the different actors takes place.

2.2.1. Policy integration

It can be stated that linking opportunities need a certain extent of integration of policies to be established, for linking opportunities are ambitions formulated according to a policy agenda and interest of an actor and take place within a project which is part of a policy objective. In that way different policies can be at stake for a project. In order to do research on linking opportunities by using the concept of policy integration, a better understanding and definition of this concept is needed. Therefore there will be explained how the concept of policy integration developed; what

the different understandings of policy integration are; which understanding will be used for this research; and how it will be used.

Policy integration is aimed at integrating different policy fields. Meijers and Stead (2004) define policy integration as follows: *“Policy integration concerns the management of cross-cutting issues in policy-making that transcend the boundaries of established policy fields, and which do not correspond to the institutional responsibilities of individual departments.”* (Meijers & Stead, 2004, p. 2). This definition implicates that there are policy issues that go beyond the boundaries of the policy fields for which specific policy actors are responsible.

The concept of policy integration stems from the concept of environmental policy integration (EPI). Environmental policy integration is a long established concept and is elaborated thoroughly within scientific literature. It specifically aims at the incorporation of environmental concerns within sectoral policies (Jordan & Lenschow, 2010). Environmental concerns should be integrated in sectoral policies in order to reduce the incoherence and achieve synergies within the policies (van Oosten, Uzamukunda, & Runhaar, 2018). The principle of EPI is defined as *‘the incorporation of environmental concerns into other policy areas to overcome policy conflicts* (van Oosten, Uzamukunda, & Runhaar, 2018, p. 64)’. Policy integration can be regarded as the incorporation of sectoral concerns into other policy areas to overcome policy conflicts, as it does not only concern environmental concerns but also other sectoral concerns. Nilsson and Persson (2003) state that policy integration can even increase the rationality and effectiveness of policy making. This because different policies and its actors are brought together by policy integration. Different policy actors together have a pool of knowledge and are better able to identify win-win and cost-effective solutions and opportunities (Nilsson & Persson, 2003).

Policy integration entails both horizontal and vertical integration. By horizontal integration there is an integration across policy domains. For instance, different national ministries can have policies aimed at the same cross-cutting issue. Vertical integration is aimed at integrating policy actors and scales of governance (Stead & Meijers, 2009). There are various arguments that are identified that argue for more integrated sectoral policies. More integrated sectoral policies

“reduce the horizontal and vertical duplication in the policy-making process, promote a certain consistency between policies and decision making in different levels and sectors, promote synergies between sectors, improve the achievement of cross-cutting objectives, promote innovation in the development and implementation of policy, develop a greater understanding of policy effects in other sectors and focus more on the government’s achievement in overall goals, instead of sector-oriented goals” (Stead & Meijers, 2009, p. 319).

With this view on horizontal and vertical integration Stead and Meijers (2009) build on the view of Underdal (1980). However, Underdal (1980) and Stead and Meijers (2009) have different interpretations of, or perspectives on policy integration. Nilsson and Persson (2003) define two interpretations of policy integration, namely policy integration as an outcome and policy integration as a process. Underdal (1980) interprets policy integration as an outcome, while Stead and Meijers (2009) regard policy integration as a process. Nollkaemper (2002) makes a similar distinction and speaks of policy integration as an objective instead of as an outcome in this interpretation. In this interpretation policy integration would have the primary role to inspire legal rules, activities or

political programmes (Nollkaemper, 2002). Policy integration as an outcome is focused on substantive outputs, such as policy instruments (Persson, 2004). It underlies and inspires more specific environmental laws. It would not be a suitable foundation of legal decision-making (Nollkaemper, 2002; Jordan & Lenschow, 2010). For studying policy integration as an outcome it is likely to involve many variables that are subject-specific (Persson, 2004).

Policy integration as a process focuses on the coordination between agencies, relations that are intragovernmental, processes of communication and systems for mainstreaming issues into the sectoral decision-making processes (Nilsson & Persson, 2003, p. 335). When one would study policy integration as a process, the focus would be on researching general policy process variables. These could for instance be *'governmental power relations, communication processes, and analytical procedures'* (Persson, 2004, p. 23). The policy process could be divided in different stages to identify the specific nature of integration and the development in stages. The two perceptions on policy integration are not mutually exclusive (Persson, 2004). However, in practice there might be a weak link between the process and output. The policy outputs sometimes result not of an substantive preparation process (Nilsson & Persson, 2003).

Underdal (1980) is one of the earliest and an important writer on policy integration. He defines an integrated policy as

"one where all significant consequences of policy decisions are recognized as decision premises, where policy options are evaluated on the bases of their effects on some aggregate measure of utility, and where the different policy elements are consistent with each other. In other words, a policy is integrated to the extent that it recognizes its consequences as decision premises, aggregates them into an overall evaluation, and penetrates all policy levels and all government agencies involved in its execution" (Underdal, 1980, p. 162).

The main purpose of policy integration is the improvement of outcomes, is stated by Underdal (1980). It is an effort to link issue-aspects or issue-areas in decision-making that are otherwise neglected. Although, the definition of Underdal (1980) is at the foundation of policy integration, his approach is not used for the operationalisation in this research. This research focuses on policy integration, but not from the perspective of policy integration as an outcome. For researching linking opportunities within projects in development, the dynamics and integration in the process are more interesting than focusing on the extent to which the policy has been integrated as an outcome. For this reason the concept of policy integration as a process is used as the theoretical framework of this research.

Policy integration as a process

For this research two theoretical concepts focused on policy integration as a process are used, namely Candel and Biesbroek (2016) and Stead and Meijers (2009). Most authors on policy integration focus on national or international level. Stead and Meijers (2009) focus on the occurrence of policy integration at various levels of government, including the local as well. They state the relevance and current occurrence of initiatives for integrated area development at a local level. It is stated that these initiatives can coordinate or integrate various aspects of physical development or incorporate social and economic development within the physical development (Stead & Meijers, 2009). This can be regarded as being the case for linking opportunities, for it links ambitions on other fields to the physical development of the water safety measure (van Rijswijk, 2014). Policy integration is stated as being to a great extent linked to the spatial planning practice.

Many problems regarding developments in current society are emphasised as cutting across sectors (Stead & Meijers, 2009). Managing sectoral policies and integrating these, is stated as being increasingly difficult, for government and society are increasingly independent. Besides that, there is an increasing amount of actors and agencies involved in policy-making, and the influence of the external bodies of government is increasing as well, which are aspects that increase the difficulty to integrate policies (Stead & Meijers, 2009). The government is to an increasing extent decentralising and the responsibilities become therefore divided, which makes it harder to integrate them. However, the current desire to integrate policies is increasing (Stead & Meijers, 2009). Policy integration promotes synergies between sectors, for the combination of sectors creates an added value. The achievement of the cross-cutting goal is greater when it is integrated (Stead & Meijers, 2009). Besides, policy integration takes care of reducing horizontal and vertical duplication in policy making. Policies become more consistent in different sectors and at different levels (Stead & Meijers, 2009).

Stead and Meijers (2009) distinguish different concepts in the process of policy integration, which could be interpreted as degrees of integration. These parts are respectively co-operation, coordination and integrated policy-making. The first phase is co-operation. Within co-operation different organisations can work together and accomplish their own goals. There would be a joint accomplishment for goals that operate individually (Stead & Meijers, 2009). Coordination goes further than co-operation. It has a larger threat for the autonomy of actors, for it involves more resources and interdependencies. With coordination joint decisions and actions will result in joint outcomes. This can differ from the initial preferred outcomes of actors (Stead & Meijers, 2009). Integrated policy making is the most far reaching of the three. With policy integration there is a joint new policy. Integration is more demanding for the stakeholders of the process, for it requires more *'interaction, accessibility and compatibility, leads to more interdependence, needs more formal institutional arrangements, involves more resources, requires stakeholders to give up more autonomy and is more comprehensive in terms of time, space and actors'* (Meijers & Stead, 2004, p. 6). The process of policy integration therefore includes coordination and cooperation, but they do not account for the entire process. Policy integration leads to joint decisions and actions that result in joint outcomes, which may be different from the initial preferred outcomes. Coordination leads to policies and actions that are adjusted and remain sectorally separate and distinct (Stead & Meijers, 2009).

Stead and Meijers (2009) build on existing scientific literature that identified different inhibitors and facilitators of policy integration or certain ways of coordination or cooperation. With these different scientific frameworks they developed their framework that identifies different factors that influence the policy integration process. Stead and Meijers (2009) distinguish five categories of facilitators and inhibitors of policy integration. In these categories factors are clustered. This system, according to Stead and Meijers (2009), only represents one of many ways of classifying. In figure 2.1 and 2.2 the inhibitors and facilitators are presented. They are included to give an impression of what the factors practically entail. The following factors are of importance according to Stead and Meijers (2009), and can be described as follows:

- *Political Factors*

It is important for integration to have a political commitment and have leaders that are able to deliver the bigger picture and look for partners with needs that are compatible to strive for the these cross cutting objectives (Stead & Meijers, 2009). This leadership and political commitment create

dependencies between actors, but gives more influence in each other's policy sectors as well. In this process the autonomy of the actors and the ability to unilaterally control outcomes decreases. Other sectors and actors need to be respected within a process of policy integration. A barrier to integration is a fear of conflict over domain and loss of a strategic position (Stead & Meijers, 2009). Other domains need to be respected and should not be claimed. Similarities between the different involved agencies have a positive influence on the integration. Similarities can occur in different dimensions such as: 'the organisational structure, power, status, professional ethics, ideologies to resources that are invested in the policy-making process (Stead & Meijers, 2009, p. 324). The starting point is to have a shared understanding of the policy issues and objectives. Besides, it is important to have a similar view on how approach and address these issues collaboratively (Stead & Meijers, 2009).

- *Institutional/Organisational factors*

Bureaucratisation hinders the communication and innovation and therefore has a negative influence on policy integration (Stead & Meijers, 2009). The fragmentation of the government can lead to contradictions in mandates and regulations, that will eventually lead to a decreased policy integration. A central overview aimed at achieving cross-cutting objectives can facilitate integration. When organisational goals and structures are similar, this can stimulate policy integration (Stead & Meijers, 2009). It focuses on the way in which the organisation is structured and given shape. For this research, this factor it is of importance which institutions, rules and procedures are in place.

- *Economic/Financial factors*

At one side integration is regarded as efficient as it allows economies of scale, risks are shared amongst different actors and uncertainties can be decreased. At the other side there are high costs for the actors that are involved in the integration process (Stead & Meijers, 2009). There are opportunity- and direct costs that are aimed at developing and sustaining the cross-cutting working arrangements. Funds are often allocated to sectoral aims and not to the cross-cutting objectives (Stead & Meijers, 2009). In this way there could be little or no reward in helping to achieve objectives in other sectors or achieve cross-cutting objectives. On the other hand incentives and appraisals can be useful for stimulating policy integration. When there is a great difference in resources between actors, this has a role on the balance within the collaboration of the actors. The actors with lesser resources can have a loss of authority and influence in the process and this can withdraw them from the policy process. However, a short on resources leads to more urgency in linking the objectives of actors with other actors (Stead & Meijers, 2009).

- *Process-, management-, and instrumental factors*

For a good policy integration process, communication needs to be adequate. There is a tension between at one side the autonomy for the individuals involved in the collaboration and at the other side the accountability they have to the organisations they represent. Benefitting for policy integration could be '*instruments that help to balance costs and benefits between actors; to reconcile and identify conflicting priorities; to anticipate, detect and resolve policy conflicts early in the process; and to contribute to a systematic dialogue between sectors.* (Stead & Meijers, 2009, p. 327)'. Flexible implementation of policies to new circumstances are of importance as well, and can be achieved by monitoring mechanisms (Stead & Meijers, 2009).

- *Behavioural, cultural and personal factors*

The relationships between organisations and individuals are of importance to policy integration. There needs to be a shared understanding of the policy issues on an individual level. This can be achieved by convergent approaches by specialists and language. The organisational culture is of importance as a specific organisation culture can support working with other organisations towards joint goals. It is dependent on the specific people to what extent there are people that can see common interests of the involved organisations. There also needs to be a culture where there is trust (Stead & Meijers, 2009).

Figure.2.1: Inhibitors of policy integration according to Stead and Meijers (2009) p.326, derived from: (Halpert, 1982) (Challis, et al., 1988) (Alter & Hage, 1993) (OECD, 1996) (Huxham, 1996) (Kickert, Klijn, & Koppenjan, 1997) (Cabinet Office, 2000)

Political factors	Divergent priorities, interests, ideologies, outlooks or goals (A; E; F; G) leading to a lack of consensus on nature of the problem and solutions (B) and fear of conflict over domain, goals and methods (C) Perceived loss of organisational power, strategic position, prestige, authority and fear of being linked with (other's) failure (A; C) Guarding administrative domains and attempting to extend them (B) Lack of political commitment, backing and leadership (B; D; F) Status differences and asymmetries of scale between sectors (B; E) Short-term political aspirations vis-à-vis the time needed for integration (B) Loss of autonomy and ability to unilaterally control outcomes (B; C) Loss of accountability for policy and service delivery (G) Sectoral objectives often taking priority over cross-cutting goals (G)
Institutional/organisational factors	Bureaucratisation generating increased communication costs, fragmenting communication and leading to low levels of internal communication that makes it difficult to maintain inter-organisational networks (A) Large institutional and organisational differences increase costs (A) Fragmentation of levels of government leading to contradictory mandates and regulations (A) Inadequately trained personnel and high turnover of policy personnel leading to a lack of continuity (A) Lack of central overview capacity above the fray of sectoral issues (D) Lack of a formal authority structure (hierarchy) (E)
Economic/financial factors	Costs outweigh benefits (A) Perception of limited or unbalanced resources to exchange (A) Different cycles in planning budgets and resource uncertainty between sectors complicating structural coordination (B) Fear of losing resources (time, money, information, raw material, legitimacy, status) (C) Time needed to manage logistics (E) Direct and opportunity costs of management and staff time spent establishing and sustaining cross-cutting working arrangements (G) Significant costs falling on one budget while the benefits accrue to another (G) Budgets allocated on a departmental or sectoral basis, rather than to policies or goals (G) Little or no reward for helping someone else to achieve their objectives (G)
Process, management and instrumental factors	Infrequent or inadequate communication (A) or lack of a systematic dialogue between sectors (D) Fear of delays in solution due to coordination problems (C) Tension between autonomy of individuals involved in collaboration and their accountability to the 'parent' organisation (E) Differences in procedures (E) Insufficient recognition of multiformity of the network (F) Complex relationships and lines of accountability, implying risks and management difficulties (G) Lack of management mechanisms (G)
Behavioural, cultural and personal factors	Poor historical relations and negative evaluations of previous cooperation and negative image formation of other organisations (A) Perceived sanctions by network members in case of cooperation with new non-network members (A) Vested interests (A) Lack of a shared understanding resulting from non-convergent (specialist) approaches and language (A; D; E) Poor personal relations between key actors and different styles of working (B) Professional defensiveness reinforcing domain defence (B) Lack of a cooperation- and consultation-orientated structure (D) Overlooking the overall goals of the organisation or the end-user of services (G)

Sources: A, Halpert, 1982; B, Challis et al., 1988; C, Alter & Hage, 1993; D, OECD, 1996; E, Huxham, 1996; F, Kickert & Koppenjan, 1997; G, Cabinet Office, 2000.

Figure 2.2: Facilitators of Policy integration according to Stead and Meijers (2009) p.325, derived from: (Halpert, 1982) (Challis, et al., 1988) (Alter & Hage, 1993) (OECD, 1996) (Huxham, 1996) (Kickert, Klijn, & Koppenjan, 1997) (Cabinet Office, 2000)

Political factors	Convergent problem definition, professional ideologies, interests and approaches (A; B; F) Relatively equal status of organisations involved in coordination (A) An understanding of other organisation's needs and the perception that these are compatible and thus might enhance efficiency (C) Perception that integration increases the ability to manage uncertainty and complexity (A; C) Gain of influence over other sectoral domains (C) Commitment to policy coherence and integration by political leadership; political backing (A; B; D; F) Perceived effectiveness of policy and service delivery (G) Ability to convey the 'bigger picture' and to identify cross-cutting issues (G)
Institutional/organisational factors	Standardised procedures, allowing for greater supervision and maintenance of an orderly and reliable pattern of resource flow from other involved organisations (A) Similarity of structures, supply capabilities, needs and services of organisations involved (A) Existence of a central overview and coordination capacity responsible for achieving cross-cutting, long-term objectives (D)
Economic/financial factors	Corresponding actual needs or common benefits, and scarce resources (A) Perceived gain in resources (time, money, information, raw material, legitimacy, status) (C) Sharing costs and risks of developing products and policies (C) Perceived economies of scale (G) Allocation of budgets to cross-cutting issues and policies rather than to sectors (G) Incentive structures, appraisal systems and rewards stimulating integration (G)
Process, management and instrumental factors	Group-centred approaches to problems (A) Geographical proximity easing interaction and communication (formal and informal) between decision makers and staff (A) Complementary organisational or personnel roles (A) Mechanisms to anticipate, detect and resolve policy conflicts early in the process (D; G) Existence of a strategic policy framework that helps to ensure that sectoral policies are consistent with overall governmental objectives and priorities (D) Decision-making process organised for reconciling policy priorities and budgetary imperatives (D, G) Flexible implementation procedures and monitoring mechanisms capable of adjusting policies in the light of new information, progress and/or changing circumstances (D) Systematic inter-sectoral dialogue (D) Ability to involve all indispensable actors and leave out others (F) Ability to take the diversity and multiformity of the network and actors into account (F) Open nature of networks (F)
Behavioural, cultural and personal factors	Positive attitude and organisational culture towards working with other organisations in a joint endeavour (A, D) Good historical relations (A) Positive evaluation of other organisations and staff involved (A) Persons in the organisation able to understand their own and others' possible benefits of coordination and to plan intervention (B) Willingness to cooperate, need for expertise and culture of trust (C) Shared framework of understanding that allows broader issues to become perceptible to specialists (D)

Sources: A, Halpert, 1982; B, Challis et al., 1988; C, Alter & Hage, 1993; D, OECD, 1996; E, Huxham, 1996; F, Kickert & Koppenjan, 1997; G, Cabinet Office, 2000.

Stead and Meijers (2009) indicate very specific inhibitors and facilitators and factors, which together form one of the starting points of this research for researching perceived barriers and benefits of linking opportunities. The factors focus on the perceptions and interpretations of the involved actors (Stead & Meijers, 2009). This approach makes this framework very useful, for the research aim of this research is to give an insight in which barriers and benefits there are perceived. Attitudes, values, perceptions and images are for this research of main importance, as is the case for policy integration according to Stead and Meijers (2009).

Although the framework of Stead and Meijers (2009) is very applicable to this research, it does not make the policy integration process entirely measurable. The facilitators and inhibitors that are identified say something about the barriers and benefits within the process, but do not indicate the level or extent of policy integration that is present. Therefore the framework elaborated by Candel and Biesbroek (2016) is used. The framework of Candel and Biesbroek (2016) is focused on the manifestations of policy integration in different fields. This fits the research, for the research question focuses on perceived barriers and benefits that can be identified in the process of the project, in which it will be discussed to what extent a linking opportunity can be implemented. Candel and Biesbroek (2016) emphasise, as Stead and Meijers (2009) do as well, that current society has problems that require more integrated policies. Candel and Biesbroek (2016) illustrate examples like the problems of 'compartmentalization, fragmentation, competing and incoherent objectives, policy under- and overreaction, competing issue-attention, and inconsistent instrument mixes' (Candel & Biesbroek, 2016, p. 212). As can be seen, these identified problems are similar to the inhibiting and facilitating factors according to Stead and Meijers (2009). Candel and Biesbroek (2016) do not study whether policy integration is implemented, but study the dynamics and reasons behind the process of integration and disintegration. With their framework, policy integration is seen as an ongoing and multi-dimensional process, in which different elements and developments over time are of importance. One of their critiques on previous theories on policy integration as a process is that it is regarded as a linear process. Candel and Biesbroek (2016) state that policy integration is multi-layered and asynchronous of nature. This is the first starting principle Candel and Biesbroek (2016) identified. Candel and Biesbroek (2016) identified three more starting principles, that have to be taken into account in order to understand their framework. The second starting principle states that the process of integration is as well about integration, as about disintegration (Candel & Biesbroek, 2016). The third principle is '*Mutual dependencies exist and interactions take place between dimensions*' (Candel & Biesbroek, 2016, p. 216). This implies that different elements and conditions in the integrating process, can affect each other. *The fourth principle is: 'Policy integration should be considered as a process of policy and institutional change and design in which actors play a pivotal role'* (Candel & Biesbroek, 2016, pp. 216-217). This fourth principle aims at more agency-centred mechanisms. With the four principles Candel and Biesbroek (2016) define policy integration '*as an agency-driven process of asynchronous and multi-dimensional policy and institutional change within an existing or newly formed governance system that shapes the system's and its subsystems' ability to address a cross-cutting policy problem in a more or less holistic manner*' (Candel & Biesbroek, 2016, p. 217)

Candel and Biesbroek (2016) distinguish four dimensions of policy integration that are derived from these four principles. These principles can be understood in relation to the specific cross-cutting policy problem that occurs in a governance system. For each of the dimensions, Candel and Biesbroek (2016) identified different manifestations. These manifestations make the extent in which the amount of policy integration is applicable easier to identify. As is stated in the starting principles, for each of the dimensions this can be different.

Policy Frame

This dimension refers to the different problem definitions of societal problems in public debates. The definitions could be competing or dominant. The dominant problem definition can differ from the problem perception in individual policy subsystems (Candel & Biesbroek, 2016). A certain policy frame can indicate a cross-cutting issue as such, while other policy frames regard the same issue not as cross-cutting. Policy frames are of importance for indicating the public support and deciding on policy alternatives. Its dependent on the administrative culture how open they are to integration regarding certain issues. This is in the framework of Stead and Meijers (2009) identified as a behavioural-, cultural- and personal factor. This dimension focuses on whether there is recognition of an issue as being cross-cutting, and to what extent it is perceived as being an issue that needs an holistic approach of governance (Candel & Biesbroek, 2016). In figure 2.3 different manifestations of the policy frame in the policy integration processes are visualised. The policy frame is a dimension that has different similarities with the theory of collaborative governance by Ansell and Gash (2007).

Subsystem involvement

This dimension refers to the range of actors that is involved in the cross-cutting policy problem and its governance. The higher the cross-cutting issue is on the political agenda, the more subsystems will be involved either formally or informally. There are two indicators of subsystem involvement. The first indicator is which subsystems are involved in the cross-cutting issue. Candel and Biesbroek (2016) state 'The

	Low amounts of policy integration			High amounts of policy integration	
Policy frame	The problem is defined in narrow terms within the governance system; the cross-cutting nature of the problem is not recognized and the problem is considered to fall within the boundaries of a specific subsystem. Efforts of other subsystems are not understood to be part of the governance of the problem. There is no push for integration		There is awareness that the policy outputs of different subsystems shape policy outcomes as well as an emerging notion of externalities and do-no-harm. The problem is still predominantly perceived of as falling within the boundaries of a particular subsystem. There is no strong push for integration	As a result of increasing awareness of the cross-cutting nature of the problem, an understanding that the governance of the problem should not be restricted to a single domain has emerged as well as associated notions of coordination and coherence	General recognition that the problem is and should not solely be governed by subsystems, but by the governance system as a whole. Subsystems are desired to work according to a shared, 'holistic' approach, which is particularly recognized within procedural instruments that span subsystems (see "Policy instruments")

Figure 2.3: Manifestations of policy frame (Candel & Biesbroek, 2016, p. 219)

Low amounts of policy integration			High amounts of policy integration
Subsystems involved	One dominant subsystem, which governs the issue independently (Metcalf 1994). Formally, no other subsystems are involved, although they may be in terms of substantial, non-intentional policymaking	Subsystems recognize the failure of the dominant subsystem to manage the problem and externalities (Bryson et al. 2006; Feiock 2013), which results in the emergence of concerns about the problem in one or more additional subsystems	<p>Awareness of the problem's cross-cutting nature spreads across subsystems, as a result of which two or more subsystems have formal responsibility for dealing with the problem</p> <p>All possibly relevant subsystems have developed ideas about their role in the governance of the problem. The number of subsystems that are formally involved is equal to or higher than at previous manifestations, but complemented with a less engaged set of alternative subsystems</p>
Density of interactions	No interactions	Infrequent information exchange with dominant subsystem (Geerlings and Stead 2003)	<p>More regular and formal exchange of information and coordination, possibly through coordinative instruments at system-level</p> <p>High level of interaction between formally involved subsystems, that maintain infrequent interactions with a less engaged set of subsystems</p>

Figure 2.4: Manifestations of subsystem involvement (Candel & Biesbroek, 2016, p. 221)

engagement of subsystems is thus determined by the extent to which subsystems consider a particular issue to be of their concern as well as the recognition of the issue's cross-cutting nature and governance implications thereof.' (Candel & Biesbroek, 2016, p. 219). It is also important to be aware of the subsystems that currently are not involved but could be involved as well. Subsystems do not have clear boundaries, but in general it is possible to identify relatively stable actor groups in the policy-making process (Candel & Biesbroek, 2016).

The second indicator focuses on the amount of interaction there is between subsystems. There are subsystems that are primarily involved and ones that are only indirectly involved. In the primarily involved subsystems the problem is primarily embedded. Higher amounts of policy integration mostly have more frequent interactions with each other (Candel & Biesbroek, 2016). In figure 2.4 the manifestations of subsystem involvement are visualised.

Policy goals

Governance systems and associated subsystems have various short-, medium- and long-term policy goals. A policy goal is seen by Candel and Biesbroek (2016) as *'an explicit adoption of a specific concern within the policies and strategies of a governance system, including its subsystems'* (Candel & Biesbroek, 2016, p. 220). The dimension of policy goals focuses on two aspects, which are the range of policies in which the cross-cutting issues are adopted as being policy goals; and the coherences between the policy goals that are diverse. Policy goals which entail cross-cutting issues can be integrated in policies that have different policy goals as starting point (Candel & Biesbroek, 2016). For instance, Climate Change policies could be either only involved in the domain of Climate change policy, or could be part of other policy domains as well, such as infrastructure and mobility. For is embeddedness of a policy goal within other policy domains a certain coherence is needed as well.

It is important to gain insight on how the goals of different domains and subsystems relate to each other, particularly for cross-cutting policy problems. When there is coherence the policy goals contribute to each other, but when there is no coherence in policy goals, the goals could undermine each other (Candel & Biesbroek, 2016).

With a weak coherence the policy goals are more sectoral goals, but with a higher amount of coherence in policy goals, the goals become more shared. Figure 2.5 shows the manifestations of policy goals.

	Low amounts of policy integration		High amounts of policy integration	
Range of policies in which problem is embedded	Concerns only embedded within the goals of a dominant subsystem	Concerns adopted in policy goals of one or more additional subsystems (Keast et al. 2007; McNamara 2012)	Possible further diversification across policy goals of additional subsystems	Concerns embedded within all potentially relevant policy goals
Policy coherence	Very low or no coherence. Occurs when cross-cutting nature is not recognized, or when subsystems are highly autonomous in setting (sectoral) goals	Because of rising awareness of externalities and mutual concerns subsystems may address these to some extent in their goals	Coordinated sectoral goals, which are judged in the light of coherence (Geerlings and Stead 2003). Subsystems attempt to develop synergies (Metcalf 1994)	Shared policy goals embedded within an overarching strategy (Geerlings and Stead 2003; Jochim and May 2010; Keast et al. 2007; McNamara 2012; Metcalfe 1994)

Figure 2.5: Manifestations of policy goals (Candel & Biesbroek, 2016, p. 222)

Policy instruments

Within policy instruments there is a distinction in substantive and procedural policy instruments. Candel and Biesbroek (2016) define substantive instruments as: *'Substantive instruments allocate governing resources of nodality, authority, treasure and organization to directly affect the nature,*

types, quantities and distribution of the goods and serviced provided in society' (Candel & Biesbroek, 2016, p. 222). Substantive instruments thus subdivide means as information, authority, budgets and the organisation. Procedural instruments can manipulate policy processes and with that can indirectly affect outcomes. There are three indicators of policy instruments. Those are: Subsystems' deployment of instruments; procedural instruments at system-level; and the consistency of substantive and procedural instruments (Candel & Biesbroek, 2016, p. 223). When the instruments are embedded in all potentially relevant subsystems then there is a high amount of policy integration. There should be a diversification of instruments that address the problem across the policies of the subsystem (Candel & Biesbroek, 2016).

Low amounts of policy integration		High amounts of policy integration		
Range of subsystems' policies that contain policy instruments	Problem only addressed by the substantive and/or procedural instruments of a dominant subsystem	As a result of increased awareness of externalities one or more additional subsystems (partially) adapt their instruments to mitigate negative effects	Possible further diversification of instruments addressing the problem across subsystems	Instruments embedded within all potentially relevant subsystems and associated policies
	Procedural instruments at system-level	Some procedural information sharing instruments at system-level (cf. Metcalfe 1994)	Increasing number of system-level procedural instruments that facilitate subsystems to jointly address the problem	Broad range of procedural instruments at system-level, including boundary-spanning structures that coordinate, steer and monitor subsystems' efforts
	Consistency	No consistency. Sets of instruments are purely sectoral and result from processes of policy layering (Rayner and Howlett 2009)	Subsystems consider externalities of sectoral instrument mixes in light of internal and inter-sectoral consistency	Subsystems seek to jointly address the problem by adjusting and attuning their instruments. Consistency becomes an explicit aim
				Full reconsideration of subsystem instrument mixes, resulting in a comprehensive, cross-subsystem instrument mix that is designed to meet a set of coherent goals

Figure 2.6: Manifestations of policy instruments (Candel & Biesbroek, 2016, p. 224)

When there is a more integrated policy then there is a certain use of procedural instruments at governance system-level aimed at coordinating the efforts within policy in the subsystems. When the integration is the largest, the organisational procedural instruments will span to the boundaries of the structure or will be an overarching authority that sees the problem as an overall problem (Candel & Biesbroek, 2016). When there is a higher integration there is a greater consistency of the policy instrument mixes. These are the sets of instruments of subsystems that are used over a longer course of time. For their consistency there should be looked at the governance system as a whole, so that means between the subsystems (Candel & Biesbroek, 2016). In figure 2.6 the manifestations of policy instruments are elaborated. The process-, management- and instrumental factors identified by Stead and Meijers have some similarities. Stead and Meijers (2009) indicate the importance of the need of good instruments to benefit policy integration. These instruments are needed for different purposes, such as communication, but also for balancing costs and priorities. Therefore the factors by Stead and Meijers (2009) link to different dimensions of Candel and Biesbroek (2016).

The framework of policy integration as a process by Candel and Biesbroek (2016) show, as is indicated by discussing the scientific articles, complementary and overlapping aspects with the framework by Stead and Meijers (2009). Because these frameworks are used complementary these are combined in the conceptual model, in which it will be elaborated how the frameworks are used together. Although the theory of policy integration pays attention to the role participation plays in current decision-making processes (Meijers & Stead, 2004), the theoretical concepts do not

elaborate on how non-state actors are part of policy process. The theory of policy integration regards participation as a procedure that needs to be included in the decision-making, and Stead and Meijers (2009) state the increasing difficulty in decision-making processes, because of, amongst others, the increasing extent to which nonstate actors are involved. If participation is not done to a satisfactory extent procedural conflicts can arise (van Oosten, Uzamukunda, & Runhaar, 2018). Nillson and Persson (2003) state that different policy actors that collaborate are more able to find win-win and cost-effective solutions and opportunities. Although the importance of collaboration and nonstate stakeholders within the policy integrating process is thus emphasised, the place of nonstate stakeholders in the theory remains small, for they are not regarded as a policy actor. Stead and Meijers (2009) emphasise the importance of policy integration in a very local context in which an integrated area development takes place, but do not focus on the actors in the local context in which this integration process is taking place. Therefore, for this research is chosen that it is important that nonstate stakeholders should be regarded as an actor influencing the process of policy integration. For this reason the theoretical concept of collaborative governance is used as a complementary theory to policy integration. There is chosen to include different aspects of the theory of collaborative governance to give nonstate stakeholders a place within the policy integrating and decision-making field, because in today's practice this role of stakeholders' participation is ever more relevant (Stead & Meijers, 2009). By including collaborative governance aspects, the interests of the stakeholders become part of the possible cross-cutting issues that can be identified. Although the participating stakeholders have no clear policy agenda or administrative body, this does not mean their input and interests are not part of the decision-making process. This can be identified as a critique on the theory of policy integration, as it does not include contextual factors such as in this case stakeholder engagement.

2.2.2. Collaborative governance

An important definition of collaborative governance is the definition by Emerson, Nabatchi and Balogh (2011). They define collaborative governance as:

“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” (Emerson, Nabatchi, & Balogh, 2011, p. 2).

From this definition it can be stated that collaborative governance is, as is the case for policy integration, cross-boundary. Besides transcending different policy fields, collaborative governance transcends the conventional focus on the formal public sector, as policy integration does. Ansell and Gash (2007) state that collaborative governance is a governing arrangement in which public agencies directly engage non-state actors in a collective decision-making process. This process would be formal and focused on building consensus (Ansell & Gash, 2007). Ansell and Gash have a definition that is slightly different from that of Emerson, Nabatchi and Balogh (2011). They define the concept 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” (Ansell & Gash, 2007, p. 544)

Ansell and Gash state that public agencies are mostly initiating collaborative governance. They also emphasise the role of public policy and management. Therefore their framework fits the purpose of this research and the framework of policy integration very well. The definition requires the participation of nonstate stakeholders (Ansell & Gash, 2007). Collaboration is never only consultative, but needs a two-way communication and influence between stakeholders. They need to meet each other in a ‘deliberative and multilateral process’ (Ansell & Gash, 2007, p. 445). The process needs to be collective in this way. Nonstate stakeholders should have a responsibility for the outcomes and must be directly engaged in the decision-making process. This makes policy integration more difficult, is stated by Stead and Meijers (2009). The collaboration is formal as it has an organised and structured arrangement (Ansell & Gash, 2007). The decision-making process is oriented on reaching a consensus. Public authorities will in the end have the authority to make the decision. However, the goal of collaboration is therefore aimed at achieving a certain extent of consensus amongst the stakeholders. The institutionalisation of the collective decision-making process is of main importance to the concept of collaborative governance (Ansell & Gash, 2007). This is also an aspect on which the theories of policy integration and collaborative governance are used together for this research. The integrated policy process should be a collective decision-making process in which the interests of nonstate stakeholders are integrated.

In order to understand and make the link of the concepts of policy integration to the framework of collaborative governance, the framework of collaborative governance by Ansell and Gash (2007) needs to be elaborated further. The framework by Ansell and Gash (2007) is visualised in figure 2.7.

Starting conditions

Ansell and Gash (2007) distinguish three different conditions that can facilitate or prohibit cooperation amongst stakeholders and between agencies and stakeholders.

The first conditions is the ‘Power/resource (im)balances’. Imbalances are seen as a problem that is commonly occurring in collaborative governance. Some stakeholders do not have the “capacity, organization, status or resources to participate or participate on equal footing with other stakeholders” (Ansell & Gash, 2007, p. 551). When there is an imbalance, manipulation by stronger actors can occur. This can result in weak commitment and distrust, which are also important factors according to Stead and Meijers (2009). This is mostly problematic when important stakeholders are not able to organise themselves. They then do not have the organisational infrastructure that is able to make them representative in the collaborative governance process (Ansell & Gash, 2007). Organised stakeholder groups do not collectively represent individual stakeholders, in most of the cases, which is regarded as a problem. Some stakeholders do not have the skills or expertise to engage in discussions that are highly technical. Another problem is that some stakeholders will not have the time or liberty to engage in the process (Ansell & Gash, 2007).

These conditions identified by Ansell and Gash (2007) relate closely to some factors identified by Stead and Meijers (2009). Power and resource imbalances can be seen as a political factor, as Stead and Meijers (2009) state: ‘relatively equal status of organisations involved in coordination’. However, the resource imbalances can be seen as an economic and financial factor that is defined by Stead and Meijers (2009). They define factors such as: ‘Sharing costs and risks’ and

‘perception of limited of unbalanced resources to exchange’ (Stead & Meijers, 2009). According to Ansell and Gash (2007) this can result in distrust and weak commitment. These are political factors identified by Stead and Meijers (2009) and can result in behavioural, cultural and personal factors.

The incentives to participate is the second condition. Participation is voluntarily and therefore it is important to understand the incentives for stakeholders to participate and factors that shape these incentives. These could be for example financial incentives, such as sponsoring, that are also part of the financial and economic factors identified by Stead and Meijers (2009). Power and resource imbalances have an impact on incentives to participate. Power differences amongst actors influence their willingness to collaborate. The incentives to participate are depending partly on the expectations actors have about what the collaborative process will bring to them (Ansell & Gash, 2007). If it brings meaningful results in relation to their invested time and energy, they are more likely to participate. The incentives will increase when the participation has a positive link with the effectual policy outcomes. When stakeholders can achieve their goals unilaterally or through other means, then the incentives to participate are lower. This is a political factor also identified by Stead and Meijers (2009). Concepts such as venue shopping undercut processes of collaboration. The incentive to participate increases when the collaborative process is an exclusive forum for decision making. Another incentive to participate is a certain dependency of goals on the cooperation with other actors (Ansell & Gash, 2007). This is a political factor identified by Stead and Meijers (2009) as well.

The third starting condition is the ‘prehistory of antagonism and cooperation’ (Candel & Biesbroek, 2016, p. 553). This factor can both hinder or facilitate collaboration. A high factor of conflict can at one hand create a strong incentive to collaborative governance. Policy deadlocks can lead to more collaborative governance in that way. Serious costs on both sides rise from a deadlock, what is an incentive for collaborative governance. Conflict is therefore not in definition a barrier to collaboration. Some interests cannot be met without the engagement of other stakeholders with complete opposite interests (Ansell & Gash, 2007). However, on the other hand, us versus them dynamics can be a barrier for collaborative governance. Therefore poor historical relations and histories of conflict can create low levels of trust, which will lead to low levels of commitment, manipulation and communication of dishonest information. A history of good past cooperation can create social capital and a high amount of trust. Historical relations are mainly an behavioural, cultural and personal factor according to Stead and Meijers (2009).

Institutional design

Institutional design refers to the way in which the collaboration process is given shape, so it refers to ground rules and the protocols for collaboration. These are of importance for the procedural legitimacy of the collaborative governance. The access to the process should be open and inclusive according to Ansell and Gash (2007). Actors that have had the legitimate opportunity to participate are more likely to commit to the process. Otherwise procedural conflicts can arise (van Oosten, Uzamukunda, & Runhaar, 2018). This is also part of the framework of policy integration as a process. The institutional design is complementary and linked to the subsystem involvement dimension elaborated by Candel and Biesbroek (2016). It can be seen as a factor that is organisational and institutional according to Stead and Meijers (2009). Stakeholders should be included broadly if they are affected by the issue or care about it. Considerable attention should be paid to getting

stakeholders actively involved in order to succeed in a collaborative governance (Ansell & Gash, 2007). If stakeholders are excluded they can create alternative forums than the collaborative forum. This can negatively influence the collaborative governance. Also clear ground rules and process transparency are of importance for collaborative governance. This can be understood from the perspective of trust building and procedural legitimacy. Stakeholders often enter the collaborative process more sceptical. Issues that can be relevant are equity, power balance and manipulation. The legitimacy of the process depends upon the perception of stakeholders on the extent to which the communication has been fair. Ground rules that are clear and consistent can facilitate a fair, equitable and open process. Process transparency serves the purpose that stakeholders are confident that the negotiation is real. A clear definition of roles for the stakeholders could be of an added value too (Ansell & Gash, 2007).

Although collaborative governance is oriented towards consensus, this is not always reached. It can be discussed if all collaborative decisions should have a formal consensus. This because it can lead to stalemates, which need other procedures than collaborative procedures. Deadlines are of importance too, because meetings for collaborations can be unlimited. Therefore the scope needs to be limited (Ansell & Gash, 2007).

This factor links closely to institutional and organisational factors identified by Stead and Meijers (2009), but also process, management and instrumental factors (Stead & Meijers, 2009).

Facilitative leadership

Leadership is an ability that can bring the different parties to the table and engages them in collaboration processes. There are three types of leadership styles, according to Ansell and Gash (2007): facilitation, mediation and nonbinding arbitration. Facilitation is aimed at ensuring the integrity of the process of consensus building, and is of importance for collaborative governance. Leadership is also of importance for setting and maintaining 'clear ground rules, building trust, facilitating dialogue, and exploring mutual gains' (Ansell & Gash, 2007, p. 554). It is important for embracement, empowerment and involvement of stakeholders. It can mobilise them to make steps forward (Ansell & Gash, 2007). Leaders should bring about a balance of power amongst the stakeholders, in which the weaker stakeholders should be empowered and represented. Possibilities of mutual gain should be explored. If incentives to participation are weak, power and resources are unevenly distributed and the historical relation is poor, then leadership becomes even more important. A strong 'organic' leader, that commands the trust and respect of the stakeholders, is more likely to succeed in this case. Organic leaders rise from the communities of stakeholders. This is dependent on local circumstances. Therefore a lack of leadership can negatively affect collaborative governance.

Collaborative leaders should 'promote broad and active participation; ensure broad-based influence and control; facilitate productive group dynamics; extend the scope of the process' (Ansell & Gash, 2007, p. 554). Collaborations can have more leaders, both formally as informally.

Leadership is according to Stead and Meijers (2009) a political factor.

Collaborative process

In this research different process parts can be distinguished according to the interpretation of Ansell and Gash (2007). These are trust building, commitment to process, shared understanding, intermediate outcomes and face-to-face dialogue. It is not to be seen as a cyclical process, but more

as iterative. This collaborative process and its starting points that influence this process are linked to the integrating process of policies.

Face-to-face dialogue

Communication is of main importance to the collaborative process. Therefore the process builds on face-to-face dialogue between the stakeholders. Face-to-face dialogue is a mean of communication, but is regarded as of main importance, for it breaks down barriers of communications. In this way mutual gains can be identified. It is of main importance to building trust, creating mutual respect, developing a shared understanding and creating commitment to the process (Ansell & Gash, 2007). Face-to-face dialogue is necessary for collaborative governance. However, it is possible that face-to-face dialogue is not sufficient enough and reinforces stereotypes and brings about mutual disrespect (Ansell & Gash, 2007).

Trust Building

At the start of a collaboration there is often a lack of trust. An important part of the process therefore is thus trust building. When there is a history with poor relations this is even more important and at the same time difficult for the collaborating process. This trust building can happen simultaneously with the face-to-face dialogues. Good leadership can have a positive influence on trust building. Opponents need a certain extent of trust before they will risk manipulation. Trust-building takes a long time and needs a long-term commitment (Ansell & Gash, 2007).

Commitment to the process

The extent of commitment to collaboration by the stakeholders has an important influence on the success of a collaboration. Weak commitment of public agencies to collaboration is a problem. Commitment to the process means that there is a belief that 'good faith bargaining for mutual gains is the best way to achieve desirable policy outcomes' (Ansell & Gash, 2007, p. 559). Commitment also means that if the results are going in a direction that a stakeholder not fully supports, there is still a willingness to commitment. Mutual recognition of gains are therefore of importance. Mutual gains can be seen as a shared understanding or shared policy goals, according to the theories of policy integration. Commitment depends as well on the trust in that other stakeholders respect your interests. Commitment can increase as involvement will increase. In collaborative governance the ownership of decision making is collectively. There is a shared responsibility between opponents. Therefore trust is also needed. Shared ownership can be hindered by imbalances of power or different perceptions on who should take the initiative (Ansell & Gash, 2007). Ansell and Gash (2007) state that mandated forms of collaboration are needed when there are less incentives to participation. Although, at the same time mandated collaboration can also give the impression there is a real commitment when this is not the case. A great extent of interdependence among stakeholders enhance commitment to collaboration. But, it can increase manipulative behaviour. Collaboration is based on an ongoing cooperation (Ansell & Gash, 2007).

Shared understanding

Within the collaborative process stakeholders should develop an understanding of what they can collectively achieve. A shared understanding can be interpreted as a common mission, purpose, or objective of alignment of values. This fits the definition of one of the political factors defined by

Stead and Meijers (2009). Development of an shared understanding is part of a collaborative learning process (Ansell & Gash, 2007).

Intermediate Outcomes

Collaboration increases when the purposes and advantages of the collaboration are specific and there are small wins from the collaboration (Ansell & Gash, 2007). These intermediate outcomes can be final outcomes too in the end, but the small wins can encourage the collaborative process to go on. It can encourage the trust building and commitment, but when stakeholders have more ambitious goals it can have the opposite effect. Joint fact finding is important as an intermediate outcome as well. Trust can be built by joint exploration of what the value of the collaboration is (Ansell & Gash, 2007).

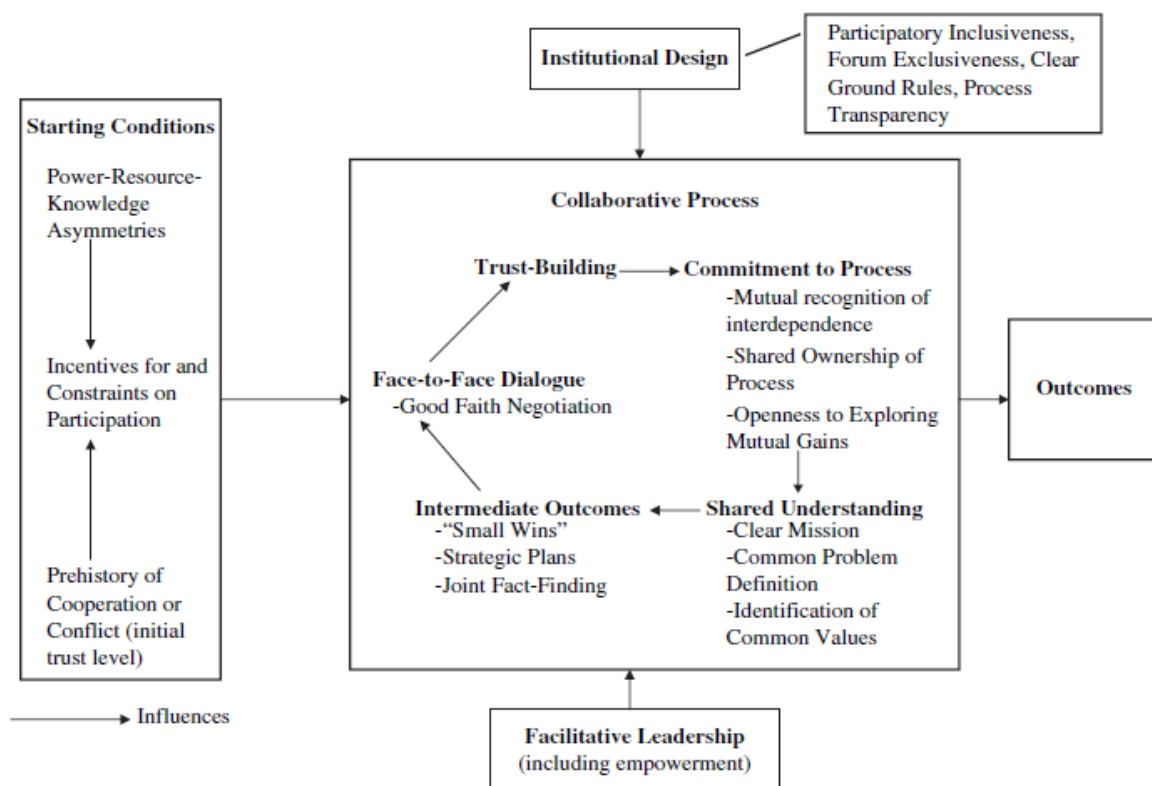


Figure 2.7: Collaborative governance model (Ansell & Gash, 2007, p. 550)

2.3. Operationalisation

This research combines two theoretical concepts, collaborative governance and policy integration. The most important authors on policy integration for this research are Candel and Biesbroek (2016) and Stead and Meijers (2009) and the most important authors on collaborative governance for this research are Ansel and Gash (2007). These theories together are used to come to the conceptual framework and conceptual model that are used to identify the different perceptions actors have on barriers and benefits to linking opportunities. As can be seen in the elaboration on the theories, they overlap, but also complement each other on different aspects. As the policy integration process theory does not include the process with nonstate stakeholders, this research uses the theory of collaborative governance to complement the theory of policy integration on this point. In figure 2.8 the operationalisation of this research is visualised. The variables shown in this operationalisation are formulated according to the theoretical concept of Stead and Meijers (2009). Together these are the fields of factors in which barriers and benefits can be perceived for the purpose of this research. The dimensions that these factors have are formulated from combining the theories by Candel and Biesbroek (2016), Ansell and Gash (2007) and Stead and Meijers (2009). With the indicators is shown what is exactly meant with the dimensions and how it can be measured. The operationalisation of the concepts leads to a conceptual model (figure 2.9) which shows the supposed interactions between the factors that together contribute to and are part of a collaborative process of integration of interests within a certain project. All these factors have an influence on the perceived barriers and benefits that are experienced within this collaborative process of the integration of interests. For instance, if a lack of trust in the project process is perceived by an actor, then this can have a possible influence on how this process is perceived and can possibly be identified as a barrier for integrating the interests in the project.

Variables	Dimensions	Indicators
Political factors	Interests	Interests identified by actor
		Interests of other actors perceived by actor
	Policy goals/intermediate outcomes	Wished outcomes
		Perception on intermediate goals
	Shared understanding	Common problem definition
		Alignment/coherence in objectives
		Clear project goal
	Power and resource (im)balance actors	Common values
		Perceived (Mutual) dependence of actors on each other
		Perceived ability to organize themselves
		Perceived expertise
		Perceived time and liberty to participate
Institutional/organisational factors	Institutional design	Participatory inclusiveness
		Alternative forum
		Clear ground rules
		Process transparency

	Subsystem involvement	Range of involved actors
		Density of interaction
		Formal/informal involvement
	Organisation structure	Perception on fragmentation/bureaucratisation
		Decision-making process
		Organogram
		Project organisation
Economic and financial factors	Uncertainties and risks	Perceived insecurities
		Perceived risks
	Financial distribution key	Distribution of process costs
		Distribution of realisation costs
		Responsibilities
	Financial incentives	Financial stimulances to participate
Process, management and instrumental factors	Face to face dialogue/communication	Ways of communication/interaction actors
	Commitment (to the process)	Perceived interdependence of actors
		Shared ownership of the process
		Openness to explore mutual gains
	Policy instruments	Substantive instruments
		Procedural instruments
	Scope project/planning	Perception of the project's scope
		Flexibility to changes in scope
		Project planning
		Planning delays
		Time frame of goals
Behavioural, cultural and personal factors	Trust	Perception of trust in other actors
		Perception on trust building
	(Facilitative) Leadership	Ability to empower actors
		Consensus building
		Trust building
		Mobilization of actors
		Involvement of actors
	Organisation culture	Perception of the organisation culture
	Personal relations	Perception on collaboration and relations on personal level
		Prehistory of antagonism and cooperation
		Perception on mutual respect

Figure 2.8: Operationalisation

Collaborative process of integration of interests

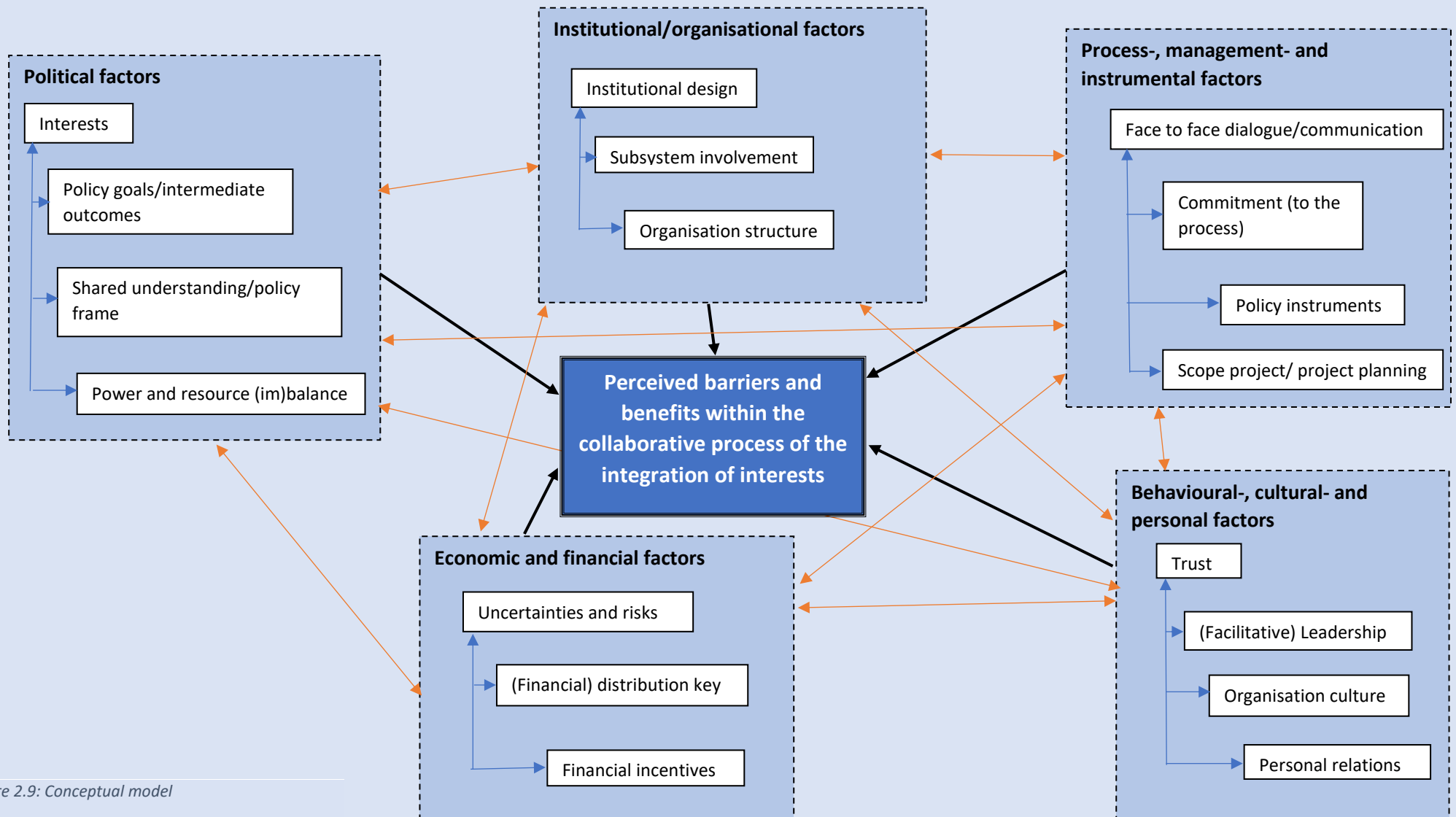


Figure 2.9: Conceptual model

To understand the relations between the variables and dimensions, a further elaboration of the concepts needed. There is chosen to cluster different dimensions in five different variables. This is done by combining the theoretical frameworks and adjusting the concepts to each other so they work complementary. This does not mean that every dimension only is part of that one variable. The factors and dimensions are closely interconnected, as can be seen in the conceptual model in figure 2.9. This is also the case in the theoretical frameworks. The framework has a processual approach, so the factors are highly connected in a non-linear way. For instance, a shared understanding is seen as a political factor, but is highly connected with the behavioural-, cultural-, and personal variable. So, can the dimension leadership possibly influence to what extent a shared understanding is reached. These processual interconnectedness of different dimensions are also emphasised in the literature (Candel & Biesbroek, 2016; Stead & Meijers, 2009; Ansell & Gash, 2007). Therefore, there is chosen in this research to be aware of the interrelations and interconnectedness of the different variables and dimensions, but not to presuppose which connections exactly would be at place in the specific cases and what would be the most important connections. Therefore the blue and orange arrows in figure 2.9 are drawn, connecting all factors and dimensions as they are interconnected within the process. The interconnectedness is context specific and therefore the interconnectedness will be different for each of the cases in this case study research. This will be part of the analysis of the case studies.

All different variables and their interconnected dimensions have a certain influence on which barriers and benefits in the collaborative process of integration of interests are perceived. The collaborative process of integration of interests can be seen as the project process in which linking opportunities occur. Within this collaborative integrating process different barriers and benefits can be perceived by the different stakeholders that have an influence on to what extent the process is collaborative and integrating. With these factors and dimensions it can be identified which of these possibly cause barriers or create benefits for the involved actors.

The different variables and dimensions need to be elaborated further to understand the exact meaning of these for this research and to understand why and how certain aspects of the theoretical concepts are combined for this research.

Political factors

- **Interests**

This dimension focuses on which interests are at stake in the particular project area. It is closely linked to the dimension of 'policy frame' identified by Candel and Biesbroek (2016). The dimension refers to different problem definitions of actors and to what extent a cross-cutting problem is recognised. It focuses on the identification of possible dominant problem definitions in relation to other occurring problem definitions in subsystems. Stead and Meijers (2009) also state that convergent problem definitions and interests have a positive influence on the policy integrating process. They identify this as a political factor as well.

- **Policy goals/intermediate outcomes**

This dimension combines different concepts of the different authors. A policy goal according to Candel and Biesbroek (2016) is an adoption of a certain concern (interest) within the policy or policies of a governance system. This dimension thus identifies which goals the actors have in the project. It identifies what they want to be realised. It is closely linked to their interests, but can be

seen as a translation of the actor's interest in a certain goal. For instance, a local farmer can have an interest in the accessibility of his or her farm. His or her goal could therefore be to create a new entry road to the farm.

This dimension also focuses on the intermediate outcomes identified by Ansell and Gash (2007). These are outcomes within the process that can encourage or discourage going on with the process. This dimension is thus also focused on to what extent the intermediate goals are perceived as good or bad. Stead and Meijers (2009) also take the time in which aspirations can be implemented versus the time needed for integration in to account as an factor. It can be inhibiting for a collaborating process if short term aspirations can be implemented.

- Shared understanding

The shared understanding defined by Ansell and Gash (2007) and the policy frame identified by Candel and Biesbroek (2016) states more or less the same. In a shared understanding the actors should have an understanding of what can be collectively achieved. This fits in the definition of political factors by Stead and Meijers (2009). They state that an understanding of each other's needs and a perception that these needs are compatible can positively influence the integrating process (Stead & Meijers, 2009). This links closely to the dimension of policy frame by Candel and Biesbroek (2016). This dimension refers to different problem definitions. If a cross-cutting problem would be recognised as such, it could be stated that there is a shared understanding. Therefore the dimensions of 'interests', 'policy goals/intermediate outcomes' and 'shared understanding' are linked to each other. In the policy frame dimension by Candel and Biesbroek (2016) is stated that a recognition of a problem that cannot be solely governed by actors, in which actors desire to work according to a shared approach means there is a high extent of policy integration (Candel & Biesbroek, 2016). Common values are of importance in this dimension, as well as a clear project goal, a common problem definition and a certain alignment in the goals.

- Power and resource (im)balance

Power and resource (im)balance is identified as one of the starting conditions for collaborative governance according to Ansell and Gash (2007). Actors need the capacity to participate, in the fields of expertise, financing, organisation and time. It can be the case that this capacity differs for every actor. There can also exist a certain dependence of actors on each other, where some actors can be in a more dependent role than others. Stead and Meijers (2009) state that integration demands a certain extent of interdependence of actors. Ansell and Gash (2007) state that a dependency of goals on the cooperation with other actors is an incentive to collaboration.

Institutional/organisational factors

- Institutional design

According to Ansell and Gash (2007) the institutional design refers to the rules and protocols for collaboration. This links closely to the institutional and organisational factors identified by Stead and Meijers (2007). Ansell and Gash (2007) distinguish four dimensions: Participatory inclusiveness, alternative forums, clear ground rules and process transparency.

Participatory inclusiveness refers to the extent to which actors are able to participate or excluded. Alternative forums can emerge when actors try to reach their interest via other ways. Ground rules

are needed to facilitate the process and the communication. The process needs to be transparent so stakeholders are confident that their negotiation process is real.

- Subsystem involvement

The dimension of subsystem involvement that is identified by Candel and Biesbroek (2016) is closely related to the dimension of institutional design. The subsystem involvement is focused on the range of actors that is involved and how they interact and at which density. The actors can be formally or informally be involved. Each actor can have a different role in the process, this is also emphasised by Ansell and Gash (2007).

- Organisation structure

There is chosen to include the organisation structure in the institutional/organisation factors, although Stead and Meijers (2009) place this dimension in the political factor variable. This is done as the organisation structure in this case includes aspects as the way the project organisation is shaped and how the decision-making process is taking place. This is more organisational and does not really focuses on political aspects of the organisation, but more on how the processes within the organisation are taking place. The decision-making process is of importance for this research, as with policy integration they become increasingly difficult, as more actors with more interests are included in the process (Meijers & Stead, 2004)

Economic and financial factors

- Uncertainties and risks

Stead and Meijers (2009) identify uncertainties and risks as part of economic and financial factors. Uncertainties and risks can be shared amongst different actors, evenly or unevenly. Risks and uncertainties can cause delays in the project planning or cause other processual problems.

- (Financial) distribution key

Risks can be shared, but this is also the case for costs. Costs can be shared among different actors involved in the process. This can be realisation costs or costs that facilitate the process (Stead & Meijers, 2009). There can also be a distribution key of responsibilities that distributes the responsibilities amongst actors.

- Financial incentives

This is a dimension that is included in the concept of policy integration defined by Stead and Meijers (2009) and the collaborative governance framework by Ansell and Gash (2007). Stead and Meijers (2009) state that little reward for helping other actors' goals will have a negative influence on policy integration.

Process-, management-, and instrumental factors

- Face to face dialogue

Communication and dialogue is according to the different authors of importance. Stead and Meijers (2009) emphasise that an frequent and adequate communication between actors is of importance. Ansell and Gash (2009) state communication is of main importance and has an influence on trust building, mutual respect, shared understanding.

- Commitment (to the process)

Commitment is a dimension that is used in as well the theory of policy integration as collaborative governance. Stead and Meijers (2009) see commitment as a political dimension, but are focussing more on political commitment in their definition, what entails that the actors are committed to politically shared outcomes. In the definition by Ansell and Gash (2007) there is more focus on the commitment to the process, of which the commitment to the policy goal is also part. Commitment in their definition means that this process of negotiating for mutual gains is the best way to achieve policy goals.

- Policy instruments

Candel and Biesbroek (2016), Stead and Meijers (2009) and Ansell and Gash (2007) all distinguish the dimension of policy instruments.

Candel and Biesbroek (2016) distinguish two different types of policy instruments, substantive- and procedural policy instruments. This distinction is used in the operationalisation of this dimension. Substantive instruments focus on the allocation of governing resources, authority et cetera. For instance, these could be allocation of budgets or authority given to an actor.

Procedural instruments focus on instruments that influence the process (Candel & Biesbroek, 2016). Stead and Meijers (2009) name different instruments as subfactors within this category, that can be linked to either procedural- or substantive instruments. Therefore there is chosen to include the distinction in instruments by Candel and Biesbroek (2016).

- Scope project/ project planning

This dimension focuses on the perceived scope of the project and the flexibility there is perceived in changing the scope. Ansell and Gash (2007) state collaborative governance is consensus orientated, but the scope needs to be limited by procedures to stick to the planning and scope as it leads to stalemates. Ansell and Gash (2007) state that leaders can extend the scope of the process.

Also the project planning is of important in this dimension, as collaboration and integration are comprehensive in terms of time (Meijers & Stead, 2004). Problems in the process can cause delays. Also goals can have different time frames (Candel & Biesbroek, 2016).

Behavioural-, cultural-, and personal factors

- Trust

Trust is of importance to the collaborative process. Trust needs to be built. Trust is related to different factors such as leadership, organisation culture and personal relations (Ansell & Gash, 2007). Stead and Meijers (2009) state there needs to be a culture of trust within a process of policy integration.

- (Facilitative) leadership

Leadership is of importance to reach a consensus, lead the process, gain support, make ground rules and find a mutual goal (Stead & Meijers, 2009; Ansell & Gash, 2007). This factor can be seen as a political factor and is identified as such by Stead and Meijers (2009). However, there is chosen to include it in behavioural-, cultural-, and personal factors as leaders can rise organically and more leaders can occur in one process. Leadership is understood in this research as a behavioural-, cultural-, and personal quality.

- Organisation culture

The dimension organisation culture is focused on how people experience the organisation culture. This is for instance focused on how open the organisation is to collaboration, which is part of the policy frame dimension identified by Candel and Biesbroek (2016). Stead and Meijers (2009) identify this as a behavioural-, cultural-, and personal factor. The organisational culture can support actors to work towards joint goals, as is stated by Candel and Biesbroek (2016). This dimension is not part of the collaborative governance framework, but is included additionally in this research as is thought that it can have an influence on the collaborative process too, as some actors would be more familiar from their organisation culture to collaborating than others.

- Personal relations

Personal relations include the perception actors have on their collaboration with other actors, the previous relations with involved actors and the respect they have for the interest of others. Stead and Meijers (2009) distinguish this dimension as influencing political factors, however they state too that the actors should respect other domains, what makes it a more behavioural factor for actors. Ansell and Gash (2007) also state the importance of the respects stakeholders have for each other's interests.

A bad historical relation with actors can cause problems for the collaboration and integration process (Ansell & Gash, 2007; Stead & Meijers, 2009).

3. Methodology

In this chapter it will be explained how the research is conducted and which methodological choices were made. In section 3.1. the research philosophy, approaches, design and tactics are illustrated. It will be made clear why certain choices were made. In section 3.2 the reliability and validity of this research is elaborated. Section 3.3 focuses on the research process and way in which was dealt with sensitivity during the research.

3.1. Research philosophy, approaches, design and tactics

In this research the choices that are made regarding the research strategy are elaborated by using the 'research onion' framework by Saunders, Lewis and Thornhill (2009). This onion has different layers that have to be 'peeled off' to come to the central point of the data collection and analysis (Saunders, Lewis, & Thornhill, 2009). In figure 3.1 the research onion of this research is visualised.

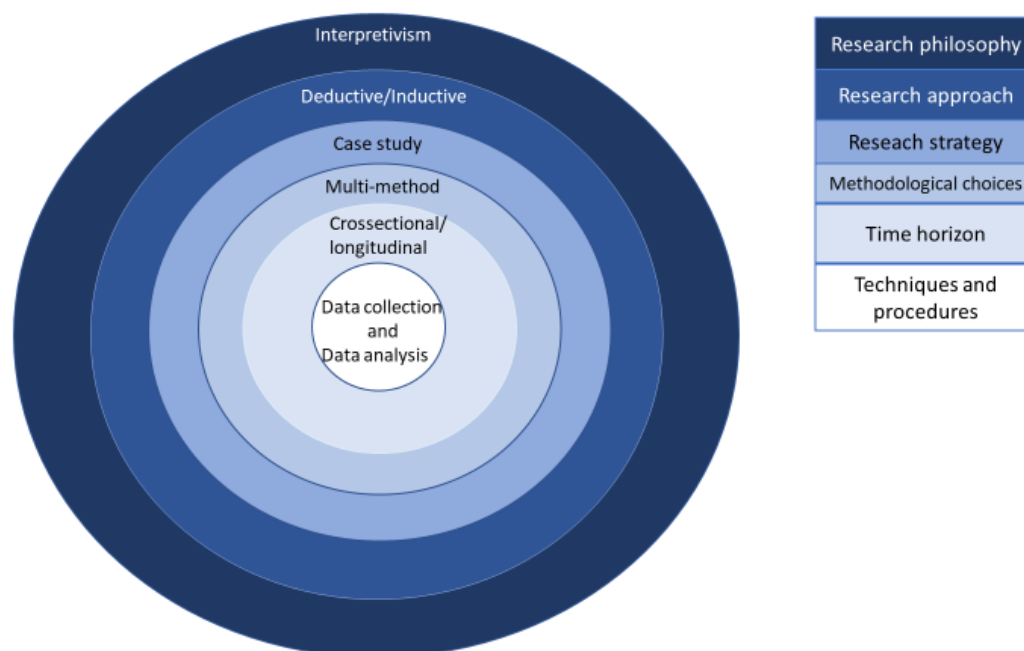


Figure 3.1: Research Onion of this research, according to Saunders, Lewis and Thornhill (2009)

3.1.1. Research philosophy

The outside layer of the onion, is the layer of the research philosophy. A research philosophy is focused on the perception the research has on how knowledge develops and on the nature of knowledge. The research philosophy contains certain assumptions on how the world is perceived, and it is therefore of importance to describe these for this research. The assumptions that are made in the research philosophy underpin the research strategy and the chosen methods (Saunders, Lewis, & Thornhill, 2009). This research fits within the research philosophy of interpretivism, that has the view that social phenomena are created from social actors that have perceptions and can conduct actions. It can be regarded as a continual process. Through social interaction the social phenomena constantly shift and revise (Saunders, Lewis, & Thornhill, 2009). It is important to understand differences between humans in the role of social actors. The social roles they carry out are shaped by their own meaning and interpretation of the world surrounding them. The social roles of others are again perceived in accordance to people's own perceptions. Within the overarching epistemology and ontology debate, this research fits within an ontological subjectivist interpretation

of reality. This entails that social phenomena are created from perceptions and the consequent actions of the 'social actors that are concerned with their existence' (Saunders, Lewis, & Thornhill, 2009, p. 110). This fits the theory of social constructionism. The epistemology is the view the research has on what constitutes acceptable knowledge. For a researcher it is of importance to understand the subjective reality of the research objects, in order to make sense of their motives, actions and intentions in a meaningful way (Saunders, Lewis, & Thornhill, 2009). For this research it is important to explore the subjective meanings and perceptions on linking opportunities of the actors involved in the HWBP projects. These individual actors perceive the situations in different ways, as a consequence of their own world view. These actors interact with this situation and shape and affect it by doing so. In this research the subjective reality of these actors is important in order to be able to understand the motives, actions and intentions in a meaningful way (Saunders, Lewis, & Thornhill, 2009). The axiology entails the view on the role of values in the research. An interpretivist research philosophy means that the research value is bound, for the researcher is part of the research. The researcher cannot be separated from what they research and it is therefore always subjective (Saunders, Lewis, & Thornhill, 2009).

3.1.2. Research approaches

There are two main approaches to research: inductive and deductive. This entails the extent to which the theory is formulated prior the research. Within an inductive research one first collects data and from the corresponding data analysis a theory will be developed. When using a deductive approach, a theory and hypotheses are formulated which are then tested by the design of a research strategy (Saunders, Lewis, & Thornhill, 2009). These research approaches can be combined. It is stated that there are no rigid divisions between deduction and induction. The combination of these approaches could even be advantageous for the purpose of the research (Saunders, Lewis, & Thornhill, 2009).

This research contains both elements of an inductive and a deductive research approach. There is a clear deductive element in this research, for a conceptual framework is formulated that is used for collecting data and the analysis. A supposing relationship between different variables is formulated. These variables are operationalised in order to measure and research the variables. Although the research contains these elements of deduction, not all aspects of deduction available are part of the research. Deduction uses mainly quantitative data, even though a qualitative approach is possible as well (Saunders, Lewis, & Thornhill, 2009). This research only uses different qualitative data analysis approaches, which is more uncommon in a deductive research approach. The research will not have a highly structured methodology, as for the interpretivist philosophy a semi-structured methodology is more fitting. The structured methodology according to deduction is needed for the replication of the research that would increase the reliability of the research. Within the deductive approach the researcher is regarded as independent and objective. As stated in the previous section, this research reasons from a subjectivist approach, in which the researcher is subjective (Saunders, Lewis, & Thornhill, 2009). A deductive research approach is focused on the generalisation of the data. For this research has a qualitative approach in carrying out a case study, it is not the aim nor is it possible to generalise this data (Saunders, Lewis, & Thornhill, 2009).

Therefore, it could be stated that the research consists out of some deductive elements, for there is a clear formulated theoretical starting point of the research, in the format of a theoretical framework and conceptual model. This would not be the case for an entirely inductive research approach. The research approach of the data collection methods can be regarded as more inductive,

in which theory follows data. This means that data is collected and theories can be formulated with the process of data collection (Saunders, Lewis, & Thornhill, 2009). The research gains an understanding of the meanings and perceptions that are attached to the linking opportunities which are researched closely. This is important in the approach of induction, for the inductive approach is specifically concerned with the context in which events take place. For the research it is important to gain an understanding of the meanings that are attached to events by social actors, to have an in-depth understanding of the context of the research. This in order to collect mostly qualitative data, to be more flexible to the structure of the research, to realise that the researcher is part of the research process and that there is no need to generalise (Saunders, Lewis, & Thornhill, 2009, p. 127). These are all inductive approaches, and fit perfectly within this research.

The theoretical framework and conceptual model contribute a deductive element to a mainly inductive research approach. With this understanding the beforehand formulated theories can be applied to the specific context of the cases, and a theory regarding these specific cases can be formulated. This research approach is chosen because the beforehand formulated theoretical framework and conceptual model are focused on institutional theories that define the scope of the interactions and context of what is being researched. The research focuses on perceived barriers and benefits within a specific institutional and spatial context. In order to conduct this research, it is important to define what is going to be researched within this context, so the scope and aim of the research do not get lost in the entire social context and interactions that are taking place.

3.1.3. Research strategy

A research strategy follows from both the research philosophy and approach. In this research a fitting strategy is the strategy of a case study, for phenomena in a real life context are of importance. In this research it is namely the case that there are no clear boundaries between the phenomenon that is being studied and the context in which it is being studied (Saunders, Lewis, & Thornhill, 2009).

In this research there is aimed to get an in-depth understanding of the context of the research and the processes that are taking place. This matches perfectly with a case study research (Saunders, Lewis, & Thornhill, 2009). A case study can be defined as an empirical inquiry that *'investigates a contemporary phenomenon (the "case") in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident'* (Yin, 2014, p. 16).

There are four basic types of designs for case studies (Yin, 2014). These types are based on whether the approach is holistic or embedded or whether there is a single case or are multiple cases. This research uses the form of multiple-case studies. There is chosen to include multiple cases for it compares if the findings of the single case occur in the other cases, and investigates thus if there is a possibility to generalise to a certain extent (Yin, 2014; Saunders, Lewis, & Thornhill, 2009).

As is the case in the multiple-case study procedure, there will be started with the development of theory in a theoretical framework. The cases will be selected from that theory and a data collection protocol will be designed. Then the data collection will start on the individual case studies for which individual case reports will be written. Within the analysis cross-conclusions will be drawn. With the insights the theory can be modified and policy implications can be developed. At last a cross-case report will be written (Yin, 2014). The multiple-case study procedure as described by Yin (2014) will be used as the research model of this research. This model is visualised in figure 3.2.

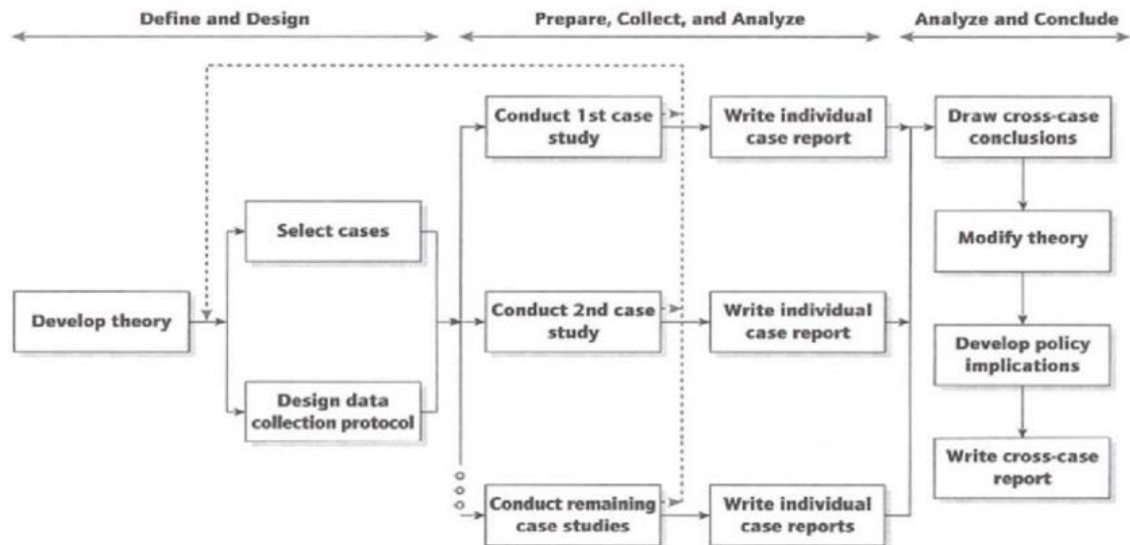


Figure 3.2: Multiple-case study procedure (Yin, 2014, p. 60)

Case selection

The case study concerns three cases. These cases are selected by two different criteria. These criteria follow from the chosen theory. Therefore it could be stated that the case selection is carried out following a dimensional sampling approach (Vennix, 2011). The case study has one reference case, which is a project that is already finished and two case studies of projects that are currently in process. The first selection criterion only applies to the current cases, and focuses on the phase of the project. The projects are preferably in the ‘verkenningfase’ of the MIRT trajectory. For this research this is translated as the ‘exploratory phase’. This means the exploratory phase, in which linking opportunities are identified. The second selection criterion is that all the three cases need to have a different initiator. In practice this means that each case needs to take place within another water authority. There is chosen for this approach, because each water authority has a different policy agenda related to linking opportunities. In order to get an insight in linking opportunities in a more overviewing way, it is relevant to research the topic from different policy agendas, for they can possibly influence the approach to linking opportunities.

A third case is chosen as a reference case and should be regarded as a best practice. The criterium for this case is that it is demonstrable a best practice, it includes linking opportunities and it is already developed.

For the research aim and the relevance of the case study, the cases differ as much or as less as possible from each other (Verschuren & Doorewaard, 2016). Preferably at least one of the cases encounters many barriers and one case encounters many benefits of linking opportunities. In this way the cases can be compared and a possible causal relationship can be identified (Verschuren & Doorewaard, 2016).

For this research three cases are selected based on these criteria. Kustwerk Katwijk has been selected as a reference case, and HWBP Sterke Lekdijk: Wijk bij Duurstede – Amerongen, and HWBP Noordelijke Maasvallei: Baarlo – Hout-Blerick are identified as the cases that are currently in the exploratory phase. In chapter four the cases are elaborated further.

3.1.4. Methodological choices, data collection and data analysis

There are various research choices that can be made on the field of methods. This section combines the onion layer of 'methodological choices' and the core of the onion of 'data collection and data analysis', for they are closely linked to each other and more comprehensible when elaborated simultaneously. At first, there is the choice for either multiple methods or a single method. When one chooses multiple methods these could be either multi-method or mixed method. Mixed methods combine different qualitative and quantitative models or methods. Multi-method is either using various quantitative methods only or only various qualitative methods (Saunders, Lewis, & Thornhill, 2009). With the case study research strategy various methods could be logic, depending on the content of the case study. Therefore it is possible to include and use mixed or multiple methods in a case study research (Yin, 2014). This research does not mix different qualitative and quantitative methods, but combines various qualitative methods. This research uses therefore a 'multi-method qualitative studies' for it is focused on in-depth analysis of perceptions (Saunders, Lewis, & Thornhill, 2009, p. 152). There is chosen for a qualitative approach within the case study research, for a quantitative approach cannot answer the research questions. Because of the importance of people's perception and experience within this research, qualitative methods are needed (Verschuren & Doorewaard, 2016).

In order to formulate an answer to the research question a qualitative empirical research is needed. The research question and the research purpose ask for an in-depth approach, instead of a broader approach that focuses on a research on a larger scale with generalisation of the research results (Verschuren & Doorewaard, 2016). Therefore, a narrower research design in which a specific set of cases is researched extensively and qualitatively is chosen, instead of a broad set of cases that is researched more generic. Certain qualitative methods fit in an in-depth, qualitative, case study research, which matches the research questions and aim. The data is mostly collected by conducting a multitude of in-depth interviews. With the thought of triangulation of methods, more methods are used additionally to the in-depth interviews. There is a desk research on relevant policy documents and past researches, which is included in appendix 1, and a desk research on the three different cases, included in chapter 4. The desk research on policy documents and past researches is carried out to place the research findings in the (policy) context and to relate it to scientific theories and earlier findings. The desk research on the different cases is aimed at answering the first two sub-questions. With this desk research there will be a triangulation of sources. For all the cases there will be one or more site visits. This in order to place the research findings within a spatial context and to take the spatial context into account in the data collection.

A strategical sampling method of respondents will be carried out in this research. A random sampling method would make the risk of an atypical sample too high in this research (Verschuren & Doorewaard, 2016). The respondent selection is led by the conceptual and theoretical framework. The case study has an holistic approach, for it tries to gain an integral insight in the research object. The data collection is therefore not structured beforehand, but has a more open approach and method. For conducting the interviews there will not be a structured list of questions, but a broad structure that is based on the conceptual framework of the research. The interviews will be conducted with actors that are involved in the project processes. Some respondents are involved in the project team of the initiator, working for the water authority or engineering consultancy. Some respondents are working for the initiator of a linking opportunity. These persons are mostly officials of municipalities in this research. Some respondents are administrators, who are involved in the decision-making process. For each project at least five persons with different roles, working for

different organisations, are interviewed. For Kustwerk Katwijk six persons have been interviewed. For the case of the Sterke Lekdijk five persons have been interviewed and for the case Noordelijke Maasvallei six persons have been interviewed. The respondents are selected by the role they play in the project. For each project a project manager/leader, stakeholder engagement manager, initiators of linking opportunities and someone involved in the decision-making process needed to be interviewed. The projects most of the time have more project managers and stakeholder managers, for sometimes personnel changes over time or there is a mirrored organisation structure in which there is a project manager or stakeholder engagement manager for both the water authority as the engineering company. In this case there is chosen to interview more project managers or stakeholder engagement managers, for this can give more variety in perceptions. The respondents with the same role a working for another organisation, or have worked in another period on the project.

In appendix 2 the interview guide for this research is included. In appendix 3 an overview of the roles of the respondents is given. This overview shows as well for which organisation the respondents are working, or if they have worked on different periods in time on the projects.

The interview-, site visit- and desk research- data will be analysed with the grounded theory approach, as this part is the more inductive part of the research. This means the data will be analysed in a iterative way (Verschuren & Doorewaard, 2016). The comparison will be constantly made and new information will be linked back to already collected information within the research. There will be a primary empirical comparison that compares the information and data of the cases with each other. Besides that, there will be a secondary theoretical comparison that compares and links the information gained by this research to already existing scientific literature and theories. The data will be coded according to the methods of the grounded theory. This is a process of coding in three iterative steps of open coding, axial coding and selective coding (Verschuren & Doorewaard, 2016). Open coding is more explorative, for concepts that could possibly be useful for the analysis are identified. These are called 'sensitising concepts' and are at the start of the analysis more open, but give more and more direction during the research process. During the process there will be given more and more specific meaning to these concepts. In practice it means that in the early stages of the analysis more general notes on the observations are made and sensitising concepts are identified, which give an indication of the observations. These sensitising concepts get a code (Verschuren & Doorewaard, 2016). Axial coding is a procedure in which the different identified concepts and codes are linked to each other, in often a causal relationship. By axial coding the context and conditions in which the concepts and codes occur become visible. From this a phenomenon could be identified, and the way people have an influence on this phenomenon becomes clear. This approach fits the phenomenological research philosophy of this research. It fits this research's focus on people their perception as well (Verschuren & Doorewaard, 2016). Selective coding brings back the codes to the core, which is needed for the theory that is developed by the research (Verschuren & Doorewaard, 2016). Atlas.ti 7.5.18 is used for coding and analysing data.

3.1.5. Time Horizons

There are two different time horizons possible within a research. These are the time horizons of: Cross-sectional studies and longitudinal studies. A cross-sectional research focuses on research findings that are found in a particular time. A longitudinal study focuses on a series of research findings over a longer period of time (Saunders, Lewis, & Thornhill, 2009). This research is mainly cross-sectional as the empirical data that will be gained, is focused on a particular time horizon,

namely the present. However, there could be stated that there are longitudinal elements in the case study. So does the policy context studied by a desk research, has a longitudinal element, for it concerns the development of the policy and policy view over time. The research uses the theoretical framework of policy integration, but regards it as a process. The use of an already finished project as a reference case adds a certain longitudinal element as well, as this is more historical data in relation to the main cases that are in the exploratory phase.

3.2. Credibility of the research findings

The choice for a certain research strategy with certain research methods has an implication for the validity and reliability of the research.

3.2.1. Reliability

Reliability focuses on the extent to which data collection methods and the measuring will yield consistent findings (Yin, 2014; Vennix, 2011; Saunders, Lewis, & Thornhill, 2009). It means that research findings will remain the same if there would be a reoccurring measurement or data collection. If the same procedures are followed by a later researcher, and the same case study will be conducted, the same conclusions and findings should be found. Therefore, it is the aim of reliability to minimise errors and biases in the research (Yin, 2014). Important for this is to make the research transparent and well documented. This is done in this research by describing the choices made explicitly.

One should be aware of 'subject or participant error', 'subject or participant bias', 'observer error' and 'observer bias' (Saunders, Lewis, & Thornhill, 2009). Subject or participant error are factors that influence the perception of actors. This could be for example the influence of the time on which the interviews take place. An example illustrated by Yin (2014) is when there would be a questionnaire on the enthusiasm employees have in their work, the time of conducting the questionnaire can give different results. Friday afternoons can give different results than Monday mornings. This is something to be aware of according to Yin (2014). Subject or participant bias is focused on the bias the interviewees may have. They can for example tell the stories, that are desired by their organisation, but it is possible that this is not their personal opinion (Saunders, Lewis, & Thornhill, 2009). To deal with this issue, the questions are most of the times specifically aimed at the personal perception or the perception present in the organisation. Observer error can occur when there are different ways of conducting interviews. This can give different insights. Therefore, a certain extent of structuring and the conducting of the interviews by the same researcher can increase reliability (Saunders, Lewis, & Thornhill, 2009). Therefore the interview guide is semi-structured and all interviews are conducted by the same researcher, as well as the desk research and analysis. An observer bias can occur within the interpretation of the researcher. Also in this case it can increase the reliability of the research to let the interpretation be done by one researcher (Saunders, Lewis, & Thornhill, 2009). To deal with this, the interpretations of the data are communicated with the respondent. There is asked for an approval of the interpretation.

3.2.2. Validity

Construct validity

Construct validity is focused on '*identifying correct operational measures for the concepts being studied*' (Yin, 2014, p. 46). This is a challenging concept in case studies. Therefore it is important for

case studies to develop sufficient operational measures. It is important that the subjective judgments of the researcher, that confirm the preconceived idea of the researcher, are not used to collect data (Yin, 2014). Therefore this research has a clear theoretical framework and operationalisation as a starting point. From this theoretical framework there are clear operational measures formulated. This also lowers the chance on the inclusion of the subjectivist judgment of the researcher to a too large extent. This research uses triangulation as an approach to use multiple sources of evidence. This increases the construct validity (Yin, 2014). The triangulation in methods and sources in this research ensures the validity of the case study research. Different research and data collection methods are used and different sources are compared and combined (Johansson, 2003). The construct validity of this research is also increased by a clear and transparent way of documenting evidence. The evidence and research data collection steps that are taken are insightful and imitable displayed. This will lead to a chain of evidence, that also increases the reliability of the research (Yin, 2014).

Internal validity

The internal validity focuses on *'seeking to establish a causal relationship, whereby certain conditions are believed to lead to other conditions, as distinguished from spurious relationships'* (Yin, 2014, p. 46). For internal validity it is important that a causal relationship is a real causal relationship and does not include other or interacting factors that influence or alternate the relationship. The inferences and conclusions of the researcher also influences the internal validity of the research. A researcher infers that an event results from an earlier occurrence, when an event cannot be observed directly but are researched by interviews and documentary evidence. But it is the question if the inference is correct. Other rival explanations and possibilities need to be considered. The research design has to take this into account (Yin, 2014).

External validity

External validity is sometimes referred to as generalisability of the research. It focuses on the *'domain to which a study's findings can be generalized'* (Yin, 2014, p. 46). This means that when research results are generalisable they are also applicable to other research settings. In this research the aim is not to produce a theory that is generalisable to all HWBP projects, but a theory that explains the particular research setting and derives lessons from these particular settings that could be possibly applicable to a more generalising extent (Saunders, Lewis, & Thornhill, 2009).

The strategical sampling within this research will lower the risk on an atypical sample. This has an implication on the external validity (Verschuren & Doorewaard, 2016). When the sample is not representative the research data cannot be used in a broader context. Therefore the strategical sampling of this research has a positive influence on the validity of the research. In this case study research the results will therefore not produce a theory that will be generalisable to all populations/cases. The robustness of the conclusions could be tested by exposing them to other research settings in follow-up studies (Saunders, Lewis, & Thornhill, 2009).

3.3. Data collection process and dealing with sensitivity

For this research seventeen respondents have been interviewed in total. They all share their perceptions from the role they have on the project. These different perspectives on the different levels in which the project takes place is very useful for answering the research question. Therefore, there is chosen to include the roles of the respondents within the analysis, which makes the respondents not anonymous. Therefore a very careful and clear process regarding sensitivity is followed. In this process it was made clear to the respondents prior the interview was conducted which procedure would be followed and that they would not be anonymous. The respondents all received an individual analysis report of their interview. Within this report it was made clear to every respondent which benefits and barriers were identified from their interview and were used for the research. Besides that, the passages used in the analysis that directly linked back to the individual respondents, and the used quotes including their English translation were included within this individual analysis report. For giving the respondents context, the interview transcript was included as well. The respondents all got a week time to respond to this report and identify sensitive or misinterpreted issues. It was stated that when there would be no reaction there would be an automatic permission after that period. After this period some issues were identified and alterations in the analysis were made in correspondence with the respective respondents. When the reports on each individual case were finalised, they were sent to the respondents of the respective cases. They got the opportunity to identify issues or misinterpretations in these case reports as well. They had again a week to respond to these case reports. Again, it was stated that when there would be no response in a week, they would automatically give permission after this time. After this period had passed and the identified issues were changed, the reports became final. This final report is eventually published publicly with the approval of the respondents in this way.

4. Results

This chapter discusses the results which have been collected during case study research. In sections 4.1., 4.2 and 4.3 the results for each respective case study will be discussed. In 4.1. Kustwerk Katwijk, 4.2. HWBP Sterke Lekdijk: Wijk bij Duurstede-Amerongen, and 4.3. HWBP Noordelijke Maasvallei: Baarlo – Hout-Blerick. Each of these sections starts with a policy framework for the respective case. In this first sub-section on the policy framework the starting points of the project are elaborated. This sub-section is followed by a sub-section on what the specific objectives are of the respective case. It gives project-specific contextual information. With these two sub-sections the first two sub questions, “Which sorts of linking opportunities can be identified?” and “In what way is dealt with linking opportunities in the current situation?” are answered. For Kustwerk Katwijk these sub-sections have been combined in one section.

In the sub-section on ‘perceived benefits and barriers for implementing linking opportunities’ the last four sub questions are answered, which are: “Which factors are regarded as being a benefit and by whom?”; “Which factors are perceived as being a barrier and by whom?”; “Why are these factors perceived as a benefit or a barrier and by whom?”; “Which actors or factors can either positively or negatively influence linking opportunities?”. In these last sub-sections it will be described which factors have been distinctive for the collaborative process and for integrating ambitions and objectives. In a short conclusion, it will be made insightful for each case which factors were most important for the respective case and how they possibly interrelate. The last sub-section uses mainly data from the conducted interviews.

It is important to note that the last sub-sections which are focused on the perceived benefits and barriers, discuss the specific, by respondents indicated benefits and barriers for implementing linking opportunities. There is chosen to make a division in benefits and barriers, for making it more understandable which factors are perceived as benefits and which as barriers. This does not necessarily mean that when a certain factor encounters barriers according to this analysis, and it is not mentioned as a factor that has benefits as well, that the entire factor can be regarded as being a barrier for the project. The factors are more nuanced than being merely benefitting or obstructing. In this analysis there is only focused on specific factors that are perceived as benefits or barriers for the project, without describing the theme entirely. It is a conscious choice, for it is not relevant to, for instance, describe the entire financial distribution key if only a certain aspect of that is relevant, for it is identified as a barrier or benefit of the project. The titles ‘benefits’ and ‘barriers’ indicate that there will be described in a nuanced way which barriers or benefits there are perceived for a specific factor, without describing the entire project process regarding this factor.

4.1. HWBP Kustwerk Katwijk

For Kustwerk Katwijk a literature study has been executed. Besides this literature study various interviews have been conducted. In total there have been five interviews with different respondents that played a role in the project. There have been interviews with: the project manager of the Hoogheemraadschap van Rijnland; two project leaders of different project phases of Arcadis; the stakeholder engagement manager of Arcadis; the project leader of the municipality of Katwijk, which was the initiator of a linking opportunity; and the project leader of the flood defence of the Hoogheemraadschap van Rijnland, who was also involved in the stakeholder engagement management. For this case it has not been possible to interview administrators. Because the project

leaders of the Hoogheemraadschap and the project leader of the municipality of Katwijk were closely involved in the decision-making process, this has been covered.

4.1.1. Starting points of the project Kustwerk Katwijk

Kustwerk Katwijk is in this research included as a reference case. The case is identified as one of the best practices in the HWBP's guide for landscape integration and spatial quality in water safety objectives, which is formulated by van Rijswijk (2014). This project was already finished when this research was executed. The project was completed in the year 2015.

For Kustwerk Katwijk there has been a lot of emphasis on spatial quality, flexibility and added value for the project (Arcadis, n.d.). The coastal defence, that was then situated in the village centre of Katwijk aan Zee, did not meet the water safety standards and was therefore included in the HWBP. The dike is operated by the Hoogheemraadschap van Rijnland, which made them the initiator of the HWBP project. This project has not been part of a bigger programme that includes more projects within the HWBP programme.

In the exploratory phase the municipality of Katwijk came with the ambition to include the development of a parking garage simultaneously with the flood defence. The municipality requested to investigate a possible combination of the dike with a parking facility to tackle the increasing pressure on parking facilities. The municipality of Katwijk had the policy to estimate if there would be space for parking facilities in each building activity. In this way the municipality of Katwijk became involved in the exploratory phase of the project. The plan study has been a collaborative effort between the municipality of Katwijk and the Hoogheemraadschap van Rijnland (Vermeer, 2017; van Rijswijk, 2014; Arcadis, 2012). Both initiatives became linked to each other and a collaborative environmental impact assessment was carried out (Arcadis, 2012). The collaborative aim was to *"guarantee the coastal safety for the hinterland of Katwijk (meeting the lawful norm) and decreasing the parking pressure in Katwijk aan Zee with maintaining the spatial quality"*³ (Arcadis, 2012, p. 4). This collaboration resulted also in an integral project team, in which the municipality of Katwijk was involved. There was a directing team which consisted out of the project manager of the Hoogheemraadschap van Rijnland, a project leader for the flood defence that worked for the Hoogheemraadschap van Rijnland, and a project leader for the parking garage that worked for the municipality of Katwijk. There were thirteen working groups in which Arcadis, Royal HaskoningDHV, OKRA, Hoogheemraadschap van Rijnland en the municipality of Katwijk were working collaboratively.

In total there were five alternatives for the coastal defence. The first was called 'Hoog en smal duin'. This alternative would strengthen the defence with a dune seawards from the boulevard. The parking pressure would be lowered with free lying parking places on the dune. The second alternative was called 'Laag en breed duin'. This alternative is similar to the first alternative. The only difference is the height of the dune. In alternative 1 this is 10 meters NAP and in alternative 2 7,5 meters NAP. Alternative 3 strengthens the defence with a dike in a dune of 6,5 metres NAP. The outer-dike area would remain outer-dike. The dike would be developed as resistant to overtopping. The parking pressure would be lowered by free lying parking facilities on the dune. Alternative 4 is called 'Dijk-in-Duin, Katwijk Binnendijks'. This alternative develops a dike of 7,5 metres NAP and places the current outer-dike area of Katwijk inside the protection zone of the dike. The parking pressure is lowered with free lying parking spaces in the dune. The last alternative is called 'Dijk-in-

³ Translation from Dutch

Duin, Katwijk binnendijks met parkeergarage'. In this alternative a parking garage becomes situated behind the dike and parallelly to the boulevard. The dike will be moved therefore more seawards (Arcadis, 2012, p. 7). The alternative for the parking garage had different starting points, namely: the amount of parking spaces (the necessity lies between 345 and 1583 parking spaces); location (behind the new dike and for the boulevard); Length (Maximum length of the dike, 850 metres); width (as narrow as possible); height (the top of the parking garage cannot rise above the top of the Dike-in-Dune; the amount and location of entrances and exits (the traffic to and from the parking garage should be spread as much as possible) (Arcadis, 2012, p. 8). The land-use plan of 'Kustwerk Katwijk' allows various other developments as well, namely: beach pavilions have the possibility to exploit the place for the entire year and can have a larger building surface; the beach houses can have a seasonal exploitation. In the previous situation this was not possible.; The water sport associations are allowed to stay on its place for the entire year and they now have a possibility to expand their buildings.; there will be two permanent rescue posts (north and south). In the north post there will be a police post too (Arcadis, 2012).

For the implementation of the Dike-in-Dune with parking garage some mitigating, compensating and integrating efforts are formulated. These are: Extension of the cover of the river bank of the 'Uitwateringskanaal' to prevent silting; the execution of the proceeding should be as much as possible outside the touristic season. If that is not possible measures to retain the accessibility of services should be taken.; Persons and organisations that sustain damage from the development of the coastal defence and the parking garage are able to appeal for plan damage compensation or disadvantage compensation.; By early communication with the local residents there is created clarity on the period and earnestness of the effects; The archaeological values are retained as much as possible.; protected flora and fauna are spared as much as possible. When it is not possible the effects will be decreased as much as possible or compensated.; To prevent the level of the groundwater, a drain will be developed on the current level of the ground water, as closely as possible to the boulevard (Arcadis, 2012).

Financially there was a risk to additional costs of 9 million euros. There was agreed that these costs should be paid by the region. For the municipality of Katwijk these costs were too high. Therefore, other parties became involved. The province of Zuid-Holland agreed to finance to a maximum of 2 million euros, the Hoogheemraadschap van Rijnland would finance 1 million euros of these costs. This was part of their own budget, and not part of the HWBP-2 subsidy. Up until 1,5 million euros would be financed by the 'Innovatiefonds' of Rijkswaterstaat. This meant that the municipality of Katwijk only had a risk of 4,5 million euros (van Rijswijk, 2014).

In the plan development phase and realisation it became clear that the additional costs would be lower than 9 million euros. In the collaboration of the Hoogheemraadschap van Rijnland and the municipality of Katwijk signed a cooperation agreement, with clear financial agreements. The percentual distribution key was of importance in this case. The municipality was financially 100% responsible for the development for the parking facility. The dike would be mostly financially covered by the HWBP-2, but also the municipality had a financial contribution. This because the municipality was proponent of the lower water safety measure by developing the 'dike in dune' alternative. A significant part of the public space was financed by the HWBP, as both the alternatives would have had a spatial integration. Additional efforts within the public space were financed by the municipality of Katwijk.

4.1.2. Perceived benefits and barriers for implementing linking opportunities

Political factors

Benefits

○ Interests/policy goals/shared understanding: Interests and objectives

From the HWBP objective the Hoogheemraadschap van Rijnland had the interest in realising a flood defence that would meet the new safety norms. Although, the main objective for the Hoogheemraadschap van Rijnland was the flood defence, the municipality of Katwijk has been perceived as the most natural partner by the project manager of Hoogheemraadschap van Rijnland. Hoogheemraadschap van Rijnland already discussed in an early stadium on administrative and official level that the municipality had the wish to see the parked cars disappear from the boulevard. The starting point regarding linking opportunities for Kustwerk Katwijk was:

“And ambitions of third parties, that are conflicting with the starting points of the flood defence, will not be answered. All other ambitions that are not conflicting with the flood defence will all be granted. That’s how we dealt with it, and that’s why it probably became as a success, because a lot was discussable.”

- Project manager, Hoogheemraadschap van Rijnland, 2019

This starting point can be regarded as an institutional/organisational factor for it is a clear ground rule. Because there was leeway in the project planning, which is a processual factor, the municipality of Katwijk got the opportunity to research their financial ability to realise the parking garage. At that same time it was researched what including the parking garage would mean for the project. This immediately shows that different factors can be closely connected, and together create a benefit in this case.

All the respondents have a corresponding perception on which ambitions and objectives were part of the project, and they name the flood defence, the parking garage and spatial quality as the main objectives.

According to the project manager of the Hoogheemraadschap common interests stimulate the collaboration between parties. An understanding of each other’s interests is perceived by the different actors. When the interests are big, failure is no option, he states. On the other hand it is stated that in every project some interests are contradictory. The project manager of the second phase of Arcadis states it is important to be open to other actor’s interests and to be aware of how they are connected. He states:

“Allowing an interest such as the parking problems and the parking garage to be part of your project. Be open to other actor’s interests and I think for certain on the design aspect, just ask, you want something from the parking garage? What can in that case be done with the dike? (...) Make sure that every time all critical questions are asked thoroughly, why can something be done or why not. So, also thinking beyond those boundaries, do not just reason and continue to argue from your own discipline, but look for that interaction, specifically that interaction between those disciplines.”

- Project manager second phase Arcadis, 2019

The project manager of the flood defence of the Hoogheemraadschap van Rijnland emphasises this by identifying looking outside your own framework as a factor to success. She states:

“That is a particularity, that you, if you want to jointly take on a project than you probably need to take on the problems of both organisations at that moment. If the municipality of Katwijk would not have been capable, or if we together in the organisation were not able to bring the design of the parking garage up to date in a short time, because it was miles behind the flood defence, then it would not have been possible. (...) Thus I think that if you look

for combinations or linking opportunities or whatever, then you have to look broadly. But eventually you need to be willing to bring it all together. And do not only think from your own perspective and think 'well, if I take that on, I will have a delay', no because it can also be beneficial. (...) Yes, for we certainly had a delay because the parking garage became included in the project, but eventually the result was way more beautiful in the end. And that is I think a continuous consideration. But therefore you have to broadly look to your surroundings, when you are going to do something, think of what are the opportunities which I could link to my project, whereby the total will improve, also for the surrounding, specifically for the surrounding."

- Project manager flood defence, Hoogheemraadschap van Rijnland, 2019

As addition to these factors, an identified factor to success for Kustwerk Katwijk has been the fact that the municipality has had a 'straight back'. The municipality has been regarded as being open and clear about what they wanted and kept working for that goal, as being stated by the project leader of the first phase from Arcadis. The respondents all emphasise that a certain centrality of the common purpose and the common interest were important factors for the project.

- Shared understanding: Tender Arcadis

The tender of Arcadis is also identified as an influential factor for the success of Kustwerk Katwijk. It is stated that Arcadis' tender had more of an area development approach, instead of a focus on water safety only. That made the priorities of the interests more equal. The project leader of the first phase of Arcadis states the following about this:

"Yes, yes at the start it was. The Hoogheemraadschap said we are initiator, so we need to take care of a safe flood defence, so we are on top. And with our tender we really torpedoed that a bit, for we stated: No, water safety is a boundary condition, the area development is on top."

- Project manager first phase, Arcadis, 2019

The project manager of the Hoogheemraadschap van Rijnland argues that the municipality of Katwijk has had a certain standard in quality. The boulevard was already improved a several years before Kustwerk Katwijk, and they wanted to see similar improvement for the flood defence. So, the municipality of Katwijk put a lot of money in the quality of the project.

Barriers

- Shared understanding: Looking beyond boundaries

Different respondents emphasise the importance of being able to look outside your own boundaries as an organisation. This is something that implicitly or explicitly is mentioned by all respondents. The project leader of the second phase of Arcadis states that it can be a barrier when you are not able to think outside your own boundaries, or when you are not open to each other's interest. He states that it is important to seek for interaction between the disciplines. This is eventually identified as something that went successful for this project, but it can be a barrier to overcome.

An example that is used by several respondents to illustrate this barrier is the position of Rijkswaterstaat at the start of the project. Rijkswaterstaat had the viewpoint with HWBP of a 'robust, sober and effective' financing, as is emphasised by all respondents. Rijkswaterstaat was therefore proponent of a sandy dune, as this fitted this viewpoint the best. In this alternative a parking garage, would not be possible. Rijkswaterstaat therefore had to accept eventually that the additional costs of the sandy dune would get paid by the region, and the dike-in-dune alternative would be realised. The dike-in-dune alternative was at first not the wished alternative for Rijnland as well, as it did not fit its policy. At a certain point Rijkswaterstaat gave the space to explore the

possibility for a parking garage, and this has worked out successfully. However, the stance of HWBP and Rijkswaterstaat have been a barrier in an earlier phase of the project, before the administrative agreement was signed.

“What really has been a barrier in the beginning, before the administrative agreement, was the attitude of the state. The HWBP, they had a real rigid attitude in my experience when it came to flexibility in the alternatives. They stated even for a certain time, then we thought now we are really heading in the wrong direction, that they would not sign the administrative agreement if the sandy solution was not in it,(...), I think they did it, that they had the feeling it was a risk, I think that is where it came from. But I find that they gave very little space to the regional process that took place at that time and which actually went well to come to an administrative agreement and another kind of alternative than their preferred alternative.”

- Project manager flood defence, Hoogheemraadschap van Rijnland, 2019

Eventually there has been agreed to elaborate the sandy solution as the robust, sober and effective reference alternative next to the dike-in-dune alternative with a parking garage located behind the flood defence. The sober and effective alternative for the HWBP determined the amount of money the HWBP would be contributing to the project. For instance, when the dike-in-dune would be realised, the costs the reference alternative would cost, would be their contribution to the project. All additional aspects should be financed by others. Different respondents emphasise that dealing with this in this way has been beneficial for the project, as it was still possible to take on the project in an integral manner.

Institutional/organisational factors

Benefits

○ Organisation Structure: Project organisation

Different actors regard the project organisation as being well organised. They still regard it as an example for other projects. The working groups are regarded as positive factors for the way the project organisation functioned. In total there have been 13 working groups working from different disciplines. Every four weeks the leaders of these working groups came together and kept each other up to date. There was a certain ‘get and bring’ duty, which will be elaborated in a following paragraph as it is a more cultural factor. The organisation of these working groups is identified as being very beneficial as it made clear what was being done, what should be done, what was needed from others, and what the risks were.

The project organisation has not had a mirrored structure, as is being illustrated by the project manager of the flood defence:

“(...) And if you look at it, you think holy moly what an organisation and it has functioned brilliantly. And what we haven’t done, what happens of course very often on the moment that an engineering consulting is hired, is that someone from the state is the chairman of such a working group. That is something we didn’t do, no the chairman on the content from the internal working group at Arcadis, he or she was also the actual working group chairman and was also in the project team (...), we have taken a link away in between so to say.”

- Project manager flood defence, Hoogheemraadschap van Rijnland, 2019

This organisation structure is by different respondents emphasised as being very beneficial for the project.

- Subsystem involvement/institutional design: Stakeholder engagement management and rules

The stakeholder engagement management is by several respondents identified as important for the success of the project. There has been a lot of effort from the project team for the stakeholder engagement management. The local stakeholders were able to think along within the project, and it is perceived that they considered themselves as taken seriously. There have been several starting points, which can also be regarded as clear ground rules, for the stakeholder engagement management. The project manager of the flood defence states:

"And they also saw that we really had clear, that we never would talk with one stakeholder about what another wants. And on the moment when we had a conversation, we started working on it and reported back. So we also reported back when it was not possible. Then we explained what we tried and why it was not possible. I think that gives a lot of trust in the method and eventually in that the maximum achievable is reached."

- Project manager flood defence, Hoogheemraadschap van Rijnland, 2019

The project manager of the Hoogheemraadschap van Rijnland emphasises the fact that the local actors were very directly involved in the project. He also states that it is important to be careful with what lives amongst the stakeholders. You have to be aware that stakeholders do not always share their interest in every situation.

The stakeholder engagement manager states that another important is the ability to openly discuss the interests of the local stakeholders and make decisions based on this in the project team. She illustrates this by stating:

"And I think, what was really strong about Kustwerk Katwijk, is that this tension, that you have every time, between the wishes of the local stakeholders and the wishes of the project, that I was able to put it on the table and that we made decision on these matters. Whereby I was able to go back to the local stakeholders to say 'it is not going to work now' or I could go back to the project with 'it really needs to go differently now'. (...) So consciously looking for that tension between stakeholder engagement management and the project, I think is crucial. What you often see, is that false promises are made, or implicit assumptions (...) And by consciously discussing that tension and make decisions on it, you really, I think, you really take along the local stakeholders."

- Stakeholder engagement manager, Arcadis, 2019

This approach has had a positive influence on creating support among the local stakeholders. The stakeholder engagement manager also states she never had a feeling she had a double agenda. She regards the process to the local stakeholders as transparent. There has been a stakeholder engagement plan in which there were three types of stakeholder engagement. Firstly, there has been a direct involvement of stakeholders, with individual contact and conversations. Besides that, there have also been groups that felt represented in an advisory group that regularly met in working sessions. The last type is the bigger audience that is informed by information sessions.

There has been a great awareness of the interests of the local stakeholders in the project team. Different respondents state the importance of the stakeholder engagement management for the project. The stakeholder engagement manager also acknowledges that she was able to discuss matters of the stakeholder engagement management within the project team. There is emphasised that stakeholder engagement management should not only be the task of the stakeholder engagement manager.

The stakeholder engagement manager of Arcadis emphasises the importance of the ability of the local stakeholders to organise themselves. It is important to have contact points. Some actors

were better organised than others. It is regarded as important to help actors to organise themselves. A project should be approachable and accessible by local actors. She says:

"I've clearly been the face of the project, so I was very approachable and the project clearly had a name and a phone number, so people were able to call me. And that can be a little frightening, but it really helped in giving the project a human face. Look, not all people were happy that the flood defence needed to be developed, but given the fact it had to be developed, I think the support was really good."

- Stakeholder engagement manager, Arcadis, 2019

She emphasises that the 'human face' the project had was really beneficial for the project and has made the project more successful. The wishes to be involved and participate are regarded as very high in Katwijk in relation to other places, according to the stakeholder engagement manager of Arcadis. This is allocated to the small community, and the sense of a community Katwijk has as a village. Therefore the attendance has been relatively high. This is also identified as a beneficial factor.

Another factor that has been successful for the stakeholder engagement management process has been the management of expectations. In this way the local actors were informed about when which interest was discussable. The stakeholder engagement manager states namely, that there are different linking opportunities for different phases.

○ Organisation Structure: Decision-making process

A factor that has been identified by multiple actors as being important for the success of Kustwerk Katwijk has been the decision-making process. There is stated by several respondents that the decision-making process went quickly. As an illustration the project manager of the Hoogheemraadschap van Rijnland said:

"If we wanted something on Tuesday, then we went to the Mayor and City Council Members in the morning, and in the afternoon we were present at the B&W, and then it was decided immediately. Thus it were, because of that involvement, very short lines on an administrative level. And that has just happened at Rijnland, meetings were skipped as well so to speak, to keep the process going quick."

- Project manager, Hoogheemraadschap van Rijnland, 2019

This has also been the case for the municipality of Katwijk according to the project manager of the municipality. He states that he experienced a lot of freedom on this aspect for the project organisation. The products for the decision-making did not have to be presented well ahead, but were sometimes presented the day beforehand.

He allocates this experienced ability to a fast decision-making process to the fact that it was a project of major size. Everybody, on administrative level, recognised their interest and that has created a certain leeway to be able to work outside the deadlines or frames, he argues.

The project manager of the flood defence states there has been a shortage in time, which resulted in the fact that the decision-making had to happen parallel of each other, instead of chronological. The decision-making actors were involved in the total trajectory before the final decision. In this way they were informed well, and were able to make decisions in a short time. As a result permits were granted in a few days' time. This asked for a certain approach from the project team, which is described as.

"(...) if permits needed to be granted by Rijnland. Then I went beforehand, then I went talking to them. (...) so continuously informing all stakeholders from the involved organisations during the permit trajectory. (...) So it is a sort of stakeholder management within the organised administrative stakeholders."

- Project manager flood defence, Hoogheemraadschap van Rijnland, 2019

The importance of informing the decision-makers is stated by different respondents. A perception on this which is mentioned is that if you present the right things to the decision-makers, you will get back right things from them as well.

It is stated that the lines of communication between the administrative level and the project team were thus very short, which resulted in achieving deadlines in the project planning.

For the project leader of the municipality of Katwijk it has also been important to know his mandate. He states the following:

"As project leader for the parking garage I had an official and administrative mandator, to whom I regularly spoke. Can we catch up on where we are, what is going on, what will happen, with whom I created my mandate? When I was talking in the direction group, I knew to what I could say yes or no. So I knew my playing field. So, I did not have to go back for every question to ask if I was allowed to say yes or no. Because, that is a way of working that really has worked well for me."

- Project manager parking garage, Municipality of Katwijk, 2019

Barriers

○ Institutional design: Promises to local stakeholders

A barrier that can occur during the stakeholder engagement management is the risk to a precedent effect. Therefore it is important to not make promises you cannot keep or about which you are not certain.

The stakeholder engagement manager illustrates this by the following example:

"Maybe another big risk has been the precedent effect, thus, because it was such a big project and there are so many people living, if I would say to one person, yes at your place we can make the dune a little lower so you still have a view, then that would not be possible at the neighbour's."

- Stakeholder engagement manager, Arcadis, 2019

The project manager of the Hoogheemraadschap van Rijnland emphasises this. He gives an example of a local stakeholder for whom an exception was made. He states it is important to be consequent in that. He states it can be identified as a pitfall of stakeholder engagement management and thinking along too much with local actors. He states that it is therefore important to be consequent and make no individual exceptions.

Economic and financial factors

Benefits

○ Uncertainties and risks: Managing and accepting

The project has encountered several risks, but these risks had already been taken into account within the chosen approach. This approach is regarded as a factor that has been successful according to several actors. Archaeology is identified as one of the main risks for the project according to different respondents. There was a chance the project would stagnate at this aspect. The way in which there is dealt with the risk of archaeology is an example of the earlier mentioned approach

that was preserved. The project manager of the Hoogheemraadschap van Rijnland states the following on this:

"We brought archaeology forward. Before we were busy with the realisation of the dike in dune or the parking garage, that entire area was, was already researched by archaeologists, say predictive of the actual activities. That has happened a year beforehand, so if you find something then, in that year beforehand, then you can still act on that. (...) Thus it was all very controlled by the risks, the project that is. It was full of permits and permissions of course. So, if you know that that is an important theme, then you hire the knowledge and skills of people that have an understanding of those specific permits. And by collecting that, you also know that: a. What you have to do for it. And b. What you will do when it goes wrong. There is always a scenario b, or always a scenario c. So we could immediately switch in terms of strategy."

- Project manager, Hoogheemraadschap van Rijnland, 2019

The project manager of the parking garage of the municipality of Katwijk emphasises this as well. He identified risks within the tender of the execution, because the execution only could take place in the winter period. For these sorts of risks analyses were made and control measures were taken. He states that the control measures were taken on very actively.

It is stated that the municipality of Katwijk accepted a certain financial risk. They had to finance the parking garage, the additional costs of the dike-in-dune and additional costs for spatial quality. However, on the time they agreed to finance this, there was still a certain bandwidth. They did not know exactly how much the costs would be.

There has always been the possibility to cut the project in a juridical way, as is stated by the project leader of the second phase of Arcadis.

"There has always been a possibility to cut it loose. That you for instance realise the flood defence first, and later the parking garage. Uhm that has always remained a possibility. If it would not work procedurally for example, you could cut it juridical. If there would be a lot of resistance for one of them. For instance, against the parking garage, then the flood defence could still go on. Agreements were made on this, you know."

- Project manager second phase, Arcadis, 2019

This has been a control measure for the project. In this way the risk for delay in the dike-in-dune was controlled.

○ Uncertainties and risks: Separation of functions

For Rijnland's policy it was important that the dike-in-dune construction would be functionally separated from the parking garage. This was a condition of the Hoogheemraadschap van Rijnland. When there would be an safety issue within the parking garage it needed to be guaranteed that it would not affect the dike and its flood protection. It was thus an obstacle because of the policy on the safety on the dike. The project manager of the Hoogheemraadschap van Rijnland states:

"As a matter of fact, the parking garage is built in the protection zone. And that is a deviation of the policy, with all computational things it was calculated as being right, and yes as a whole you then have a beautiful solution as well, you know. So if you can realise it in this way."

- Project manager, Hoogheemraadschap van Rijnland, 2019

Without this separation of the different functions, the parking garage would not have been possible. The project manager of the second phase from Arcadis states that it has been a choice to separate the ambitions in a functional way.

"We researched a lot of alternatives at that time, if the parking garage could also be the flood defence or not. Eventually, it is decided to cut that loose, so now the parking garage is placed behind the flood defence. The interests remained for that matter really functionally separated. A lot of research preceded this, if it wasn't possible to be done simultaneously. This research really was conducted from the perspective of the interests, to what extent it would be possible, but it is all truly researched in an honest way. It was not already declined beforehand, even though this was the primary reaction."

- Project manager second phase, Arcadis, 2019

○ Financial Distribution Key: Financeability

The municipality of Katwijk has, as illustrated earlier, agreed to finance the parking garage and the additional costs for the flood defence and spatial quality. From the HWBP programme there was no financing for additional ambitions besides water safety. The subsidy covered only integration efforts. The project manager of the second phase of Arcadis states on the role of the municipality the following:

"Well, because the municipality had a great interest and budget, they completely got in. That is something that you truly need, you need commitment from the organisation, to be involved. Then they are initiator as well then, so then they have to be involved completely, and commit as well."

- Project manager second phase, Arcadis, 2019

Commitment is regarded as important in this case. The factor of commitment will be discussed later as a process-, management-, and instrumental factor, for it does not only encompass commitment on finance. Important to address is that commitment in this case is thus highly connected to financeability. The project manager of the second phase from Arcadis states the availability of budget is important. Time also plays a part in this. He states that initiatives should timely take care of financing. He states that the municipality of Katwijk had a budget available that they could use for large initiatives within the municipality. Because this budget was available financing was a smaller risk. The project manager of the first phase of Arcadis states that it is important before deciding on a preferred alternative to research for every aspect if it is financeable.

Process-, management-, and instrumental factors

Benefits

○ Policy instruments/commitment: Setting agreements

All respondents state the importance of the different agreements that were made during the project process. Different respondents additionally state the importance of making agreements beforehand. This is illustrated by the following quote of the project manager of the Hoogheemraadschap van Rijnland:

"For the sake of clarity, before every phase of the project so to say, agreements were made. (...) Directly after the administrative agreement, a financing agreement was made. So like well, you are accountable for that, and you are accountable for that, on this that distribution key is applicable. So, at the moment that something comes up, everyone knows exactly how to act. Collaboration agreement. At the moment when you start working together, you need to know what everyone's responsibility is, and why it is that way. Well, we did not start a phase so to say, if there was no agreement made beforehand."

- Project manager, Hoogheemraadschap van Rijnland, 2019

Several respondent emphasise this as well, as they state that they had the principle of making agreements beforehand, to prevent difficulties later on in the process. This is regarded as an important beneficial factor.

An important moment within the project process has been the administrative agreement, as stated by all interviewed respondents. In this agreement it was decided that the project would be taken up integrally. The project manager of the flood defence states the following about the content of this agreement:

"If you look at the policy, it was not possible, the parking garage. It was impossible. There was a lot of hassle about the pavilions that were located on the beach, what was their status exactly. And if you talk about interests (...) Rijkswaterstaat had the opinion, (...) 'robust, sober and effective'. Well that would be no dike-in-dune, because it was also possible with sand. The municipality wanted a parking garage and the province wanted maintenance of the spatial quality and Rijnland just wanted to take care of the project having enough support in the region to become truly developed. (...) What actually happened eventually is that we, the project manager of Hoogheemraadschap van Rijnland and I, with the administrative agreement we started talking to the different parties, to which extent things were possible. Also concerning financing. Eventually that has been set in the administrative agreement, in which the interests of the different stakeholders turned out to be safeguarded to a satisfactory extent."

- Project manager flood defence, Hoogheemraadschap van Rijnland, 2019

The administrative agreement and financing agreement set boundaries for the direction that was in mind, and set clear ground rules and responsibilities for the involved actors. Conditions were for instance that the parking garage could not delay the project. The municipality of Katwijk was made fully responsible for the realisation of the parking garage. Agreements were made on the division of the additional costs as well. The agreements were regarded as something one could appeal to. This prevented possible delays and covered some risks, as is illustrated with the following quote about the perception on making agreements:

"(...) you have to do that beforehand I think. You cannot do it the moment something happens so to say, then you still have, then you will get all kinds of wrangling and more delays et cetera. So actually you have to make agreements beforehand about risks, the way you act on them, and yes, also the possible related costs, they belong to that as well."

- Project manager second phase, Arcadis, 2019

Although this administrative agreement is sometimes even regarded as a crucial aspect, it took effort to come to this agreement, as is illustrated by the project manager of the flood defence. She states there was a fear at Rijkswaterstaat that the financing would not be settled, and the municipality of Katwijk had to agree to pay the total package of additional costs. It is also stated as important that the design is technical achievable and is licensable.

○ Commitment: Commitment

Commitment is a term that is often used by the respondents, it is used to illustrate a factor that is needed from the different parties for an integral approach to a project. The factor of 'financeability' already discusses a certain financial commitment from actors. According to certain actors a political courage is needed from every actor to reach a commitment, as is illustrated by the following citation:

"The commitment, yes when do you really get commitment? Well a certain political courage is needed from both the water authority, and the HWBP for instance in this case, yes, as from yes the municipality that states they are going to do it and realise it. And that is of course part of a political game."

- Project manager second phase, Arcadis, 2019

The administrative agreement has been, as is stated by the above mentioned factor of 'setting agreements', an important moment of reaching commitment by the different organisations. In this agreement organisations gave commitment to the integral design, and to the financing this entailed. The different organisations are perceived as being highly committed to the project. Moreover, the local stakeholders are mostly regarded as being committed to the project. The project team has been regarded as highly committed as well.

○ Scope project/planning: Planning

The project planning was seen as very clever. The project manager of the Hoogheemraadschap van Rijnland had made at first both a deterministic planning and a probabilistic planning. At a certain point he made the 'most likely planning', on which he agreed with the decision-makers.

The project manager of the first phase of Arcadis illustrates the way in which the planning was made as follows:

"The project manager of Hoogheemraadschap van Rijnland was at that moment already project manager and he stated at a certain point, first I want from you a, something we call a deterministic planning. That is a no-frills planning so to say, if you just put all the activities next to each other, in that case we totalled to 1,5 years. And then he said, now I want to know which risks are in this. Yes, that, that and that. And if you calculate on these risks, we call that a probabilistic planning. If those risks, because you cannot stick those risks together one to one, then you get the worst case and we could maybe be five years further, so you have to make a sort, and you have programmes for this, the most, how do you call it again, the most likely planning will come from this. And that was 2,5 years. So a year longer than the 1,5 years we thought of. Then the project manager of Hoogheemraadschap van Rijnland stated, I am going to agree on these 2,5 years with administrators and we are going to aim on those 1,5 years. And eventually we needed 9 months of those 12 months, so for the administrators we were three months earlier than we agreed upon with them. So everyone was very happy. (...). That is just very smart, because not many project managers do this. They set something in between, or set a deadline administratively without thinking about it too much."

- Project manager first phase, Arcadis, 2019.

The planning has been identified as essential for aiming on the deadlines. The planning was therefore highly structured and focused on milestones. The reason for this was that there was agreed upon the construction being executed in the winter months, so there was strictly managed on the planning. The project manager of the parking garage states that in this case a good project planning was crucial. This is connected to the decision-making process. As is stated earlier, the fast decision-making process has had a positive influence on the project planning. Every actor recognised its interest in the project and therefore fast decision-making was possible.

○ Policy instruments: Contractor

This project has had an contractor selected before the environmental permit was granted. This is something that had been a deliberate choice as is illustrated by the project manager of the Hoogheemraadschap van Rijnland:

"And that sounds very strange, but it is a certain way of thinking. And we did not thought of that ourselves, but we saw it at Maasvlakte-2. There, land was already sold to very large investors, before they even got a shovel in the ground or even had a permit. And that has as an effect on what the impressions are of the local stakeholders, like yes, they are going to come, it simply will happen because they are selling land. And that has as effect, side-effect, that the local stakeholders indeed have the feeling they are coming, but also that interest organisations are going to think along

instead of impeding. Because it is better to try to get things out of it, say work on it and then from that cooperation achieving your goals, instead of impeding.”

- Project manager, Hoogheemraadschap van Rijnland, 2019

This has been a strategy that has worked for this project. The stakeholder engagement manager also states that the agreements that were set with the local stakeholders were given as obligations to the contractor. The spatial planning was given as an obligation to the contractor. There were clear image quality plans, specifically for the parking garage, that were given to the contractor. This image plan is executed eventually. The stakeholder engagement manager had a database with wishes that were identified amongst the local stakeholders. The ‘need to have’ wishes were translated to obligations to the contractor. And the ‘nice to have’ wishes were given as a wish in the EMVI to the contractor. The contractors were in this way able to score higher with their tender if they met these wishes. For instance the selected contractor hired an ‘area janitor’, that informed the local stakeholders during the construction. This has been regarded by the stakeholder engagement manager as an important beneficial factor to the project. However, there have also been some barriers for this last factor.

Barriers

- Communication: Retrieving information

It is important to be aware of the policy demands of the different involved organisations. It is important to directly collect them from the policy organisation, instead of asking them from different representatives of the actor. This has been a barrier that is encountered in the execution of this project.

- Policy instruments/communication: Including wishes from local actors with the selection of the contractor

A barrier can be the ‘noise’ there can be between the agreements that are set with the local stakeholders and how the contractor interprets these obligations. It is important for the sentiment amongst the local stakeholders that the contractor keeps its promises. Therefore, a good transfer is needed between the different phases and from the project team to the contractor. It is stated that if you do not transfer all the agreements with local stakeholders to the contractor, it can cause problems. Therefore the moments for transfer are regarded as being possible risks or barriers. It needs to be prevented that you have to return to your agreements. A close collaboration to discuss certain aspects on for instance these agreements is needed. Communication and honouring existing commitments are regarded as key in this. The selection of the contractor is therefore regarded as very important and needs expertise of a certain extent. In this project the communication and transfer between the contractor and the project are regarded as a barrier.

Behavioural-, cultural-, and personal factors

Benefits

- Personal relations/trust: The project team

The collaboration in the project team is regarded as very good according to each of the interviewed respondents. The collaboration and the functioning of the project team has been a very prominent factor that has been identified in the interviews. It is stated that there was a high amount of trust in

each other, the personal relations have been very friendly and good, the people working on the project were very driven and they had much expertise. It is stated that the project team has been working for the project, and not for individual organisation's interests, as is illustrated by this quote of the project manager:

"People had to work with each other, and they worked for 'Kustwerk Katwijk'. To say it in a popular way, we wore t-shirts and stood outside with the logo of Kustwerk Katwijk. People were thus not working for Arcadis, Royal Haskoning or the municipality. People were working for Kustwerk Katwijk. That was also the outward appearance."

- Project manager, Hoogheemraadschap van Rijnland, 2019

The project manager states that he wanted everyone to think in the interest of the project and stated that if he saw anyone thinking only in the interest of their organisation, he did not think they were doing well. This approach is perceived as having worked well for the project team. There have been thirteen working groups with leaders that all had a 'get and bring duty'. This meant:

"(...) that if you have data, then you share it with your colleagues, and if you need data, then you get it from your colleagues. And that platform of those thirteen persons was very good at this, for you heard from each other what was going on and what was available. And there it was very easy for them to share it with each other and they were forced to interchange things with each other."

- Project manager, Hoogheemraadschap van Rijnland, 2019

Several respondents mention the get and bring duty and state it has been an important positive factor of the collaboration, that it has worked well for the project.

Regarding the expertise, there has been a certain continuity in the project, which is also regarded as important for the project. However, it is also stated that it is important to change people per project phase, as some people have more expertise in a certain phase of the project. Therefore, the balance in the project team is also regarded as an important factor. Several times this is illustrated by using the management drives and its different colours. It is stated that the project team has been very complementary, which has been a positive factor.

The project is regarded as one of a kind. A kind that occurs once in your career. It is stated that therefore people had a certain drive to work hard for it.

All respondents specifically state the collaboration between the project team has been an important factor to success for the project. There was a great understanding of each other. Also the project team working on the same location for several days a week has been regarded as a successful factor, for the communication lines were very short in this way. The project organisation has had a certain creativity and courage, which is perceived as needed for approaching a project in an integral way.

The organisation culture is regarded as very open. However, there was not a set IPM structure, this was the starting point of the project team. Within the organisation culture there was a working culture. Hard work was appreciated, which worked motivating for people.

○ Leadership: Leadership style

The leadership is regarded as a beneficial factor as well. The leadership is mostly addressed to the project manager of the Hoogheemraadschap van Rijnland, as the Hoogheemraadschap has been the initiator of the HWBP objective. However, it is stated that there has been a directive group, that consisted out of the project manager of the Hoogheemraadschap, the project manager of the flood defence from the Hoogheemraadschap, and the project manager of the parking garage from the

municipality of Katwijk. It is stated that within this directive group the stakeholder engagement manager had an important role as well.

The leadership role of the project manager of the Hoogheemraadschap is perceived very positively. It is stated that he gave everyone in the team the freedom to reach the maximum achievable. It is also stated he took his responsibility if needed and approached people when needed. Moreover there has been the openness within the project team to discuss matters. The project manager of the Hoogheemraadschap van Rijnland states the following about the leadership within the directive group:

“But if something fundamental had to be decided for the parking garage I let it to the project manager of the parking garage, to say it in that way. Unless I thought, this is not a wise decision, pay attention to that and that. But formally yes, it were his 30 million, so he had to take the responsibility for that, I thought. And he always did this in a neat manner. In the same way he also respected that when there was something very specific about the flood defence, he always thought in the interest of the project and not in the interest of the municipality.”

- Project manager, Hoogheemraadschap van Rijnland, 2019

This is acknowledged by the project manager of the parking garage, as he states that there has been a certain equivalence of contribution in the directive group.

It is stated that the type of project manager involved in the project is important. This can influence the approach and the success of a project. This can also be a barrier, when the project manager is not able to approach the project in an integral way. When another project manager is going to be involved during the process, this can have an influence on the process but also on the outcome.

Barriers

○ Human relations

As stated earlier, working hard has been appreciated in the organisation culture. It is stated by several respondents that people were very driven and worked very hard for the common interest. However, it is stated that this sometimes can come with certain costs. It is important to be aware of the wellbeing of people, so they do not get a burn-out.

Concluding remarks on Kustwerk Katwijk

In summary, Kustwerk Katwijk has been regarded as an overall positive project by the different respondents. There are some factors that are more common and central in each interview than others. In this section there will be focused on which factors can be regarded as crucial to the project Kustwerk Katwijk and the way in which the project was integrally given shape.

Commitment has been a very central factor to the project. Commitment is woven into different aspects of the project such as the administrative agreement but also commitment on a personal level. It has been an important factor that the municipality of Katwijk was able to commit to the project under the conditions that were set by the water authority. They could commit because there was a certain financial clarity and because they were willing to take a certain risk. The municipality of Katwijk has been very committed to the project process as they were working alongside the water authority in an integral project organisation, without a mirrored structure. This links to another central point of Kustwerk Katwijk, namely the common interest. The project organisation was working for a shared interest. Almost every respondent stated they were working for Kustwerk

Katwijk instead of their own organisation. The project organisation was functioning in a good way in which the roles were complementary. Every respondent emphasises this as a crucial factor. The leadership style is also emphasised as an important successful factor that played a role in this. It has been a project team that was closely connected and had a certain courage and creativity, that was needed for the success of this project.

The administrative agreement is seen by almost every respondent as a crucial moment in the process. In this agreement the organisations committed to the common interests, and agreements were made on the financing. By informing the decision-makers in a good manner, the decision-making process was very quick, which has had a positive influence on the planning of the project. This was also possible because the planning of the project was regarded as crucial, and was set up in a way that is regarded as clever.

Stakeholder engagement management is mentioned as an important factor by almost all respondents. It has been not only part of the task of the stakeholder engagement manager, but has been regarded as important for the entire project. The project has put a lot of effort in this, as stated by several respondents.

4.2. HWBP Sterke Lekdijk

For the project *Wijk bij Duurstede-Amerongen* there have been various ways of data-collection as well. There has been a literature study, various interviews were held, and there has been a site visit. The interviewees had different roles in the project, which were: Hoogheemraad, project manager of the Hoogheemraadschap, stakeholder engagement manager of Arcadis, stakeholder engagement manager of the Hoogheemraadschap and the involved official of the municipality *Wijk bij Duurstede*.

4.2.1. Starting points of the HWBP Sterke Lekdijk

The HWBP projects of the Sterke Lekdijk are situated in the province of Utrecht in the Netherlands. The dike trajectory is 55 kilometres long and includes six project areas. These six project areas are visualised in a map in figure 4.1. Around 90% of the dikes of the Sterke Lekdijk do not meet the safety standards. The dikes are mostly not meeting the standards on the fields of (inside)stability and piping (Commissie voor de milieueffectrapportage, 2018; Terra Incognita, 2016).



Figure 4.1: HWBP projects of the Sterke Lekdijk (Hoogheemraadschap De Stichtse Rijnlanden, 2019)

In this HWBP case there is a clear emphasis on (spatial) quality and even specifically linking

opportunities. There is a framework formulated that is at the basis of the assessment of information about the landscape, historical and ecological qualities. This gives direction to the way there is handled with the area surrounding the dike trajectory and the decision-making regarding the design of the dike. This framework is elaborated in the quality framework of Terra Incognita (2016).

The Sterke Lekdijk is part of the project of 'Dijkversterking Centraal Holland (DCH), which can be translated as 'dike reinforcement central Holland'. This is a cooperation between several water authorities in central Holland and Rijkswaterstaat. Within DCH there is an aim for an optimal coordination between the dike reinforcement and qualities on the field of space, landscape, nature and cultural history that are existing or need to be developed yet. The coordination takes place in a collaborative process with involved stakeholders. Besides that the DCH seeks possibilities to include extra quality and additional spatial developments of other initiators in the projects in an integral way. These last are referred to as linking opportunities (Terra Incognita, 2016).

There is an emphasis on an integral approach of the projects. Aspects that exceed the scale of the separate projects can receive more attention in this way. These aspects could for instance be landscape characteristics, nature values and traffic (Commissie voor de milieueffectrapportage, 2018).

The Sterke Lekdijk has various surrounding qualities, that come from a rich and long history. It has values for culture, history, ecology, living environment, agriculture, industry, recreation, infrastructure and experience. Terra Incognita (2016) formulated core qualities that illustrate characteristics that should be central in the task for dike reinforcement in the area of the Sterke Lekdijk. These five formulated core qualities are translated as: 'The dike is continuously in a subtle changing landscape'; 'The dike is a border between two different ways of occupation and land use'; 'The dike shows a historical and timeless battle against water'; 'The dike is a recreative axis besides attractive terrains'; 'The dike becomes enriched by the passage of interesting structures'. (Terra Incognita, 2016, p. 50 & 51).

This results in specific design principles of the dikes. These are the seven formulated principles:

'Develop the dike as a readable and strong defense against water'. For this principle it is of importance to maintain the dike on a large scale and in a continuous way. It is part of a national infrastructure and has to defend against the same water mass. Therefore there has to be a continuity in the profile of the dike. The design of the dike should take into consideration that there should be an insightful 'main shape'. Important is to strengthen as much as possible within the ground. Technical solutions need to be subtly visible. They are implemented as there is chosen for conservation of certain elements close to the dike. In this way there will be mostly be differed from the earlier mentioned ground solutions. The management of the dike should be focused on 'two worlds'. At the side of the flood plain there is the dynamic of nature and floods and at the other side of the dike is the cultural landscape that does not have flooding (Terra Incognita, 2016).

'Make the history of the dike better visible'. Dikes need to develop from the history of the landscape and the differences in the landscape. Embrace the characteristics of the surrounding of the dike, such as the vegetation, lived environment, historical and archaeological values. (Terra Incognita, 2016).

'Give shape to the landscape from a historical inspiration'. This principle specifically focuses on the visibility of clay-winning areas and the inspiration that can be derived from natural and historical dike reinforcement measures. These clay-winning areas came to existence by winning clay in these areas for the purpose of historical dike reinforcements. Nowadays these areas are ecologically very interesting. Some of these areas are not utilised nowadays and can be restored if this does not have a negative impact on the water safety. In the past, there have been several natural elements and processes used to reinforce the dikes. These deserve more attention nowadays (Terra Incognita, 2016).

'Make a dike for the experience of all users. Develop the dike as a recreative axis.' This principle includes using the dike as a recreative route that has special viewpoints over the landscape. Besides that, there should be room for everyone on the top of the dike, but especially slow traffic needs a place. The dike needs to remain accessible for recreation. The road infrastructure has to remain coherent and insightful. Routes can be connected around the dike and recreative visions have to be created (Terra Incognita, 2016).

'Use the dike as an ecological connection'. The dike is a living space and connecting structure for plants and animals. This ecological function of the dike can be strengthened. This can be done by stimulation of ecological relations between the inner and outer dike areas. Besides that there has to be thought about ecological management of the dike, such as growing flowers on the southern sides of the dike taluds. At last the nature and river dynamics can be strengthened (Terra Incognita, 2016).

'Make insightful relations between the dike and intersecting structures over the river'. Dikes should be able to follow their trajectory when there is an intersecting structure, such as a bridge. When crossing canals the experience of both the river and the canal should be remain. The ferries that operate in the area should be connected to the dike trajectories as they have an historical function (Terra Incognita, 2016).

'Maintain and improve living spaces and vegetation structures'. Monumental vegetation and buildings give character and quality to the environment and should be embraced. They have an added value for the area. It is important to give valuable buildings a liveable future. The solution should be sustainable and liveable for the future. If not, then one should consider demolishing the buildings, replacement or restructuring the building. Linking opportunities with agricultural actors

should be explored. On a sectoral level there are several challenges for agriculture as well inside the dike as outside the dike. Within the inner dike area there will be an increase in scale. Possibilities to improve the structure for agriculture, with maintaining the historical structures of the landscape should be explored. Within the outer dike areas, agriculture can have a role in historical cultural management, nature management and management of recreative services (Terra Incognita, 2016).

Traffic safety is an issue as traffic conflicts arise on almost every part of the Sterke Lekdijk. Different sorts of traffic interact on the dikes. From this the wish rises to ban fast traffic from several dike trajectories. There should be a better coherence between the users of the roads and the offered destinations. Recreative use of the dikes deserves attention too, as some flood plains are barely accessible for recreation. Continuity also is a point for attention. Intensive agriculture on the flood plains leads to an interruption of the flood plain experience and the ecological coherence. There is not always much contact between the urban environment and the river. The historical story is unknown and there could be more emphasis on creating links and giving insight in these stories (Terra Incognita, 2016).

Within the quality framework of Terra Incognita (2016) there is a strong emphasis on spatial ambitions and linking opportunities. Different spatial ambitions that are formulated in public policy documents for the project area are formulated in the framework. Even possible linking opportunities that could be linked to the HWBP projects are identified for the project areas.

The spatial ambitions focus on different aspects such as house construction, excavations of flood plains, nature ambitions, recreative use, water quality, redevelopment of cultural historic elements and strengthening the relationship between the living environment and the river (Terra Incognita, 2016). For maintaining and improving spatial quality and ambitions it is important to have a coordinating role.

From these spatial and policy ambitions there are several possible linking opportunities identified for the project area. There are three main criteria for this HWBP project to assess the feasibility of the linking opportunities. These criteria are:

- *Coherence in content*
There should be a relationship between the water safety task and chances for an integral solution. These can be regarded as all projects in the dike zone, projects that take care of a lowering of the water level and projects that take care of exchange of commodities (Terra Incognita, 2016).
- *Planning*
The time horizon on which the water safety measure will be realised will be leading. Therefore a planning that fits the initiatives of third parties is necessary (Terra Incognita, 2016).
- *Financing*
There should be a win-win situation for the parties and there should be a cooperative financing. To what extent the financing is coming from the HWBP is dependent on the extent to which it is connected to the water safety aim (Terra Incognita, 2016).

4.2.2. The project Wijk bij Duurstede – Amerongen

The previous section focuses on which starting points are applicable to the entire programme Sterke Lekdijk, and are applicable to Wijk bij Duurstede – Amerongen. The project Wijk bij Duurstede-Amerongen is one of the two first projects of the six projects that are developed. The project started in 2017 and is at the moment when this research is executed in its exploratory phase. Expected is that the project will go to the next phase in the year 2020. Hoogheemraadschap de Stichtse Rijnlanden is the initiator of this project.

The HWBP objective for the project is a dike reinforcement, which is identified as the main objective by the different respondents. The seven ambitions that are included in the previous section are named by several respondents, implicitly or explicitly. The respondents identify different objectives and linking opportunities within the project focused on additional value.

An important objective that is identified by the respondents is traffic safety. A cycling path next to the dike or measures on the dike are discussed and could be a linking opportunity to reach the ambition of traffic safety. Another possible linking opportunity is the Lunenburgerwaard, which is a nature area which could be developed further or improved. This is a project already taking place with the Province of Utrecht as initiator. The changed landscape with a historical stone factory will amongst others be transformed to more nature in this plan. There are also linking opportunities regarding the cultural history of the area. There are plans to make cultural historical parts more visible and experienceable. There is also a more uncertain linking opportunity for the outer dike, riverfront area of Wijk bij Duurstede. There are plans to give that area an upgrade.

It is stated that the linking opportunity of the Lunenburgerwaard is mainly part of the province of Utrecht. The idea for the possible improvement of the river front comes from the local actors, the municipality of Wijk bij Duurstede is still more in doubt regarding this linking opportunity. The cycling path is mainly part of the municipality of Wijk bij Duurstede, and the municipality of Utrechtse Heuvelrug is more neutral in this case. Local actors' ambition focus mostly on cultural history and recreation. Agricultural has competing interests in the area. On administrative level the Hoogheemraadschap de Stichtse Rijnlanden, the province of Utrecht, Rijkswaterstaat and both municipalities are involved. The IPM project team has a mirrored structure. The engineers of Arcadis and Sweco each have a counterpart at the Hoogheemraadschap. The municipalities are part of the design group in which policy actors, local actors and organisations with an interest are represented. The municipalities are not represented in the project team.

4.2.3. Perceived benefits and barriers for implementing linking opportunities

Political factors

Benefits

○ Interests and shared understanding: Identifying interests

A factor that is regarded as important is the identification of interests of different actors. The stakeholder engagement manager of the Hoogheemraadschap de Stichtse Rijnlanden states it is important to understand each other's interests and try to make a plan that serves these interests as much as possible. He therefore states:

"Do not talk about opinions, but talk about interests."

- Stakeholder engagement manager, Hoogheemraadschap de Stichtse Rijnlanden, 2019.

He states an interest is more rigid, but an opinion can shift. An actor will have an opinion about certain measures, but this opinion comes from his interest. Therefore, one should identify how the measures impact the interests. He clarifies this by stating:

"If you are going to discuss opinions, you will create contradictions. And I preferably talk about interests, because then I can try to find how these interests can be combined with each other. How can I take care that both the nature lover and the farmer are satisfied?"

- Stakeholder engagement manager, Hoogheemraadschap de Stichtse Rijnlanden, 2019

Other actors state the importance of identifying each other's interests as well. The stakeholder engagement manager of Arcadis states that actors have to put effort in understanding each other. In the case of this project there are some conflicting interests, although it is stated that people have created an understanding of each other's interests.

The ambition documents that were drawn up by every big stakeholder and policy actor are regarded as helpful for identifying the interests in this project. However, this strategy has had some barriers as well, which will be discussed in a following paragraph. The stakeholder engagement manager of the Hoogheemraadschap emphasises that the ambition documents have helped the project in its designing process.

(...) what happened with Wijk bij Duurstede-Amerongen is that we, as the water authority, we had our general administration register several ambitions at the start of the project. So, what do we think that is important to do with the dike reinforcement from the point of view of the water authority. (...) We expressed that in a number of ambitions and subsequently we challenged the municipality, the province, Rijkswaterstaat and also other stakeholders to write that down as well. So, what do you think is important and what would you like to realise? So, and they wrote that down in a document as well. So, on the project website there is, for all those parties, a sort of small report in which they wrote down what they wanted. The nice thing about it is that it does not only makes clear to us how we stand in the project, but in this way the rest of the world is also able to see: this is what the municipality of Wijk bij Duurstede really wants."

- Stakeholder engagement manager, Hoogheemraadschap de Stichtse Rijnlanden, 2019

One of the ambitions of the water authority has been to involve all stakeholders from the start. The vision has been that people were able to contribute their own interest and were also able to defend this interest themselves in the context of the project. This is regarded as being beneficial for the project.

The 'startbeslissing' (starting decision) has also been identified as a factor that gave space for initiatives in the area. The general administration decided that there would be space for creating

societal added value and that the project would not be executed with a focus on low-costs. This has given actors more trust, as is stated by the respondents.

Some respondents emphasise the flood protection task being a factor that connects the interests. Most respondents state that they have the feeling that every actor acknowledges the need of this and feels a certain connection to this goal.

A very important factor that is emphasised by several respondents is a certain clarity and honesty to local stakeholders. A project organisation should be clear and honest about what is possible and what is not possible. Setting clear ground rules is part of a good stakeholder management process. The existence of expectations that cannot be met should be prevented.

- Policy goals/intermediate outcomes: Kind of ambition

It is stated that the kind of ambition that is brought forward by initiators has an influence on the extent to which it will be taken into account within the project.

If an ambition develops parallelly to the project it is easier to implement. Another factor of influence can be to which extent the design of the project has to change in order to realise the ambition.

“At the moment that it develops parallelly with ours, if you so to say well only have to change a small thing, then it is not a problem. For instance, if we have to construct red asphalt or green asphalt instead of black asphalt. That probably does not matter much, not in costs, not in effort. The only thing that is a matter is that you have to pass it on at the right time. This is just a random example, I think we will not get green asphalt, but some things are just complicated. Thus, the easier it is to integrate, the bigger the chance it will succeed.”

- Hoogheemraad, Hoogheemraadschap de Stichtse Rijnlanden, 2019

A factor of influence is also the extent of support the ambition gets. If there is more resistance for an ambition it is less likely to succeed and more effort is needed to realise it. When an ambition is in line with the project, this could be regarded as a benefit.

Barriers

- Policy goals/intermediate outcomes: HWBP objective

It is stated that the HWBP objective makes it harder to realise goals aimed at improving the spatial quality. Two respondents explicitly address the HWBP objective and its financing as a factor that makes linking opportunities more difficult to implement, for there is no governmental budget for it. This brings along more insecurities on achieving the goals for the initiators, for they are financially responsible for their own ambitions. The project manager of the Hoogheemraadschap de Stichtse Rijnlanden states that the HWBP objective also includes integration efforts. He states that with the same amount of money, that fit the sober and effective aim, some ambitions of actors can be achieved by small alterations in the design. However, this is only the case for some kind of ambitions (mostly small changes in the design) as is stated in this section's explanation on the factor of 'kind of ambition'. Simultaneously he states that there should be the possibility to regard the project as an area development, if this is the case. On the other hand he states that linking opportunities should be a natural part of the project, and it should not forcedly be sought for. If there is an area development he states that the ability to connect the ambitions should be present and available within the project organisation. Moreover, the importance to look for connection on programme level with other programmes is emphasised.

Besides that, it is stated that spatial quality is linked to the HWBP objective but not an integral second objective. The definition of 'linking' implicates this. Some respondents make a comparison with the programme Ruimte voor de Rivier, in which there was an integral viewpoint.

- *Power and resource (im)balance actors: The initiator's ability/capacity to organise*

Different actors state that smaller municipalities have a corresponding smaller capacity. Officials of smaller municipalities have less capacity to work on external projects. Therefore it is harder for them to fully commit to a project, and they are more dependent on the project organisation than larger municipalities with more capacity would be. It is stated that smaller municipalities have less specific expertise, because certain persons have to take on tasks that preferably need different kinds of expertise. For instance, it could be the case that water authorities have one contact person at a municipality for all their projects, but it cannot be expected that this person has expertise on every field.

- *Power and resource (im)balance of actors: Decentralisation of national government*

It is stated that the decentralisation of the national government has an influence on the municipalities' abilities and resources regarding linking opportunities. It makes it more difficult for municipalities to bring in linking opportunities to a project. The social domain, with more health care tasks, has relatively recent become part of the responsibilities of the municipalities in the Netherlands. It is stated this has put a certain financial pressure on municipalities, according to one of the respondents. As a result some municipalities are forced to pull back their investments. Linking opportunities are in that case not the priority for a municipality to allocate their budget to most of the times, for it are additional goals, as is emphasised by some respondents. The municipalities really want to be involved in projects most of the times and initiate linking opportunities, but do not always have the financial means. This will be elaborated further on, as this is an economical and financial factor as well. In this case, the municipality Utrechtse Heuvelrug has not the financial ability to invest in the cycling path, which has been identified as a linking opportunity.

The decentralisation of the national government is regarded as being also connected to the political factor of the HWBP objective. It is stated that because of the decentralisation of the national governments there are more actors that manage areas. In this case there are three or four actors that manage the flood plains. In this way, the tasks of the actors become fragmented. Therefore this perspective emphasises the importance of looking for connections and linking opportunities on the level of national programmes.

- *Shared understanding: Late insight in ambitions*

Although it is stated that the ambition documents of each actor helped in getting insight in each other's interests, the ambition documents have encountered some barriers as well. It is stated that it has been hard for actors to identify their specific interests and ambitions in an early phase of the project. Different respondents emphasise the difficulty actors have had to identify their interests and make these specific. This difficulty is according to the respondents very understandable, but is seen as having been a barrier to the project. One respondent states that the first projects of a programme always encounter this barrier, as for the later projects the ambitions of the actors are already clearer. When the later projects are in the same phase, most of the actors already have identified their ambitions for the earlier projects, which apply to the later projects as well. The late

insight in ambitions can be a barrier to the project planning, for actually more time is needed to identify these ambitions. It can therefore also be a barrier to the actual execution of the linking opportunities, for it can be too late to execute the linking opportunity in the end.

Institutional/organisational factors

Benefits

- *Institutional Design: Clear ground rules*

At the start of the project a framework was set, which set boundaries in which the project was able to operate. This was communicated clearly to the involved stakeholders. The project organisation had been clear and transparent in advance on what was either possible or impossible. In this way local actors were informed about what was expected from them in advance. Therefore the local actors accepted their role, as they were able to think along with the design, while the decisive power remained the administrators responsibility. To communicate this clearly at an early stage is regarded as a benefit, for it can prevent possible problems that could occur later on. Local actors could be very disappointed when their plan is not going to be executed in the end for instance. In this way it was made clear beforehand that this scenario was able to happen.

There have been clear rules for linking opportunities as well. The water authority stated that if you want to link an opportunity you have to cooperate as well. The initiator has to put effort in it and needs to take care so the initiative becomes possible. This is aimed at the policy actors and the 'bigger parties' such as Staatsbosbeheer. For the local stakeholders there are different ground rules, for no financial investment can be expected of them. The policy actors are responsible for the financing of their own initiative, and therefore they have to research if they have the possibility to finance it. An additional rule was that when the decision has to be made it needs to be insightful to what extent the linking opportunity is financeable and permissible. Because when it is not possible, the project can have a delay in the next phase and the plans have to be revised. The stakeholder engagement manager of the Hoogheemraadschap de Stichtse Rijnlanden illustrates this by the following statement:

"In those playing rules we agreed about the linking of opportunities. We stated, well for the preferred alternative you need to have the bigger opportunities imaged. And at the project plan you need to have the smaller opportunities imaged as well, and after that only details can be adjusted. So you work from rough to delicate and at every step you have to demonstrate that it is permissible, that it is financeable, that it is executable, that it does not bring along obstacles in the surrounding. Well, all sorts of obstacles that are there which could obstruct it. And that is actually the core of why we say, these playing rules, we think that the ownership of such an idea should stay at the one that really wants is, and that one needs also take care of making it possible."

- Stakeholder engagement manager, Hoogheemraadschap de Stichtse Rijnlanden, 2019.

Setting these clear ground rules is regarded as being a benefit, because the needed information for linking opportunities makes it insightful if linking opportunities are permissible, financeable, executable or cause obstacles for local stakeholders. Because it is a responsibility for the initiators to make this insightful in time for the decision-making, the project will not get delayed when it is not yet insightful.

- *Subsystem involvement/instruments: Stakeholder engagement management*

The stakeholder engagement management within this project has had several barriers as well as benefits. In this paragraph the benefits will be discussed. These benefits are closely related to the

political factors that are discussed earlier and some process-, management- and instrumental factors that will be discussed later.

The stakeholder engagement management is regarded as having been an important factor for this project. The respondents all state that the water authority has organised the stakeholder engagement management well. It is stated by several actors that there were many meetings and these were well prepared, which is regarded as a beneficial factor. The communication to actors has been clear, as is stated earlier by the clear ground rules. This resulted in more support amongst the local actors according to some respondents. People accepted that the flood safety should be ensured. The communication in advance about what was going to happen and how they could be involved was experienced as very positive. The stakeholder engagement manager of Arcadis lists several communication channels: a project website with all documents and information, a digital newsletter by e-mail and information meetings. The stakeholder engagement manager of the Hoogheemraadschap de Stichtse Rijnlanden adds 'kitchen table meetings' and individual meetings with organisations that represent a certain interest.

The stakeholder engagement manager of the Hoogheemraadschap states that it is his task to bring the interests of the local actors to the project team. The project team needs to be conscious of these interests.

An important aspect that has been a result of the stakeholder engagement management is the actors' understanding of each other's interests, as is described as a political factor. In the 'starting decision' participation from the start of the project has been an important ambition stated by the water authority. This is identified as a political factor as well. It gives trust to local actors if you take their interests seriously and listen to them, which is stated to be the case for this project according to the different respondents. Different respondents state that this project has a participation process based on the concept of co-creation, which is regarded by them as a positive aspect of this project.

To start the conversation with stakeholders the project team has established a design group. In this design group the local residents were represented as well as all the big stakeholders in the area. These are for instance farmers, nature organisations, recreation organisations, the water authority itself, the municipalities, the province and Rijkswaterstaat. This has been identified by respondents as having been really helpful in identifying each other's interests and a common understanding. The group visited the dike collectively and everyone was asked to tell what was important for them. The design group also did a role play game in which actors needed to take on each other's role. The design group was organised in a certain way that is described by the stakeholder engagement manager of the Hoogheemraadschap de Stichtse Rijnlanden as follows:

"Well, at first we thus explored what are those interests actually and what does that mean? So we went to the dike once. We also have invited parties that were not there, to tell us what their interest is. For instance, LTO has given a presentation there. And Staatsbosbeheer is a site manager, and Utrechts Landschap, they both did not want to be part of the design group. But, we did invite them to come and tell what was important to them. Subsequently we started puzzling with all those interests and with the task we see for the dike, so the safety task, and all the ambitions and wishes we collected until then. So, at first we started searching for the bigger things in the area, what are the combinations that tolerate each other. (...) Eventually we puzzled until logical combined units, solutions with a story. You then actually have very rough solutions that give substance to not only the problem of the dike, but also give substance to all the ambitions that people have."

- Stakeholder engagement manager, Hoogheemraadschap de Stichtse Rijnlanden, 2019.

Because of the organisation of the resident design group people began to understand each other's interests, as is already illustrated as a political factor. This was an important aspect as a result of the stakeholder engagement management. People in the design group also gained an insight in each other's differences in interests, which is also regarded as an important beneficial factor. It was stated by several respondents that it is not possible to satisfy every interest in the end, but this is a natural thing.

For some stakeholder groups meetings only aimed at their interests were organised. This gives trust to the local actors according to the respondents. Everything in the process happens in openness and the process is regarded as well documented, according to several respondents. The documentation is available and open to everyone on the project's website. This as well gives trust to the local actors, is stated. Different respondents state that the stakeholder engagement management is very transparent and that there are no alternative forums. All wishes and ambitions are part of the negotiation. Several respondents emphasise that the stakeholder engagement management was received mainly positive by the local stakeholders as well as the municipalities. People were pleased and thought it was interesting to be able to think about the project and add their ideas. However, there have also been some critical voices.

Barriers

○ Subsystem involvement/instruments: Stakeholder engagement management

Although the stakeholder engagement management has had many benefits for the project, there are also some factors identified that have been a barrier or need to be taken into consideration.

The agricultural sector in the project area has been an important stakeholder group for this project. It is stated by different respondents that the farmers think their interest was not given enough weight and their voice was not enough represented in the design group. In hindsight the stakeholder engagement manager of Arcadis states that this could possibly be done better when there would have been face to face meetings with the individual farmers in advance. He states that their wishes and ideas have to come back in one way or another in the project. It is stated that this is a difficult aspect. In the project they invited the farmers to formulate what was important for them and what they wanted.

A barrier that is in line with this, is that the invitation for the stakeholders to come and bring their wishes to the project did not meet the attitude or anticipated reaction amongst the stakeholders. It is stated that the stakeholders were approached to think along with the project at the moment that there was not yet a clear plan. This approach did not fit the traditional attitude stakeholders had regarding participation. They expected they had to react on plans, but did not expect to actively think along while making these plans. It is stated that this attitude came from the historical relation there has been between the local actors, such as residents and farmers, and the state. In this history a certain amount of distrust amongst the local actors in the state has developed. They were used to reacting to plans, and often felt not taken seriously in their interests, instead of actively thinking along. This is something that had to be overcome by keeping promises and clearly setting ground rules about what could be expected.

A barrier that has to do with the previous one is the need for information by stakeholders. The project is in the exploratory phase. This is a phase, stated by the respondents, in which there is not exactly clear what the project would mean for every individual actor and their interest. This is something that is emphasised by both stakeholder engagement managers. The local actors desire information that is not yet available.

It is stated that the representativity of the local actors is the responsibility of the water authority, as it could not be expected of local actors to represent others. Overall this has gone well for the stakeholder engagement management process. Most respondents state that the actors were overall represented well. However the farmers, as stated above, felt less represented. Another point that can be a barrier is that the local people who are actively involved in the designing process are mostly of an older age and highly educated. This is something that is stated as more common in projects, but can have an influence on the representativity of the local actors in the project.

The stakeholder engagement management process has been organised by the Hoogheemraadschap de Stichtse Rijnlanden. A bigger role for the water authority in the stakeholder engagement management is in such a project therefore more likely to occur according to a respondent. This because the project can be regarded as starting from a dike reinforcement project of the water authority. However, it is stated that it is important to think about the different roles taken on by different actors. The respondents have stated that the project organisation and the stakeholder engagement management are experienced as very well organised. However, at the start of the project the communication to the local stakeholders was experienced as mainly taking place from the side of the water authority. This is in a way regarded as something to take into consideration. The respondent of the municipality of Wijk bij Duurstede argues that it possibly would be a good idea to work collaboratively on the stakeholder engagement management. At the start of the project the municipality of Wijk bij Duurstede was still searching for what their role in the communication to local stakeholders should be, or whether they should set up their own communication to local actors. Because the municipality of Wijk bij Duurstede has been open about their experience regarding the communication to the water authority, the roles became more clear. When it comes to linking opportunities it is important to think about the role the initiators have in communicating their initiative to local stakeholders within the stakeholder engagement management process.

Economic and financial factors

Barriers

- *Uncertainties and risks: Permissibility*

It is stated that there is always a certain risk for the water authority as some of the linking opportunities cannot be separated completely in a functional way. With a cycling path on top of the dike, the permissibility is related to the permissibility of the dike reinforcement. In this case, it could be a barrier for the dike reinforcement when a linking opportunity is not permissible. This has not been the case in the project until the writing of this report, but it is something that is important to take into account.

- *Financial distribution key: Financeability*

A very important factor that is mentioned and emphasised by every respondent is the financeability of linking opportunities. Money is a factor that is mentioned by the different respondents. As is stated earlier, the HWBP objective plays a role in this as well, for linking opportunities need to be financed by their initiators. As is emphasised by the project manager of the Hoogheemraadschap de Stichtse Rijnlanden, the water authority does not take the responsibility for the costs of linking opportunities. However, he states that the water authority is willing to support actors to find their ways to different institutes. The water authority invests process costs in identifying linking

opportunities in the project as well. At the same time some parties expect the water authority to contribute to the realisation costs of linking opportunities.

This is also an issue, for the initiators do not always have the budget to finance the initiative and/or are not able to reserve or allocate the budget in time. A reason that is mentioned for the lack of budget of some municipalities is, as stated before, and the decentralisation of the national government. In this case one of the involved municipalities does not have the financial situation to invest in the cycling path that has been identified as a linking opportunity. In this way the other municipality is not certain there will be enough budget to realise the linking opportunity.

Therefore it is emphasised that there should be aimed on creating a shared benefit on quality for the total project. The initiatives should be less separated for this purpose. If there is no benefit for the individual initiators, a shared execution becomes less attractive for them. Different respondents emphasise the idea of an external budget, either from the national government, the province or the water authority, to be able to invest in linking opportunities that are promising and have an clear added value.

A clear ground rule is that at a certain point it needs to be clear if a linking opportunity can be financed or not. Otherwise the project can have a delay. However, it is stated that there is only a short time between the identification of the linking opportunities and this moment. This is regarded as a barrier. The project manager of the Hoogheemraadschap de Stichtse Rijnlanden states that most linking opportunities become visible at the 'Nota Kansrijke Oplossingen'. From that moment on the initiators of the linking opportunities only have four to five months until the preferred alternative will be set, in which this linking opportunity needs to be concrete. He states that for linking opportunities this process ideally would take 1 year to 1,5 year. Identifying these linking opportunities should be organised earlier on in the project process. Initiators ideally would have an ambition document and a financial reservation before the project starts. In this way initiators can allocate money more easily, without the obligation that it actually needs to be spend in the end if this is not wanted. It can be a barrier when initiators did not reserve (enough) money for their linking opportunity. It is often not possible to allocate budgets on a short term. In that case it is often, that it does not matter anymore what the linking opportunity is, because it will not be discussed at the negotiation table, is stated. It is then the speed and planning of the project versus the linking opportunities. The project manager of the Hoogheemraadschap de Stichtse Rijnlanden states that the way the case is now, you either have to accept that this is the case in the project or you should give the initiators the time in the first project to catch up, and you need to accept that. A suggestion that is given is that you need to have a smaller project team in such case, and the focus then has to be on finding budget for those initiatives in the meantime.

An important factor that is stated by several respondents of the water authority is that a process becomes more difficult when it becomes more specific and money becomes a factor of discussion. This is experienced both on an administrative level as an official level. Even though this is experienced for this project specifically, it is stated that it is a common thing for projects.

Process-, management-, and instrumental factors

Benefits

○ Face to face dialogue: Communication/interaction

Different benefits of communication are identified and will be illustrated in this paragraph. The barriers of communication are illustrated in a later paragraph.

Communication and interaction are factors that are regarded as very central to this project. These factors are already discussed extensively for instance at the passage on stakeholder engagement management, for it is regarded as one of the central points of this process. Listening and taking actors seriously is perceived as of main importance. The support in the local area has grown because of a good communication and the openness. According to different respondents it is very important to keep your promises. You have to be transparent by saying what you are doing and doing as you say.

However, it is stated by the actors that communication and interaction has to take place in a good manner at different levels, with local actors, but also on an administrative level, official level and the level of the project team. Good communication between these levels is also of importance. Most actors emphasise the importance of face to face and personal contact, for it is regarded as always clearer than other ways of communication.

- Commitment: Drive of the initiator and interdependence

Almost every actor emphasises the importance of commitment of the actors to achieve their goal. Several actors state that initiators need a certain drive for their ambition. It is stated that the alderman of the municipality of Wijk bij Duurstede really has a drive for the cycling path. However, having a drive is not a synonym for being committed. It could be stated that a certain drive is needed to be able to commit. The commitment in the project has encountered several barriers, as will be discussed in a following paragraph.

The water authority has clear ground rules regarding linking opportunities. One of the ground rules regarding commitment is that if someone has a linking opportunity, then they have to take part in the process as well. The initiators have to put effort in realising it themselves.

A certain interdependence of actors is emphasised by the Hoogheemraad, as she states she personally believes the following:

"(...) you really cannot do it without each other, so you have to. As officials and administrators you have to be willing to help each other. The moment I can make an administrative move to help the officials further, then I have to do that, and the other way around I think. (...) You have to be able to bring each other into position. That is easy to say, but how do you that is of course the following question. Yes, and I think you always have to look for the common interest."

- Hoogheemraad, Hoogheemraadschap de Stichtse Rijnlanden, 2019

This factor of interdependence tells something about the collaboration between the actors operating on both the administrative and the official level. The willingness to help each other is in this case regarded as a beneficial factor. Important for this is to look for common interests. A following paragraph will elaborate on the collaboration.

- Policy instruments: Design group

The design group can be seen as a procedural instrument according to the operationalisation of this research. The design group is extensively described as a factor of the stakeholder engagement management, it is emphasised that it is an instrumental factor that has been regarded as beneficial to the project.

- Scope project/planning: Scope, flexibility and planning

The scope has been decided upon by the given tasks, but linking opportunities played a role in this as well. What the scope would be and to what extent this is flexible is collaboratively discussed. The boundaries have been decided upon in collaboration. This gave insecurities at first, but this process is regarded as being a beneficial factor according to the stakeholder engagement manager of Arcadis. He states that the insecurities were overcome by the realisation that the context changes and the acceptance of that. It has been important to openly discuss this. Within this changing context decisions had to be made which needed a certain amount of flexibility.

The ground rules for linking opportunities are for a great extent aimed at preventing the project from a delay. However, it is as well stated as a barrier that there is too less time to identify ambitions and linking opportunities for initiators.

Barriers

○ Commitment: commitment

A certain tension field between the position of the municipality of Wijk bij Duurstede and the water authority regarding commitment is experienced. This is something that implicitly comes forward from the interviews with the different actors, but is also mentioned explicitly by the official of the municipality of Wijk bij Duurstede. She states:

"(...) And that becomes, there is a tension field in that. I notice that the water authority sometimes thinks something along the lines of 'you want something, so you have to come with something'. While we think at the same time 'yes but beside that cycling path we wrote down some other things too, we have allocated some money for the cycle path, but probably not enough.' So we have to see what is even possible, and if it is possible, yes then we will look further for additional financing et cetera. That is something that is really the case with linking opportunities, like how, what will be shortly possible and what will then, how are you going to collect financial means for it?"

- Official, Municipality Wijk bij Duurstede, 2019

The official of the municipality of Wijk bij Duurstede states that this has an implication for the commitment the municipality can give. The Wijk bij Duurstede has to allocate money for their different ambitions, amongst which the cycling path, but also for cultural historical and recreational elements. She states:

"(...) It feels a little like a pressure, how am I going to collect all different financial means for that. While, yes from the water authority, they are of course in a different position, they have a big budget enough to achieve their designated task. They are very good in the organisation of identifying all these linking opportunity, but the following step, the realisation, they have zero euro for that. And with that you notice (...) how do I say it, maybe wrong expectations of each other. Or well, that is a point that comes forward I think."

- Official, Municipality Wijk bij Duurstede, 2019

This is something that comes forward from other interviews as well, as the project manager of the Hoogheemraadschap de Stichtse Rijnlanden acknowledges a same tension field. He states the following:

"I think that at that part it is just going to wrench a bit there. There are a lot of parties that state, well we want to do something, but we expect a contribution of the water authority as well. While, we as the water authority think at this moment, yes we already invest ten percent in this project, and that is a lot of money. So there is not much left, and then there just arises a tension field."

- Project manager, Hoogheemraadschap de Stichtse Rijnlanden, 2019

This is also an economic factor, and the HWBP financing again plays a part at this point. However, at the same time it is a factor concerning commitment, as the parties are giving no commitment on the financing. It is stated that the municipality of Wijk bij Duurstede asks for certainty before they will look for additional financing. They do not know yet if the cycling path will even be possible. The given financial bandwidth is regarded as uncertain, and the responsibility for specification of the costs lies with themselves. This is regarded as a big step to take. At the same time, the water authority states according to its clear ground rules that at a certain points the details, among which the costs, should be clear. Otherwise the project would have a delay. This shows that both parties want a commitment of each other. The water authority needs commitment and financial clarity from the municipality in order to carry on with the linking opportunity. Meanwhile, the municipality wants more certainty/commitment from the water authority on the possibility of the execution before they start looking for additional financing.

- Face to face dialogue: Communication

It is important to inform administrators on the content of the decision-making in an early phase. In this way you prevent them from discussing solely from their own position while this does not match the discussion that is taking place within the project. This is something that has been encountered as a barrier in this project. Administrators need to be provided with the right information. In some cases the communication between the different layers of the different organisations is regarded as not as good as it could have been. It is by different respondents regarded as a responsibility of the actors themselves to be informed and inform their (administrative) colleagues.

Some respondents state they think that more one to one communication between the water authority and the initiators of linking opportunities will be beneficial for the process. It is regarded that this will probably happen in later phases of the project. This individual communication will then be aimed at discussing specific linking opportunities, such as the cycling path. This will give more trust and insight. Eventually, this will lead to more commitment from both organisations. It is stated that the organisations could possibly be more open to each other about what they could expect of each other.

Behavioural-, cultural- and personal factors

Benefits and barriers

- Trust/organisation culture/personal relations: Project team

An important beneficial factor of this project has been the ambition of the project team. The project team is regarded as being very ambitious on the fields that are important for this project by the hoogheemraad, such as spatial quality and sustainability. This is beneficial for the project and the integrity. The project team and project organisation see the importance of the project and the hoogheemraad experienced them as being open and committed to go for it. On an administrative level they see the importance of the project as well. The interaction between the official level and the politic, administrative level at the water authority is regarded as very good and important for this project.

More actors emphasise the importance of trust within the project organisation. Creating trust is something that can happen at a very personal level by creating a safe space. The principle of talking about interests instead of opinions applies here as well. By being honest and being really interested in other's interest, you create trust. It is as well important to do as you say and say as you do. When

one is clear about the process and who has which authority it creates trust. You have to let it be a shared success and adjudge each other success.

More respondents state that they think there is trust between the project team at the basis. The amount of transparency of each individual organisation is regarded variably. Some actors regard the involved organisations as completely transparent, while others regard the organisations as transparent to a certain extent, but desire more openness. The trust between the organisations and actors is overall perceived as good. However, there is always a certain balance between the common interest and the individual interest. When there is chosen for the common interest and an individual interest is therefore not possible, this can have an influence on the trust of the organisation of that individual interest. It is stated that certain situations are difficult, but there has to be dealt with it together, otherwise it could be a barrier.

- *Organisation culture: History of project organisation*

The history of a project organisation, such as the water authority, is stated to have an influence on projects. There is a certain discussion about what should be the core tasks of a water authority. When there is a long history of participation, collaboration and integrality it is more easy for an organisation to keep following that line. When a water authority just starts with this approach it is harder to change it.

- *Leadership an organisation culture: Collaboration and leadership*

Collaboration is of importance on both the administrative level and the official level of interaction between different organisations. In this case it is stated that collaboration can start from finding shared and common interests. The Hoogheemraad states that the organisations cannot work without each other on an administrative level, so one should be willing to help each other. It is important to bring each other into position, for which leadership is needed. The common interest should be found and the final goal should be kept in mind. Sometimes this means that you should grant success to the others.

The municipality of Wijk bij Duurstede assigns a leadership role to the stakeholder engagement manager of the Hoogheemraadschap.

Concluding remarks on Sterke Lekdijk: Wijk bij Duurstede – Amerongen

HWBP Wijk bij Duurstede – Amerongen is a project that dealt with a great variety of factors that are identified as either a barrier or a benefit. Some factors are more central than others. In this section there will be focused on which factors can be regarded as crucial to the project Wijk bij Duurstede – Amerongen.

For this project the financeability has been central. The starting point, which states that every initiator of linking opportunities should take care of their own financing, has been a barrier to linking opportunities within this project. It can be hard for initiators of linking opportunities to reserve a budget for linking opportunities because there are still a lot of uncertainties. Besides, it is hard for initiators of linking opportunities to reserve the budget in time, because they only have a short time to identify linking opportunities and make these specific. In line with this is the barrier that is encountered regarding stakeholders that are late in the project process with identifying their interests and ambitions for the project. If the ambition can be developed parallelly with the project

it is more likely to succeed. The decentralisation of the state is mentioned as a reason why there is more financial pressure on municipalities, which makes it less prioritised or hardly possible to invest in linking opportunities for municipalities. It is stated that smaller municipalities have less capacity, which makes it harder for them to have the needed knowhow and capacity to be involved.

Another factor that is mentioned which makes it harder to implement linking opportunities is the HWBP objective that does not include financing for spatial quality. Suggested is that a budget aimed at supporting linking opportunities will be developed by either the water authority, province or state.

An important barrier that is mentioned is commitment. It comes forward from the analysis that actors experience too much uncertainty from each other to commit. This is experienced between initiators of linking opportunities and the water authority. They both ask for a certainty from the other, before they commit. Suggested as beneficial for commitment is one to one communication and openness about the specific issues regarding the linking opportunities.

The stakeholder engagement management process is regarded as being very positive for this project. The communication to the local stakeholders have been clear and clear ground rules were set. This has been positive for the trust the stakeholders have in the water authority. The water authority set up a good stakeholder engagement process, in which there has been listened to the different interests. The starting decision of the water authority gave space to create societal added value. The rules regarding linking opportunities are made clear as well. Although the rules themselves are sometimes not regarded as a benefit, the communication and clarity about these rules is perceived as beneficial. The ambition of the project team is also regarded as beneficial. The traditional attitude of the local stakeholders is regarded as a barrier, but simultaneously it is beneficial that local stakeholders appreciate to be able to be actively involved.

4.3. HWBP Noordelijke Maasvallei: Baarlo – Hout-Blerick

As is the case for the other projects, various qualitative methods of data collection have been used for the case of Baarlo – Hout-Blerick. A literature study, site visit and interviews. Interviews were held with the stakeholder engagement manager of HWBP Noordelijke Maasvallei; two project leaders of different phases working for Arcadis; the stakeholder engagement manager of Baarlo – Hout-Blerick; and the involved officials of both involved municipalities, namely Peel en Maas and Venlo.

4.3.1. Starting points of the HWBP Noordelijke Maasvallei

The project Baarlo-Hout – Blerick is part of the HWBP programme Noordelijke Maasvallei, which is situated in the northern part of the Dutch province 'Limburg'. In total the programme includes 15 dike reinforcement projects that are part of the HWBP. The 15 projects are visualised on the map in figure 4.2. In this part of the Limburg there currently are no dikes or are still an emergency measure that has been constructed in the 1990s (Waterschap Limburg, 2017). Therefore these dikes and the surrounding area are facing a large change. The current dikes are barely a basis for the reinforcement task and cannot be used as a reference for the dikes that need to be developed. The new safety norms for the year 2050 lead to a reinforcement tasks that will increase the current height of the dikes by 1,5 to 2 meters. Besides that, the current dikes do not meet the new safety standards because the failure mechanisms of the dikes are rejected on the field of height, but also on stability and piping⁴ measures. Therefore, specifically these projects will have a large impact on its surrounding environment and the spatial quality. It is therefore not only a technical, but also a spatial task (Waterschap Limburg, 2017). The dikes are operated by Waterschap Limburg, which makes it the initiator of the HWBP projects.

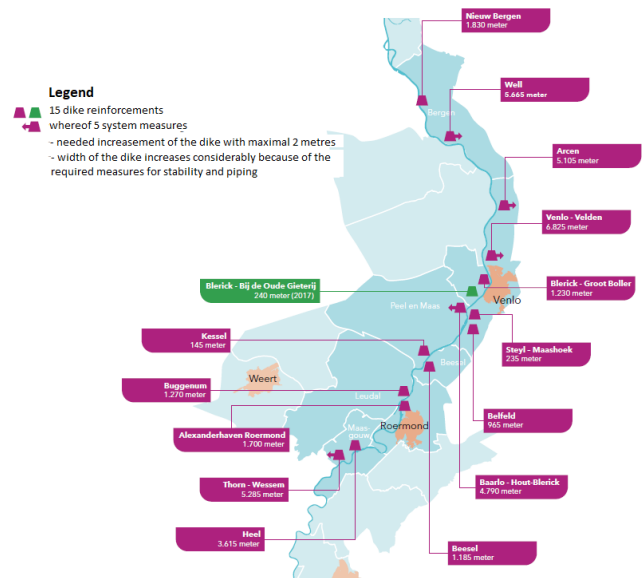


Figure 4.2: HWBP projects in the Noordelijke Maasvallei (Waterschap Limburg, 2017, p. 8)

In five of the projects a 'systemmeasure' is researched, which would include a dike relocation (Waterschap Limburg, 2017). This is initiated from MIRT, which is part of the Ministry of Infrastructure and Environment. A system measure is researched for the project Baarlo – Hout-Blerick, which is researched in this research, and for the projects in Arcen, Well, Venlo-Velden and Thorn-Wessem. These systemmeasures can be regarded as linking opportunities on programme level, for the MIRT programme is linked to the HWPB programme within these cases. The execution of both programmes takes place simultaneously in the projects.

⁴ Piping can occur when there is a stream of water underneath the dike. This water takes away sand that weakens the dike. This water stream arises due to the high water pressure on the water side of the dike. A washout of sand can arise, which creates hollow spaces underneath the dike. The dike itself is namely made out of clay, but the underground is made of sand, which can be washed out. Eventually this can lead to a collapsing dike.

The water authority of Limburg (Waterschap Limburg) states it has the ambition to use the development of the dikes as mean to strengthen the existing landscape characteristics. It wants to utilise chances that the development of the dikes bring (Waterschap Limburg, 2017). This illustrates the integral vision it has on the project area. Waterschap Limburg also states the importance of participation and stakeholder engagement (Waterschap Limburg, 2017).

Integral design is stated as important for the design of the dikes in the Maasvallei. The entire surrounding environment should be taken into account. With this thought the design is centred between technical aspects, surrounding and spatial quality. It is stated as important that the design will not be just a sum of the demands all sectoral frameworks have (Waterschap Limburg, 2017). For this case Waterschap Limburg (2017) states the importance of conducting research while designing, and allocates a central role for a integrator or coordinating landscape architect, and states a collective search for solutions in a close collaboration between stakeholders is needed (Waterschap Limburg, 2017, p. 53).

Waterschap Limburg set up a framework for the leading principles of the spatial quality. This framework sets ambitions and requirements for the steps in development that will be taken. In total there are five leading principles: Landscape is leading; logical dikes; contact with the Maas; Welcome on the dike; Foundation and catalysator for development⁵. The goal of the leading principles is to come to a spatial transformation in a correct way. The long-term and public interest are regarded as more central than short-term and individual stakes and interests (Waterschap Limburg, 2017). The leading principles are all regarded as of equal importance, however due to local differences, for some projects specific principles are more applicable than others.

“Landscape is leading” focuses on the characteristics of the landscape. In the Netherlands the dikes have become a characteristic part of the landscape and dikes lead the landscapes. The Maasvallei has a height differences, with forests, terrace borders, old river flows and valleys created by brooks. Therefore it can be stated that the surrounding varies to a great extent. This asks for specific solutions for specific places. Flood risk protection in this area therefore needs another strategy then in the western part of the Netherlands. In this area the landscape leads the design of the dikes. The dike trajectories of the new dikes are taking the characteristics of the specific areas into considerations and strengthen characteristic village- and city fronts. New dikes respect the natural height differences in the landscape. They strengthen coherence in streaming valleys created by brooks, improve the estuaries of brooks and respect the characteristic terrace borders in the landscape. The winter flood plain will not be decreased (Waterschap Limburg, 2017).

In the principle “Contact with the Maas” the view on the Maas is central. Within the Noordelijke Maasvallei the river Maas sometimes lays deep in the landscape, and therefore not always easy visible from the surrounding. Therefore the places from which the river is visible for the surrounding should be maintained. Historical and current core places that have an historical visible relation with the river Maas should maintain this relationship. For these places the river is an important part of the identity of the area. These places that are an important connection to the river for residents and visitors will not be abolished, changed of character or made unreachable. The public interest will always be preserved above the individual interest in this case (Waterschap Limburg, 2017).

⁵ Translation of respectively: Landschap is leidend; vanzelfsprekende dijken; contact met de Maas; welkom op de dijk!; Fundament en katalysator voor ontwikkeling.

“Welcome on the dike” focus on the different functions a dike can have. Dikes serve various functions and purposes within the surrounding landscape. Dikes can be a connection within the landscape for people and nature. The value that the new dikes can add to the landscape are central. For instance this could be recreative and touristic use. With the choice for dike trajectory and types these chances are included integrally in the plan development by giving enough space. The dikes are part of the public space and will be designed, arranged and managed with this in mind. Possibilities to include other purposes will be utilised and initiatives for this purpose will be embraced. However, also in this case the public interests prevails the individual interest (Waterschap Limburg, 2017).

“Foundation and catalysator for development” focuses on the future development in the area. Every place deserves a trajectory and dike that gives perspective for future development to something better. The dike reinforcement is a catalysator for nature- and landscape development, restoration of brooks, urban ambitions or restorations of mistakes made in the past. These dike reinforcements can be an catalysator for touristic-recreative initiatives. There will be a broader time-horizon used to look for these initiatives, because not all the initiatives can be financed or be realised in the time frame of the dike reinforcement (Waterschap Limburg, 2017).

4.3.2. The project Baarlo – Hout-Blerick

Baarlo – Hout-Blerick is one of the 15 HWBP Noordelijke Maasvallei projects. The objective for this programme is to reinforce the dike so it meets the safety standards. The respondents of the interviews all emphasise the project could be regarded as an area development in which many interests are taken up collaboratively. As is previously stated, it is one of the projects with a system measure from the MIRT. In this way the HWBP objective is linked to the MIRT objective on programme level. The state and Rijkswaterstaat both have an interest in retainment of the flood plains. Waterschap Limburg has an interest in the water safety.

The project started in the year 2016, and is at the moment that this research is executed in the exploratory phase, just before the preferred alternative will be administratively set.

The project takes place in and in-between the villages Baarlo en Hout-Blerick, which are part of respectively the municipality of Peel en Maas and the municipality of Venlo. In this way the municipalities are involved administratively, but also have an interest in the area development. The municipality of Peel en Maas has a clear ambition regarding the development of the area, which they set in their ‘koersdocument’. The municipality of Venlo has an interest in leaving the project area in a good way when the project is ready and in a good spatial planning, but has no clear linking opportunities formulated. The system measure takes place in northern part of the project area, in which Hout-Blerick is situated.

Besides the HWBP objective, Waterschap Limburg also has an interest in restoration of a brook, the ‘Kwistbeek’ in the project area, is stated by the respondents. This is part of the programme ‘Kader Richtlijn Water’ (KRW).

The province of Limburg is administratively involved, for they are the competent authority for the projectplan Waterwet. They have an interest in the area as well, for they own several plots in the area. Besides, they have an interest in the spatial planning and development of nature, is stated by respondents.

There is also an interest in a ‘steilranddijk’ around the area of the Hummerenweg. This could be linked to the KRW objective, for the soil that is left from this objective, could possibly be used for creating this type of dike.

Several interests are identified amongst the local actors. The interests can be divided in two main categories: the extent the project will be future-proof; and the safety of living in the area. These interests are also represented by the municipalities. Important for the extent the area will be future-proof is the 'beleidslijn grote rivieren', according to several actors. For this policy framework states that future developments in this area are bounded because of its location in a river plain. Within this project there is a desire from mainly local actors and the municipality of Peel en Maas to get rid of this policy for this area. The interest in living in a safe way in the area expresses itself in amongst others the development of possible evacuation routes of the outer-dike area. This is an opportunity which possibly can be linked to the HWBP project. The municipalities take part in that, together with the 'veiligheidsregio'. For local actors financial compensation is an important interest as well.

Several actors indicate the area as a very unique area, which cannot be compared to other parts of the Netherlands, for the dikes are very different. This asks for a different approach, according to the respondents. The objective has a reinforcement task that at some points increases the dikes with 1,5 to 2 meters. For this reason, new links to the higher ground in the area need to be made, which means that there are developed new dike trajectories in the area. A good spatial implementation is therefore needed.

As becomes clear from the previous passages, the different actors have different interests. The project organisation therefore consists out of several actors. On an administrative level Waterschap Limburg, Rijkswaterstaat, the Ministry of I en W, the province of Limburg, the municipality of Peel en Maas and the municipality of Venlo are involved. The project team is closely collaborating with officials of the municipalities, for each municipality has one official working on the project next to the project team. They are working together with the IPM team. The IPM team does not have a mirrored structure. Arcadis, Witteveen+Bos, Waterschap Limburg and the municipalities are working collaboratively in the project team. They do not have counterparts.

4.3.3. Perceived barriers and benefits for implementing linking opportunities

Political factors

Benefits

○ Shared understanding: Shared understanding

It is stated by several respondents that it is beneficial for a project to create an understanding for each other's opinions and interests. Be aware for which interest actors are at the negotiation table. Open communication is needed to identify that. By communicating in an open manner, it can be made insightful where the interests match and where they do not match. Overall this is regarded as something which is created between the involved policy actors. The interests of the policy actors are openly discussed and insightful according to the respondents. However, several respondents state that the province of Limburg has various interests, but desire a closer collaboration with the province.

It is stated that there is a shared understanding on the field of water safety. Every policy actor, as well as the local actors, acknowledge the water safety issue. However, on spatial quality there is to a lesser extent a shared understanding. It is stated that a shared interest and understanding is needed to make a project a success. Linking opportunities should be regarded as a shared interest as well. Communication is essential for that, as it makes clear what is needed from each other. A certain attitude is needed from actors for making the project a success. This is a central factor of success that several respondents state from their experience, but it encounters several barriers in practice.

The stakeholder engagement manager of Baarlo – Hout-Blerick illustrates which approach is needed according to him to make the project a success by the following statement:

"In the first instance that everyone embraces this linking opportunity or how you call it. Just see it as something important, that the parties see it as a shared interest. (...). And yes, that actually needs to arise. You need a conversation amongst the parties for that. And there you also need, a piece, that is always the case with shared interests, thus if you want to achieve something, that one is willing to compromise with respect to the total. And that attitude, that basic attitude, you need that to make things like this successful."

- Stakeholder engagement manager Baarlo- Hout-Blerick, Waterschap Limburg, 2020

○ Policy goals/intermediate outcomes: Clarity about the goals and roles

Several respondents mention the importance to have clarity about the different ambitions of actors. For that reason it is stated as important that actors themselves take the initiative and the lead in addressing what is important for them. The stakeholder engagement manager of the HWBP Noordelijke Maasvallei of Waterschap Limburg emphasises several aspects that are needed from initiators of linking opportunities. She states:

"If you talk about 'meekoppelkansen' or linking opportunities, then I perceive it is especially very important that a municipality takes the initiative themselves, has administrative courage, and takes the lead to address what they really want. If that is possible because it matches with the things that fit in within the objective that is already there, then there are of course not so many things needed, except taking it up and doing it together in time and in a pro-active way. But, if you really talk about linking opportunities, then it is really about linking other things than the actual objective, then it is also really important that there is in a certain phase, not only the concerning party indicates clearly what is its policy, ambition and ideas, but also organises financial means for it and find administrative coverage for that in their own political body."

- Stakeholder engagement manager HWBP Noordelijke Maasvallei, Waterschap Limburg, 2019

The statement of the stakeholder engagement manager of the HWBP Noordelijke Maasvallei indicates that a good process of identifying linking opportunities starts with initiators that take on the initiative, take the lead and are able to address what is important for them. The municipality of Peel en Maas drew up a 'koersdocument' which identified their course and future ambition for the area. It is indicated as an example for this factor. The official of the municipality of Venlo emphasises the importance of making the new area beautiful and useful again and not leaving behind an area which has loose-ends. This gives substance to one of the objectives of the HWBP Noordelijke Maasvallei as well.

Subsequently it is stated that other factors play a role in the eventual success of that linking opportunity. The actors should not only be able to address their initiative and take the lead, but should allocate financial means and have administrative coverage as well. This will be elaborated at other factors within this analysis.

Another respondent emphasises this aspect as well, for the respondent states that taking in a position as an actor such as Waterschap Limburg can give direction to linking opportunities and can help in the process. The respondent states this position should be taken in from a view on the entire project area, and not only focused on if it fits within the norms. It is important to take in a position for something you as an actor are willing to go for. Several respondents emphasise this by stating the importance to be clear about what is part of the HWBP objective and what is additional.

Barriers

○ Policy goals/intermediate outcomes: (HWBP) objective

A very central factor that is indicated by most respondents is the objective of the HWBP programme. It is stated that this objective does not cover the width of the objectives for this specific project area. This project is by most respondents indicated as an area development project instead of a project that focuses on water safety. The HWBP objective of realising the water safety in a 'sober and effective' way is according to several respondents conflicting with such an area development approach, which is the case for this project. This project asks for an integral approach according to several respondents. That is because spatial quality is a second ambition that has been formulated at the start for the HWBP programme in the Noordelijke Maasvallei. It is stated that the situation in the Noordelijke Maasvallei is different from elsewhere in the Netherlands, for this project introduces dikes instead of reinforcing existing dikes. This is the starting point of a discussion on what the sober and effective objective entails, for integration efforts are part of the sober and effective objective and are financially covered within the HWBP programme. It comes with a financial aspect in that way as well, which will be elaborated as an economic and financial factor. The financial framework of the HWBP is regarded as not entirely fitting for the objectives in this project, for it makes no exceptions for a dike introduction instead of a dike reinforcement. It is stated that many aspects that are in this project regarded as self-evident, are not sober and effective according to the HWBP objective.

It is stated that the starting points of the HWBP are not integral and the definition of 'meekoppelkansen' has not a very integral approach. Linking opportunities should be part of the integral plan. The word 'meekoppelkansen' suggests it is something that can possibly be done as well, during the development of a project. This would mean that it is not an integral aspect of the project. A respondent illustrates this by the financial compartmentalisation within the project. The budgets are sectoral and remain compartmentalised for their own objective. This is regarded as a barrier for the project still has sectoral objectives instead of an integral objective. There is in this way

no focus on the integral area in which the project takes place. There is spoken about the new environmental act, that can possibly have a positive influence on this. A respondent states that due to this definition of the HWBP objective, there is always a certain tendency to go back to the traditional and primary objective when there are uncertainties regarding money, planning and decisions. The definition of the objective is namely primarily the dike, and secondarily the spatial quality. This makes it more difficult for initiators of linking opportunities to bring in their interests, for the project is driven by the dike reinforcement, is stated. Whenever the dike cannot be financed in a sober and effective way, the municipalities have to allocate budget themselves. This barrier has been emphasised by several respondents. A respondent states that from this formulated objective it is mostly the case that linking opportunities are executed only if they do not cause obstacles or delay for the primary objective. There is appreciation of the effort and ambitions of initiators and there is listened to the different initiatives, but because of this reason, it can be a barrier for implementing the linking opportunities.

Institutional/organisational factors

Benefits

○ *Subsystem involvement/instruments: Stakeholder engagement management*

The stakeholder engagement management is indicated as mainly beneficial for the project and the implementation of linking opportunities within the project.

Particularly the division of the stakeholder engagement management into four subareas works well for the project according to the different respondents. The stakeholder engagement manager of Baarlo- Hout-Blerick states that people want to be informed about what is of importance to their area and their interest. By clustering the residents in four parts, the residents are informed well about their area and the other areas as well. It makes it possible to communicate to them in a goal oriented way. The residents respond well to the clustering, is stated. From this perspective there is consciously chosen for direct representation of the local actors, for proportional representation did not work. People did not recognise their interest in the proportional representation. The official of the municipality of Venlo indicates the clustering of the project area in to four subareas as beneficial as well. She states it brought more balance to the stakeholder engagement management, for some areas were more prominent in the meetings organised for the entire project area at first.

The stakeholder engagement management instruments for this project are: meetings for the four, above mentioned, subareas; individual face to face conversations, information evenings, and a working group. The project manager states the individual contact with local stakeholders has been very beneficial for the project. Some local actors find it hard to express themselves in groups, which makes the individual contact more important to identify interests and communication, according to several respondents. The stakeholder engagement manager and his drive and approach are regarded by several actors as beneficial for the project. This is elaborated as a personal factor.

The stakeholder engagement manager of Baarlo-Hout-Blerick states process contentment among the residents has been important, mainly at the start of the project. Process contentment implies to let people feel satisfied by the way they are treated. Their interests and efforts need to be taken seriously and communication is a key element in that. At the start of the project this has been very important, for the scope was still very broad and the initiatives were not very specified.

Several respondents emphasise the importance of honesty and transparency in the stakeholder engagement process. This will lead to more trust amongst local actors. The second

project manager indicates, as well as some other respondents, the importance of clarity for local actors. The actors know what is going to happen and affects them in this project. They know what the water authority is going to do in the area in the coming years. A good stakeholder engagement management process is among other things illustrated by good communication with local residents and companies according to several respondents, such as the stakeholder engagement manager of HWBP Noordelijke Maasvallei and the second project manager. Local actors need to be able to understand what is going on, which makes a clear explanation to the local actors important. The interests of the local actors should be retrieved at an early stage of the process. However, the role and responsibilities of the water authority should be clear. It is therefore of importance to be clear about what you can do as a water authority and what is not possible. It is important that the project is acceptable for everyone. A certain honesty and giving recognition to interests to local stakeholders is regarded as being important. This recognition should be translated to specific measures that will be implemented. It is emphasised by several actors that it is important to show that you take other's interests in consideration.

What helps in this process according to the stakeholder engagement manager of HWBP Noordelijke Maasvallei is the collaborative effort in the stakeholder engagement management. The municipalities are actively involved, and where there is an interest for Rijkswaterstaat or the province, they are involved as well. Local actors are directly at the negotiation table with the policy actors. It is stated that it is important to transfer the interests of local actors to an administrative level. There is emphasised that knowledge of the area is important on an administrative level.

The attitude of the local actors themselves is also indicated as an important beneficial factor according to several respondents. At the beginning of the project, the local actors had less trust because of the historical relation, however at a certain point the local actors became really actively involved.

○ Decision-making process: Instruments and decision-making process

The decision-making process is indicated as beneficial for the project. This process is arranged in a certain way that is positively received by different respondents. It is stated there is managed on decision-making information and the common interest is conveyed to the administrative level. The decision-makers are informed with the information that is needed to make a decision. It is important to present the information that is highly based on factual information, to base the decision making upon. An instrument that is used for informing the decision-makers with the needed information for decision-making are the 'stersessies'. The second project manager illustrates the stersessies as follows:

"(...) but besides that we have 'stersessies', so on the moment that we really are going to make decisions about trajectories and that sort of things, then we organise a 'stersessie' from the project team, and we thus also invite Rijkswaterstaat, and if needed the ministry, actually who we need, we invite them. And there we decide collaboratively upon the direction we will be going, that is the thing the project team will carry on with. Thus it is more informal, but in this way you take care of that at that moment when you come up with, well this should be the preferred alternative, or this is what is said in the projectplan, that it is not a surprise anymore and that you exactly know everyone's position in the game and under which conditions it is acceptable. Before every steering committee, so that is in between the abg and the steering committee, we make an administrative round. So then we go to all the aldermen, if it is needed to the municipal councils, but also to ministry, highly official, to Rijkswaterstaat. Then everything is mapped out again, so that when there is a steering committee, there are no surprises for anyone anymore. And you will see that for ninety-five percent everyone says: Okay, fine, we will do that. And for five percent, then the interests are really tense. That is still discussed there."

- Second project manager, Arcadis, 2019

More respondents emphasise the importance of the stersessies and the administrative round that is made in advance. For instance the stakeholder engagement manager of HWPB Noordelijke Maasvallei emphasises this. She states that the administrative round makes insightful in advance what should be on the agenda according to the administrators. Prior the steering committee it is made clear what is important for the administrators, what should be decided upon, and what will be brought to the table by the different actors. In the steering committee there are mainly decisions on the agenda that will lead to the decision-making about the water safety objective. However, the common ground between the actors is always mentioned, is stated. Because of the stersessies the administrators were able to discuss the project on content and an acceleration within the project was made possible. It is indicated as important to involve the administrators on the content and problems occurring in the area. A strategy game among the administrators helped them in getting an insight in and creating an understanding of each other's interest. What helped as well is to visit the project area with the steering committee. It is important for the policy actors to have some knowledge about the project area. This is indicated by some respondents.

Important within the decision-making process is that initiators of linking opportunities have a certain administrative courage and that there is administrative coverage for the linking opportunity. Crucial is the administrative flexibility and vision to take action, according to the stakeholder engagement manager of HWBP Noordelijke Maasvallei.

Another factor regarding the decision-making process that is indicated as important is to set administrative agreements and retain these administratively.

The starting points of the stersessie are also the clear ground rules that are used to decide upon the implementation of linking opportunities.

○ Organisation structure: Organisation structure

Within this project the municipalities are represented within the project team. This is regarded as being very beneficial to the project. There is chosen to have a close collaboration with the officials of both municipalities in the project team because of the nature of the objective. The municipalities both have an interest in the area and are characterised by a great involvement, according to the stakeholder engagement manager of HWBP Noordelijke Maasvallei. The belief is that this objective is something that has to be done collaboratively. The municipality of Peel en Maas has a historical tradition of participation and have a great interest in the development of the area. The municipality of Venlo is within the HWBP Noordelijke Maasvallei trajectory the municipality with the highest amount of dike reinforcement projects. In projects with a system measure, officials of the involved municipalities are working in close collaboration with the project team. Because the officials of the municipality are closely collaborating with the project team, the documents the municipalities deliver, are aligned well on the field of ambitions.

The official of the municipality of Venlo states that the close collaboration has been very beneficial for a starting project, because there was more personal contact and questions could be asked immediately. She states it is important for her to involve her colleagues of the municipality as well in the project, because it is important to remain connected to the municipality as well.

The project team does not have a mirrored structure, which is an exception for projects. For instance, the project manager is working for Arcadis and the stakeholder engagement manager for Waterschap Limburg, but they do not have a mirrored counterpart. Waterschap Limburg, Arcadis,

Witteveen+Bos and the municipalities are working in a mixed project team. This is regarded as beneficial for the process, for discussions regarding the different positions of the actors were held in advance. Besides, it decreases processual costs. It gives the ability to put people in the position that fits their expertise instead of that fits with the organisation they are working for. Several actors indicate this as a clear benefit.

Barriers

○ Subsystem involvement/instruments: Stakeholder engagement management

Although the stakeholder engagement management has encountered several benefits for the project process, there are identified some barriers by the respondents as well.

One of the barriers, identified by a respondent, is to make promises to local actors you are not able to keep. Although this is not the case for the project, a certain carefulness in requesting local actors to bring in linking opportunities is emphasised. Within this project Waterschap Limburg asked local actors very openly to come up with linking opportunities at the start. By asking this in an open way there is a chance that you implicitly make promises. Local actors do not have boundaries to come up with linking opportunities in this case. A barrier is then that when it comes to the eventual execution of the linking opportunities, that the financing is the responsibility of the municipalities when the linking opportunity is not related to the water safety objective. Therefore, states a respondent, it is important to make clear in advance and be transparent in advance that this is the case. Therefore a certain carefulness is needed so the request for linking opportunities is not too broad.

Another barrier is the time between the development of plans and the actual ability to compensate the local actors financially. The second project manager states that the project can have a great impact on local actors and their houses. The local actors know that they have to move out of their houses and want to be placed back in the area, but the question is how and where they are going to be placed back. The way in which this will be organised is very important, as well as the ability to live up to the expectations of the local actors. Because, there is a period of around three years in which there is no certainty. When the decision or disposition is available in three years, there is the ability to compensate local actors for their property. Although, in the period between now and then, the plans have to be made to receive this eventual disposition. However, many local actors want more certainty now and want to know what they can expect.

The stakeholder engagement management had to deal with a distrust among the local actors that emerged in the history. This will be elaborated as a behavioural, cultural and personal factor.

It is stated that local actors feel that the local entrepreneurs have relatively more political power than they have. This is acknowledged within the project, and there is openness and transparency regarding this aspect, which is positively received among the local actors.

Economic and financial factors

Barriers

○ Financial distribution key: HWBP objective

Several actors indicate the HWBP objective as a factor that brings along some barriers for this project. This is both a political factor and an economic and financial factor. Although these factors are intertwined for this aspect, there is chosen to include it within both passages. The HWBP objective as an political factor focuses on the formulation of the starting points and how these can be a barrier for the objectives of the project. Some financial aspects are part of that as well, for the

starting point is sober and effective. In this paragraph there is focused specifically on the economic and financial barriers of the HWBP objective.

Several actors compare the HWBP objective to the objective of the Ruimte voor de Rivier programme, in which spatial quality had a primary place next to the water safety. This is also part of the political factor, however this also brings along a financial aspect. In the Ruimte voor de Rivier programme the financial framework for spatial quality was set in advance. Two ministries combined their finances for the programme, that gave both objectives a full-fledged place. Because the financial means for spatial quality are not reserved in advance for the HWBP programme, this gives difficulties regarding the allocation of additional financing. Financial reservations for linking opportunities are not always easy to make for initiators, is stated. There is a tension on the planning of the project. A project needs to stick to the planning of the water safety issue. If an actor needs more time for a linking opportunity than the others, then it can cause tension. Then the progress of the one is competing with the time needed by the other.

It is stated that it would be a benefit for HWBP projects if initiators were able to organise financial means for linking opportunities. One respondent states the HWBP objective makes it hard to come up with good plans, for it is a barrier for the project in advance. The project is therefore managed in a more financial and technical way, which is regarded as not always being beneficial when implementing linking opportunities focused on spatial quality.

- *Incentives: (Financial) commitment*

At the time the interviews for this research were conducted, the project was in the exploratory phase before a preferred alternative was administratively set. It is stated that in this phase there is no clarity about the actual costs and what the eventual plan exactly entails. However, the water authority wants to have clarity on the contribution of the municipalities before the preferred alternative is set.

The official of the municipality of Venlo states that before financial commitment is discussed, more clarity is needed on what the additional contribution and contribution of the HWBP will be. In the exploratory phase it is not yet clear what part of the HWBP objective, and what is additional. When there is no clarity on what part of the project could be part or related to the different individual policy actors, it is difficult for individual policy actors to allocate a general budget to the project for it. There is commitment to a close collaboration of policy actors, but the financial commitment should be discussed when there is more clarity. It is important to make plans for the area collaboratively and from that starting point you can discuss the individual responsibilities of policy actors.

- *Uncertainties and risks: Financial reservations and timing*

Several respondents indicate the difficulty to adjust flows of budgets of the policy actors to each other. For instance, the official of the municipality of Venlo states linking opportunities often mean that budgets should be used earlier than was estimated. Linking opportunities are often logical to link from a practical perspective, but it asks for overthrowing already set budgets, which is not an easy question for a municipality according to the official of the municipality Venlo. This makes linking opportunities harder to implement, even though actors have a shared understanding of interests and are willing to cooperate. Different steps and aspects are needed to connect the flows of budgets. The stakeholder engagement manager of HWBP Noordelijke Maasvallei also indicates this factor, for she states that the rhythms in which the budgets of the different actors flow and are

allocated are not always in line with each other. This is a challenge according to her. This is more challenging with the HWBP objective in which more aspects need additional financing, than for instance in the Ruimte voor de Rivier programme.

Process-, management-, and instrumental factors

Benefits

○ Scope project/planning: Early identification process

Two respondents explicitly indicate the importance of an early identification of possible linking opportunities in the project area. The project manager states it is important to actively retrieve the information from local and policy actors. The stakeholder engagement manager of HWBP Noordelijke Maasvallei states it is important to collaboratively take up linking opportunities in an pro-active way. This asks for a pro-active approach from the initiators as well. A linking opportunity is not part of the scope of the water safety objective. Therefore it needs to have clarity on the fields of feasibility and financing in time. This clarity has to be achieved by acting in a collaborative and pro-active way.

Barriers

○ Commitment: Commitment

Several actors indicate that the more specific the plans become, and the more decisions and details are at stake, the harder it becomes to find consensus. The project manager states for instance that it is more easy to find each other on a higher level of abstraction. This is connected to financial factors, for many decisions need to be made on the financing of additional objectives. Important for dealing with this factor, is to keep working on it collaboratively and communicate realistically to each other. Actors should be clear about what they are able to do and what they are not able to do, which will be discussed in a later passage within this paragraph.

It is stated as well that this factor in which there is lesser commitment when a plan becomes more specific, partly can come from not having completely shared interest for each objective of the project. It is stated that each actor acknowledges the interests in water safety, but for instance spatial quality and evacuation are to a lesser extent felt as a complete shared objective. When the plans become more specific, actors tend to stay on their 'own island' of interest, is stated. There is still something to achieve on this factor, for actors should be more open to share interests of other actors to a greater extent. This could benefit the project.

The official of the municipality of Peel en Maas emphasises this as well and believes that actors should be willing to look outside their own boundaries and surpass themselves to achieve a better result in the end. This result can serve everyone's interest. He states there are chances that serve the entire area. He suggests these chances need to be set and agreed upon. Agreements should be less and less voluntary over time, according to him. At a certain point in time there should be an administrative agreement set, in which agreements are made and which makes clear who has which role and who is responsible for the different aspects of the project. At the moment it is not yet insightful which chances there are exactly for this project. It is stated once there are specific plans, there should be made agreements between the policy actors how this will be made possible. There is a risk regarding the planning of the project in this case. The water authority needs to keep going with the project process regarding the water safety, the moment on which you want to link the opportunities, the area development could be a factor of delay. The water authority cannot afford it to wait on the process for of instance the municipality, is stated. Therefore there is a certain

dependence. The water authority is clearly responsible for the water safety and has a budget and planning for that purpose. Therefore it is an objective for the municipality to make the initiatives so specific and concrete as possible, so they could be incorporated in the administrative agreement with other actors. There is only a certain amount of time for that. In an administrative agreement the commitment will be captured.

- *Commitment, interdependence actors: Organisations' approach and role*

The project involves different kinds of organisations that have different approaches and roles regarding the project. Several actors state the importance of being clear about the responsibilities and roles of your own organisation. It is important to be clear about what you can and cannot do and what you need of other actors.

A factor that can be regarded as barrier is the nature of water authorities. It is stated that water authorities in general are originally not area developers from the point of view of their own perspective on their tasks. That is not a role they naturally have and take on. In this case they have to take this role, but this is more complicated for them. The water safety objective and the responsibility this brings to both the water authority and Rijkswaterstaat, emphasises a more technical view on the project in comparison to ambitions for spatial quality. Spatial quality is regarded as a softer ambition. Rijkswaterstaat has an interest in preservation and increase of the flood plains of the river. An important drive for the project is therefore the water safety task, which can bring along some barriers for ambitions on the field of spatial quality. The policy actors have an administrative willingness for linking opportunities regarding spatial quality, is stated. However, there is also a certain carefulness.

The province of Limburg has several roles in this project, for they are a competent authority but have interests in the area as well. The province is therefore regarded as an important actor by the respondents. It is stated that an open and close collaboration about the interests, ambitions and role of the province is important.

The stakeholder engagement manager of Baarlo – Hout-Blerick argues that there maybe should be a role focused on spatial quality within the IPM-team. It is not specifically part of task of the stakeholder engagement manager but not part of the technical manager's task as well.

The programme organisation at the water authority, can be seen as an organisation within an organisation, as it has its own financing and personnel. Every project has to align with this programme organisation, which is in some cases could bring along some barriers, for this alignment is sometimes complicated.

Behavioural-, cultural-, and personal factors

Benefits

- *Relations: Local actors*

Several respondents assign beneficial factors for the project to the local actors in the area. The local actors started with a lot of distrust in the state, but came with a plan and proposition themselves now on which they collaboratively agreed. This is a factor that is partly assigned to the stakeholder engagement management process, but also to the local actors themselves that actively came with a proposition. This proposition is regarded as a beneficial factor, according to different respondents. The local actors are regarded as a close township or hamlet.

○ Personal relations/leadership/organisation culture: Personal roles

Several respondents assign an important role to the stakeholder engagement manager of this project. His role within the project is positively received. It is stated he has a directing role, which is needed for a stakeholder engagement manager, according to a respondent. It is stated by several actors that at a certain point the stakeholder engagement manager had a project managing role. A good project manager is also indicated by several respondents as being important. The stakeholder engagement manager had a personal drive and a lot of experience. The individual contact he had with local actors is beneficial for the project. It is also stated that it is beneficial for a project when the stakeholder engagement manager has knowledge on the content of the objective. This gives the ability to discuss issues with local stakeholders and provide them with answers based on the content. This can increase the extent of trust they have in the project organisation. It is stated that the stakeholder engagement manager was very committed to the project personally. Several respondents stated that he was willing and passionate to go further than was assigned, in order to make the project more integral. He took on an important role, he had a role in connecting the municipalities and the water authority. He was focused on being meaningful for the project area. It is stated that it is dependent on personal factors, to what extent people contribute to the project.

The leadership role within the project is mainly assigned to the water authority, and that is also regarded as justified. However, sometimes discussions occur in which responsibilities and leadership roles are discussed. It is stated by a respondent that it is good that the water authority takes on the leading role with the state and the municipalities are closely involved. The municipalities are able to steer as well, and at the higher level it is good that they are involved in an early stage, and not in a later stadium.

Barriers

○ Trust/relations: History with local actors

Almost all respondents emphasise the influence of the history with local actors on the project. The respondents state the history local actors have with the state is characterised by mainly distrust. This still has its implications on this project, for the trust local actors have in the project organisation is fragile. This historical process is emphasised by several respondents. It is indicated that this occurrence resulted in a low level of trust at the start of this project in 2016. This led to a certain approach the project has had regarding dealing with this lack of trust.

"Thus that is a history you have to deal with. And if you carry out such a project, then the balance is very fragile to trust. Trust can take a long time to gain, but can be gone in moments. Well, the moment had passed already for a long time, and there was not much left of the trust. To then step by step, very carefully, by showing that you are trustworthy again and again and that you do as you say and that it really happens, with other parties, to make it come true. Well, that is one of the things where you as a stakeholder engagement manager, together with the administrators, try to make it happen. And that is of course the challenge and is exciting (...)."

- Stakeholder engagement manager HWBP Noordelijke Maasvallei, Waterschap Limburg, 2019

The stakeholder engagement manager of Baarlo – Hout-Blerick confirms this distrust of local actors. He states that within the stakeholder engagement management this is taken into account, for contentment about the process for local stakeholders has been a central aspect. This entails that the water authority pays much attention to how the process and communication with local actors goes. It is stated to be important that people feel treated well, and there is dealt seriously with their input. During the process, everything will become more and more specific. The wishes that are brought in

by local actors are taken along within this process by including it in the decision-making process and signing it off on administrative level. Another beneficial factor to deal with the distrust is continuity within the project team. For years there have been the same contact points for the local actors. A third factor that is important for dealing with the issue of distrust is to know what is going on for the local actors and to know the area. It is beneficial when the stakeholder engagement manager can answer questions on the content of the project. This gives trust to the local stakeholders. It is also stated that the active communication the water authority had with local actors on an individual and group level gave trust to local actors.

○ Organisation culture/trust: Project organisation and administrative actors

According to a respondent building trust to an increasing extent in the project organisation would be beneficial. The official of the municipality Peel en Maas states that the relationship and trust is everything for a project. He states:

“You can see at the moment when it becomes less, it does not matter anymore how good your agreements are that you have made. If that trust is not there, then you are not going to reach an outcome with each other. So you really need to keep investing in each other. And that is something we do too less at the moment”

- Official, Municipality Peel en Maas, 2019

However, he states that the administrative trust at the start of the project has been low, but due to hard work of the different parties, but the water authority up front, this trust was at a certain point very high. At the moment the trust decreases a little, because the process starts to become more tensed by becoming more specific. He states that the collaboration is still constructive but the tension influences the level of trust. However, in the end he states that the level of trust on administrative level is overall perceived as well.

Concluding remarks on HWBP Noordelijke Maasvallei: Baarlo – Hout-Blerick

It becomes clear that for this case it is important to have an insight in each other's interests and have shared interests. The shared interest is mainly found within the water safety objective, while this is not the case for spatial quality objectives. It is stated as important to have a good insight in each other's interests. Communication and interaction is important for that.

It becomes clear that it is regarded as important to have clarity about the responsibilities and roles of the actors. The water authority is clear about what could be expected from them, and the initiators of linking opportunities should make clear what their ambition is, and how they are going to realise it.

The HWBP objective is regarded as a barrier for implementing linking opportunities. The objective is regarded as conflicting with the approach of an area development in which spatial quality is a central aspect. Initiators have to allocate their own budgets, which has an influence on the financial commitment, for allocating budgets is not always an easy task. The water authority wants to have an insight in the contribution of initiators before the preferred alternative is set. Which is not always easy for initiators, for they do not have an insight at this stage in what the plan entails, and which part of the project is the responsibility of the water authority, and which parts are not.

The project is aimed from the viewpoint of water safety. This makes a certain technical viewpoint in the project more prominent, because water safety is leading the decision-making process and project. The water authority is not an area developer of origin, which is something to keep in mind and take into account.

The stakeholder engagement management is regarded as an important aspect of this project. The area has been split in four subarea's which made the process better. Although the local actors have a history of distrust in the state, this project has dealt with that in a great way. There is no overall distrust anymore. However, the trust level remains fragile because of this reason. The stakeholder engagement manager has had an important beneficial influence on this project.

The decision-making process is regarded as being well executed and therefore a benefit for this project. They were very good prepared and the decision-makers were closely involved and informed. The instrument used for this, the stersessies, helped with this.

The organisation structure has worked well for the project. The structure had no mirroring and the municipalities were closely collaborating with the project team. This helped by identifying each other's ambitions at an early stage. It is stated that actors should identify their interests collaboratively and pro-actively at an early stage of the project.

However, it becomes clear that when the project becomes more specific, it becomes harder to make agreements and find each other in interests. Therefore a project organisation with courage is needed and that is willing to look beyond the boundaries of the objective.

5. Comparative analysis

The three cases of this case study all have a water safety and reinforcement objective which are part of the HWBP programme. It becomes clear from the results that for each project several barriers and benefits for implementing linking opportunities can be identified. These barriers and benefits are partly similar, but there are also project specific barriers and benefits. In this comparative analysis the focus lies on the similarities and differences of the perceptions on the barriers and benefits for implementing linking opportunities. The results on different factors that are linked to the theoretical framework of this research will be compared. This comparative analysis discusses the most prominent results, the similarities and differences of the cases and therefore has another structure than the previous chapter that discussed the project specific results. The comparative analysis in chapter 5 compares the factors identified by the empiric research. The empiric research is conducted through following the operationalisation (section 2.3) of this research. Different factors that are linked to each other and have interdependences are described in the different sections. The links and factors that are compared are the links and indicators that are most prominent and perceived as becomes clear from the results. This approach is inductive. Each section discusses prominent factors that have links and relationships with each other. Within the description of the factors links will be made to specific parts of the theoretical framework. However, in the conclusion, in the next chapter, the results will be linked in a more systemic way to the operationalisation and conceptual framework of this research, which answers

Commitment and financial arrangements

In all the cases the economic and financial factors are of importance to the project, but highly intertwined with other factors. Because of the HWBP objective, which states the execution should be sober, robust and effective, initiators of linking opportunities need to bring along their own budget. This is something that Stead and Meijers (2009) indicate as an inhibitor of policy integration. They state that when funds are allocated to sectoral aims and not to cross-cutting objectives, there is less reward for helping others to achieve sectoral or cross-cutting objectives (Stead & Meijers, 2009). Mainly the distribution of the realisation costs are an issue. It has been a search or difficulty for initiators of all the projects to allocate budget for their linking opportunities. This search eventually became successful for Kustwerk Katwijk, for in this case the municipality was able to make an investment. Concerning the other two cases, that were still in the exploratory phase in which it is not yet insightful which linking opportunities will be implemented, this is still a search and difficulty due to various perceived factors. It is striking that this is mainly the case for the involved municipalities. This can be explained by the fact that when linking opportunities are also part of a programme such as MIRT or KRW, they have their own budget already set. It can be stated that in some cases there is thus an imbalance of resources according to the definition of Ansell and Gash (2007), for some objectives have a sectoral budget allocated by a programme, but this does not always cover the linking opportunities of all actors. Ansell and Gash (2007) state this can lead to manipulation, weak commitment and trust. It can be stated from the results of this research that it possibly can have an influence on the commitment and trust, as will be illustrated later. Manipulation is a factor that does not come forward from the results.

The planning of the project is strongly connected to commitment and financial arrangements, as becomes clear from the results. As Candel and Biesbroek (2016) state, goals can have different time frames, which makes it harder to integrate policies. It becomes clear from the

results that it is hard for policy actors, mainly municipalities, to align these time frames with the time frame of the project. Municipalities set their estimates, and once they are set it becomes more difficult to overthrow them to implement a linking opportunity. There is not much flexibility for them. Investing in a linking opportunity often means that a municipality has to bring future budgets for investments to the present. Which also means that in the current situation some other aspects on the estimates have to be changed. This is not always practically possible, although it is logical to implement the linking opportunity in the current situation. Therefore the alignment of different flows of money is identified as a barrier.

Another factor that is closely related to this, is that it takes a certain time for a municipality to accumulate money, which is not always given in the project planning. Because the planning is made from the HWBP objective and budget, it is in that case more likely that a linking opportunity will not be implemented in the end. Besides that, initiators are asked by the water authorities to identify their interests and ambitions at the start of the project, which is perceived as difficult for municipalities at such an early stage. In practice they only have four to six months to identify their ambition and allocate or accumulate their budget. Stead and Meijers (2009) state it is beneficial for a process of policy integration to identify cross-cutting objectives, but this is thus in practice not always an easy task for initiators of linking opportunities.

These factors result in more difficulties regarding the factor of commitment. Ansell and Gash (2007) describe commitment as the belief actors have that bargaining for mutual gains is the best way to achieve the desired policy outcomes. Based on the results it can be stated that the water safety objectives are recognised by all actors. In Kustwerk Katwijk there has been commitment to the linking opportunity as well. This commitment is not (yet) reached in the other projects. This is because the projects are still in the exploratory phase and it is not yet insightful to which extent the linking opportunities will be implemented. In these cases in the exploratory phase a certain process regarding commitment can be identified. The municipalities and water authorities are waiting on each other's commitment. The water authority wants a commitment from the municipality on the financeability before they are taking the process for this linking opportunity further. On the other side, the municipalities want more certainty on what the linking opportunity will exactly entail and what the amount of needed money will be, before they commit. They ask the water authority to give this certainty. The parties ask for each other's commitment because the collaboration entails some risks. If the linking opportunity is not financeable or licensable, the HWBP project can have a delay. Therefore the water authority wants to know if the initiator commits. The initiator struggles to allocate money, and when they do not know what amount of money is needed exactly, they do not know if they can commit. Therefore commitment can be regarded as a factor that encounters different barriers.

It becomes clear that the capacity of the municipalities is linked to commitment, amongst other factors, for the cases of Wijk bij Duurstede-Amerongen and Baarlo-Hout-Blerick. This capacity can be seen as a factor of power and resource (im)balance according to Ansell and Gash (2007) or as an interdependency according to Stead and Meijers (2009). It can be stated that the municipalities do not have an equal status in the collaboration, for they do not have the financial and/or organisational capacity to be involved equally to their respective water authority. The water authorities have a HWBP budget which covers 90 percent of the costs, which makes the project mainly driven by a water safety task that everyone acknowledges. Bigger municipalities have more issues that the alderman has to deal with, and therefore have lesser capacity to be involved in a project. Smaller municipalities have a lower capacity, for officials often have more than one issues to

deal with, but do not have expertise on every field. It can be the case that one official is responsible for all projects with the water authority, but it cannot be expected that he or she has expertise on all the fields of study these projects entail. This is not always regarded as an explicit barrier, but is perceived as something that has to be taken into account. Close collaboration between the initiators of the linking opportunities, which are in this case the municipalities and the water authorities, is experienced as a benefit. It is perceived as beneficial to involve the municipalities in the project team and stakeholder engagement management.

The financial capacity of the municipalities is influenced by a societal factor. In the Netherlands the social domain has recently been decentralised and became thus the responsibility of the municipalities, instead of the responsibility of the national state. Mostly bigger municipalities encounter financial pressure because of the social domain, they do not have much capacity to allocate their budgets or have to prioritise and make decisions.

Commitment is needed in order to set agreements. Setting agreements in advance is perceived as beneficial for the project Kustwerk Katwijk. In this way everyone knows their responsibilities. The administrative agreement has led to a more convergent problem definition for the involved actors. A convergent problem definition is a facilitating factor according to Stead and Meijers (2009). It also gave an understanding of other organisation's need, the compatibility of the objectives, and the ability to convey the bigger picture (Stead & Meijers, 2009). The administrative agreement set clear ground rules, in which individual responsibilities became clear. Concerning the policy frame by Candel and Biesbroek (2016), it can be stated that there is an increasing awareness of the cross-cutting nature of the problem. The results show that there is an understanding that the governance of the problem should not be aimed at a single domain (Candel & Biesbroek, 2016).

Project organisation and leadership

The three projects are all indicated by its respondents as having an area development objective instead of only having a water safety objective. Stead and Meijers (2009) state that integrated area developments are currently topical. It is the case that there are other objectives of involved actors in the area that are or will (possibly) incorporated in the project. This would mean that the problem definitions would be cross-cutting and that there is a general recognition of the problem. This indicates a high amount of policy integration and is thus beneficial for implementing linking opportunities (Candel & Biesbroek, 2016). The leadership role for the projects Baarlo- Hout-Blerick and Wijk bij Duurstede – Amerongen is primarily assigned to the respective water authority. This is remarkable, for the leadership role is perceived as being part of the water authority, because the project is perceived as being mainly driven by the water safety task. It becomes clear that the water safety objective is acknowledged and shared by each actor in these projects. However, the extent of a shared understanding for a common mission or purpose is mainly focussing on the water safety task for the projects in the exploratory phase (Ansell & Gash, 2007). There is no clear shared understanding (yet) for some of the other objectives. However, it needs to be stated that some linking opportunities are recognised as being important by all involved actors. It becomes clear in the results that the water safety objective and the actors responsible for this often have a position in which technical aspects are more prominent, while the ambitions for spatial quality are softer. Therefore it is important to look beyond the boundaries of your own organisation. This is indicated as important for each of the projects. The actors should not only think from their own position but should be willing to concede for the greater and shared interest. This can be seen as a behavioural, cultural and personal factor according to Stead and Meijers (2009). It is dependent on the

organisation culture and the specific assigned people to what extent they are able to work towards joint goals and are able to see the common interests (Stead & Meijers, 2009). The project Kustwerk Katwijk had a more shared leadership role. The project manager of the entire project was part of the water authority, but besides him, there were two other project leaders. One for the flood defence and one for the parking garage, who was working for the municipality of Katwijk. Together they formed the directive team, which led the mixed project team, consisting of different working groups. This is identified as being beneficial for giving an equal weight to all objectives. This can be identified as the facilitative leadership that Ansell and Gash (2007) describe, for leaders should bring balance of power to the stakeholders. This will be beneficial for implementing linking opportunities. This has positive influences on the trust amongst the stakeholders (Ansell & Gash, 2007). The leadership has had a positive influence on promoting active participation, productive group-dynamics and extension of the scope of the project (Ansell & Gash, 2007).

It becomes clear from the results that the history of an organisation with a working method is of influence as well, and is related to the project organisation and leadership. A water authority is not an area developer, and most water authorities do not have much experience with area development projects. Therefore it is more difficult for them to take on a leading role in an area development project. This difficulty is strengthened by the HWBP objective that only focuses on the water safety task, which makes it not obligatory or necessary to include other objectives for reaching the water safety objective.

It is notable that the three projects have distinct structures in project teams. Kustwerk Katwijk had, as indicated previously in this section, a very integrated project team. Personnel of the water authority, the municipality and the different engineering consultancies were working together in an integrated project team for the purpose of the entire project, in which the different objectives were integrated. A side note that has to be placed, is that this was the case after the exploratory phase was finished, which the other projects are still in. Wijk bij Duurstede – Amerongen has a mirrored project team, in which every IPM role of the water authority has a counterpart of the engineering consultancy. The municipalities are involved administratively and with official consultation. They are involved in a design group, in which all policy and local actors are involved. Baarlo – Hout-Blerick has an integrated project team in which personnel of the water authority and the engineering consultancies fulfil the IPM-roles. There is no mirroring structure, and the IPM-team has no counterparts. Each municipality is involved with one official, working collaboratively with the IPM-team. The municipalities are actively involved in the stakeholder engagement management as well. Besides, the municipalities are involved administratively.

The respondents all have their perception on the project's organisation structure. The perception on the collaborative project team of Kustwerk Katwijk is very positive. It has been beneficial in creating a shared understanding and shared goal (Ansell & Gash, 2007; Stead & Meijers, 2009). The people were working for Kustwerk Katwijk and not their own interests. This is something that was actively encouraged, by amongst others leadership. It had a positive influence on the mutual communication, trust and collaboration, which are important factors of a good collaborative governance according to Ansell and Gash (2007). The people were all working on the same location for the project. Project organisations with a mirroring structure are perceived as neutral or positive. The involvement of municipalities is stated as being important. It is stated that it is important and beneficial for municipalities to have openness and communication from the project team and to have a role in the stakeholder engagement management. When there is no mirrored structure, this is emphasised as positive, as it encourages to have conversations about the different positions and

roles of actors in advance. Besides, it is financially beneficial when the processual costs are lower. The active involvement of the officials of the municipalities is regarded as positive for it promotes the mutual communication, documents that the actors draw up are better aligned, and is beneficial for the stakeholder engagement management. Besides that, it encourages people to get to know each other better on a personal level. Mutual communication is an important factor, for face-to-face dialogue is crucial for a collaborative process according to Ansell and Gash (2007). It creates trust and develops a more shared understanding, mutual gains and increasing commitment to the process (Ansell & Gash, 2007).

Roles, responsibilities and giving clarity

It becomes clear for each project that it is important on different levels and aspects to be clear about the roles and responsibilities actors have.

It is important for water authorities to be clear on what they can do and what they cannot do for both the local stakeholders and for initiators of linking opportunities in advance. This comes forward from each of the projects. It is beneficial when an initiator of a linking opportunity knows which rules there are for implementing linking opportunities. Setting a framework for this purpose can help in this. In these three cases the water authority is the organisation that decides whether a linking opportunity can be incorporated or not.

It is beneficial to know for water authorities what ambitions are present of the involved actors before the project starts or in an early stage of the project. It becomes clear that this is something that is perceived as difficult for those actors. This could be a barrier according to Stead and Meijers (2009). It helped for some of the projects to let the involved actors draw up documents in which they formulated their ambitions, in order to gain insight in each other's interest.

It is the case for all the projects that the linking opportunities need to be set and be specified before the preferred alternative is set. It needs to be clear if it is licensable and financeable by then. This clarity is needed for the water authorities, for they otherwise have the risk of having a delay in the project. For the municipalities this is perceived as a barrier or difficult, as they cannot give this clarity by then. This brings along a risk for them as well.

Honesty and transparency to local stakeholders is of importance according to the respondents of the different projects. It is important to set clear ground rules in a good stakeholder engagement management process. It was important for each project that there were no promises made that could not be met.

Overall, it is thus important that it is clear in advance what actors could expect of each other and which role they are able to fulfil.

There is no clear role in the (IPM) project team that focuses on spatial quality and linking opportunities. Some respondents assign this role to the project manager, for he or she has a personal drive for including linking opportunities. Often this role is assigned to the stakeholder engagement manager, for they are the contact person for the municipalities and local actors that bring in linking opportunities.

HWBP objective and linking opportunities

Several respondents of the different projects emphasise the different objectives of the HWBP and the past programme Ruimte voor de rivier. They indicate the HWBP objective does not give an integral place to spatial quality. Ruimte voor de rivier did have a budget for sectoral objectives, while this is not the case for the HWBP. Ruimte voor de rivier is perceived as a programme that gave an

integral place to spatial quality, and had a more integral viewpoint. HWBP does not give a full-fledged place to sectoral objectives, is perceived. Compartmentalisation and sectoral budgets can be barriers according to Ansell and Gash (2007) and Stead and Meijers (2009).

Several respondents that are part of the projects Wijk bij Duurstede-Amerongen en Baarlo – Hout-Blerick emphasise that this lack of integrality is already set in the definition of ‘meekoppelkansen’ or linking opportunities. To link something indicates that it is something that could be done next to the main objective. The budgets are compartmentalised and sectoral.

With this remark some respondents cite the environmental act, which will be implemented in the year 2021. They state this programme is not in the thought of that act. They desire less compartmentalisation and sectoral approaches with the implementation of the environmental act.

The HWBP objective is a point of discussion for the different projects. The definition of ‘sober and effective’ is questioned. Questions rise on what exactly sober and effective entails. There are discussions on what will be covered by the HWBP budget, and what needs to be financed additionally. Kustwerk Katwijk dealt with this by developing two alternatives next to each other. One was regarded as sober and robust, and one that included the linking opportunities. The difference in costs had to be paid by the municipality. It is still a very prominent discussion for the case Baarlo - Hout-Blerick, for it is not clear whether some objectives are integration efforts or linking opportunities.

Administrative courage and decision making

A barrier that is encountered, and emphasised for the projects Wijk bij Duurstede-Amerongen and Baarlo – Hout-Blerick is the more specific the project becomes, the less consensus there is. On a high level of abstraction the actors agree with each other. The moments decisions have to be made and budget becomes an issue, the process becomes more difficult. According to Ansell and Gash (2007) the decision-making process is aimed at reaching a consensus. Therefore the decision-making process is important, which has been perceived as being beneficial for the project process, as becomes clear from the results. A good preparation of the decision-making process is beneficial for the project process, is stated. Respondents of Kustwerk Katwijk and Baarlo – Hout-blerick clearly indicated a strategy in which they aim at the information that is needed for the decision-making. They inform the administrators in advance, and consult them before the decision is made. By doing so they tackle difficulties regarding the decision-making in advance. The decision-makers are actively involved. This positively influences the decision-making process. The interests of nonstate stakeholders have a role in this decision-making process, which is also stated as being beneficial by Ansell and Gash (2007).

For all the projects it is stated that a certain administrative courage is needed to choose for implementing linking opportunities. Administrators have to look beyond the boundaries of their own organisation. A certain courage is needed to reach a commitment to go for the shared interest. The water authorities need the courage to take a risk to look beyond their own objectives, and the initiators of linking opportunities should have the administrative courage to take the lead for their interest and address what they really want.

Stakeholder engagement management

It becomes clear that the stakeholder engagement management is crucial for all the projects. It has been important for identifying the interests and linking opportunities amongst local stakeholders. From the results of the different projects it can be stated that there are certain ground rules for the

way in which such a process should take place. A very important one is that no promises should be made that cannot be kept in the end, for this would lead to less trust in the project. The process should be transparent and honest. Within the process of stakeholder engagement management it is possible that there are still uncertainties and unclarities, which cause uncertainties amongst the local stakeholders. Not every question can be answered at every moment in the process. The stakeholder engagement process should not only be the task for the stakeholder engagement manager, but should be a concern for the entire project team. It is beneficial when a stakeholder engagement manager is approachable and has face to face contact with local stakeholders, which is also of importance according to Ansell and Gash (2007). It is beneficial to have one to one contact with the local stakeholders, for they will not always be open about their interests in groups. The historical relations with the stakeholders are of importance as well. In some cases there has been a prehistory of antagonism and/or cooperation, according to the definition of Ansell and Gash (2007). It can be stated from the results that it is important to be open about that past and to build trust by being transparent and keeping promises. It is helpful if a stakeholder engagement manager is able to talk about the content of the project with local stakeholders. A certain continuity is important for the local stakeholders.

Personal approaches and collaboration

Behavioural, cultural and personal factors, that are defined by Stead and Meijers (2009) have been of influence for all the projects. The ambition that the project team and the administrators have, is of influence to what extent the linking opportunities will be implemented in the end. The expertise of the project team is of influence as well. For every phase there should be people with the right expertise. Trust is of main importance for a collaboration on both the administrative and project level. Openness, transparency and communication from each policy actor is therefore needed. A barrier is that some policy actors are not open about their interests. The project team should be committed to the shared interest.

6. Conclusion

The main question of this research is *“Which barriers and benefits can be identified for implementing linking opportunities in water safety measures?”* As can be stated from the results and the comparative analysis various barriers and benefits can be identified. It is noticeable that the factors that are perceived as barriers or benefits for implementing linking opportunities are highly connected and intertwined.

To answer the main question the different benefits and barriers are described and their connectedness with other factors is illustrated. For each of the variables that are set within the operationalisation of this research, the different occurring dimensions and indicators identified by the analysis are described and linked to other variables, dimensions and indicators that can be identified from this research. The interconnectedness between the different factors is described and visualised. The descriptions and visualisations link back to the conceptual model (figure 2.9) and operationalisation of this research, as described in chapter 2.3. This operationalisation is based on the theoretical frameworks of collaborative governance and policy integration by Ansell and Gash (2007), Candel and Biesbroek (2016) and Stead and Meijers (2009). The figures show how each respective variable in this research is related to other variables, dimensions and indicators. These relations are described in the different sections. In each section another variable is central. Within the figures the textbox of the respective variable is marked by an orange dashed line and a darker shade of blue. The indicators that are of importance for this variable and its own most prominent indicators are marked by a green textbox. The green arrows indicate a relationship between the respective variable (and its indicators) and other variables' indicators. These indicators are marked by a green text box as well. The specific relationships and indicators are described in the sections.

By linking the results of the three case study to the operationalisation of this research, a reflection on the theoretical framework of this research can be made. Besides, these conclusions can lead to recommendations for praxis as well. Within the discussion, included in the next chapter, there will be reflected on the theoretical added value of this research and the practical applicability of this research.

Political Factors

In this section the links between political factors and other factors are described. In figure 6.1 the links and prominent indicators for the political factors are visualised.

Power and resource (im)balance actors: Power and resource (im)balance

Linking opportunities are linked to the HWBP objective, but are no integral part of it. This can create a power and resource imbalance, for the HWBP objective has a sectoral objective and budget for water safety and the integration efforts. Linking opportunities are additional. During the execution of a project it becomes insightful to what extent something is an integration effort or linking opportunity. This is most of the times not clear within the exploratory phase. The initiators of the HWBP objectives are the respective water authorities.

A power and resource imbalance has an influence on the economic and financial factors, for it can bring along uncertainties and risks, and has an influence on the financial distribution key. Because additional budgets need to be allocated by different parties there is more uncertainty regarding the financing during the exploratory phase. It has an influence on the financial distribution

key as well, for actors other than the water authority can become financially responsible for some parts of the project.

It has also an influence on the leadership within the project, which is a behavioural-, cultural- and personal factor. Because the water authority is the initiator of the HWBP project, it is most of the time the more logical or natural actor for taking on the leadership role.

Policy goals/intermediate outcomes: Time frames of ambitions

Possible different time frames of ambitions can be a barrier for allocating budgets, for estimates of initiators can already be set for a certain term in the future. This makes it more difficult to shift this term and allocate budget for this same time. This aspect has therefore an influence on economic and financial factors, specifically on the uncertainties and risks.

Shared understanding/policy frame: Shared objective and problem definition

Having a shared objective and problem definition has a positive influence on commitment. This is part of the factor 'shared understanding/policy frame'. The more the objective is shared, the more likely there will be eventually commitment. Leadership can have a positive influence on creating this shared objective and problem definition. Besides that, the collaboration of the project team can have a positive influence on the shared objective and problem definition. The perception on the collaboration is part of the factor of 'personal relations', which is part of the 'behavioural-, cultural-, and personal factors'. When there is a closer collaboration, actors get to know each other's ambitions and problems better and these can possibly be aligned better. A shared objective and problem definition can have a positive influence on the collaboration of the project team as well. The more the objective is shared, the more likely the project team will actively collaborate to achieve this.

Interests: Early identification of ambitions

An early identification of ambitions of the initiators is beneficial for implementing linking opportunities, for it gives more time for initiators to allocate budgets. This is part of the indicator 'interests'. It therefore has a relation with the economic and financial factors.

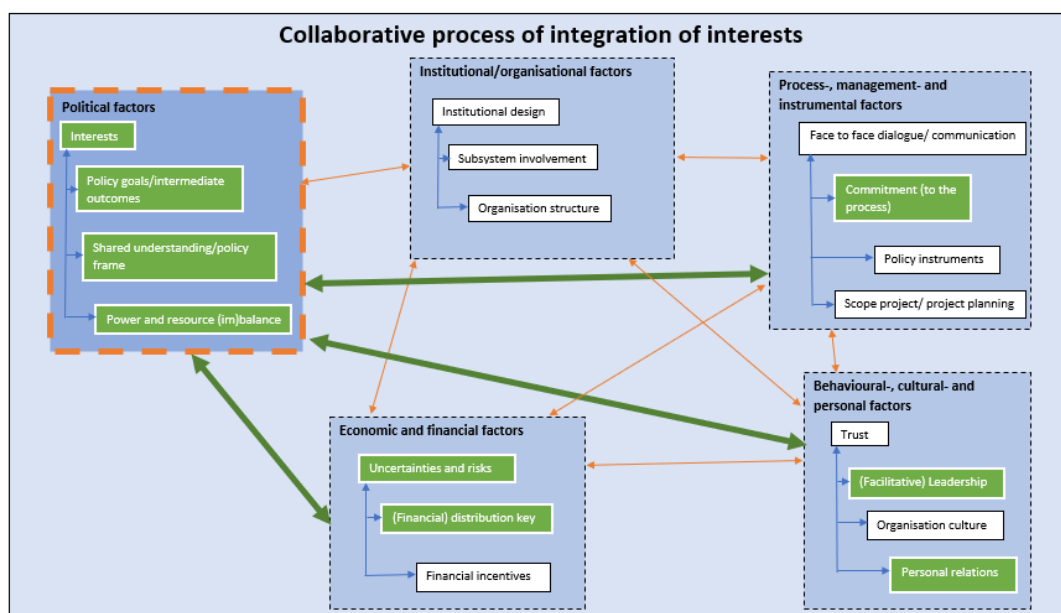


Figure 6.1: Visualisation of the important factors and relations for political factors

Institutional/organisational factors

In this section the links between institutional/organisational factors and other factors are described. In figure 6.2 the links and prominent indicators for the institutional/organisational factors are visualised.

Subsystem involvement: Actor involvement

Actor involvement says something about the extent to which actors perceive to be involved. This is as well of importance for the local stakeholders as for the project team and the administrators. Actor involvement has an influence on the actual collaboration of the project team, which is part of the indicator of 'personal relations'. The more actors feel involved, the more likely they are to collaborate. There is a mutual influence on the communication, clarity, transparency, honesty and openness, which is part of the indicator 'institutional design'.

Actor involvement is positively influenced by the decision-making process, which is part of the indicator 'organisation structure'. The more the actors are represented in the decision-making process, the more they feel involved. For the decision-making process it is also of importance to involve the administrators on the content of the project. Therefore actor involvement has a mutual relationship. The decision-making process is part of the indicator 'organisation structure'.

Institutional design: Communication, clarity, transparency, honesty, openness

The institutional design with good communication, clarity, transparency, honesty and openness can be seen as a ground rule for the process of collaboration and is clearly perceived as important.

It has a mutual influence with the factor actor involvement. The better these ground rules are executed the more the actors will feel involved. If the actors feel more involved they are more likely to execute these ground rules. This is particularly of importance for the stakeholder engagement management.

For the decision-making process it is important to have a good communication, be clear, transparent, honest and open. This positively influences the decision-making process, for the better this is executed the better the decision-making process will go. It is important to inform the decision-makers with the right information in time. Communication is therefore important, which is an indicator that is part of the process-, management and instrumental factors.

Good communication, clarity, transparency, honesty, openness can create trust, therefore a positive influence is indicated with the indicator 'trust'.

The indicator 'organisation culture' has an influence on this factor, for some organisation cultures are more familiar with these ground rules than others. Communication, clarity, transparency, honesty and openness have a positive influence on the leadership, for these are regarded as important factors for leadership. This is also the case for the collaboration of the project team. This factor is important for a good collaborative process.

Organisation structure: Decision-making process

For the decision-making process it is important that the administrators are involved, and that the communication is executed well. There should be clarity, transparency, honesty and openness. The decision-making process is part of the indicator 'organisation structure'. This process is aimed at creating a consensus or consent, so the extent to which a shared objective and problem definition are reached are therefore influenced by the decision-making process. A good decision-making

process can lead to more commitment as well, for commitment is discussed in the decision-making process.

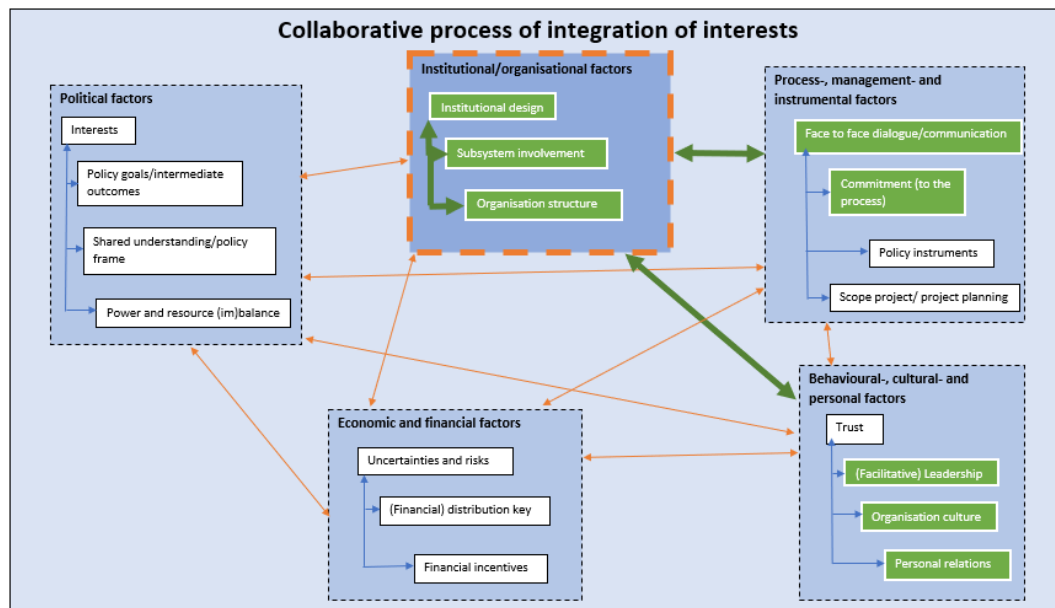


Figure 6.2: Visualisation of the important factors and relations for institutional/organisational factors

Economic and financial factors

In this section the links between economic and financial factors and other factors are described. In figure 6.3 the links and prominent indicators for the economic and financial factors are visualised.

Uncertainties and risks/(financial) distribution key: Allocating budgets for initiators of linking opportunities

As is stated, the initiators of linking opportunities have to allocate their own budgets and the factors of time frame of ambitions, project planning, and early identification of ambitions have an influence on this. These factors are all part of the indicator of 'scope project/ project planning', which is part of the variable 'Process-, management- and instrumental factors'.

The allocation of budgets for initiators has an influence on the extent there is a shared objective and problem definition, which is part of the 'political factors' and indicator 'shared understanding/policy frame'. When there is money allocated for the linking opportunity it is more likely to become part of the problem definition of the project and shared objective. On the other hand, the budgets are allocated sectoral, which makes it harder to have a shared objective and problem definition. A shared objective is therefore influenced by more factors, which is described in the previous section on the political factors.

The allocation of budgets also influences the commitment. If an initiator of a linking opportunity is not able to allocate budgets, it is not likely they are able to commit to a collaborative process to achieve cross-cutting objectives. Commitment is part of the variable 'Process-, management- and instrumental factors' as well.

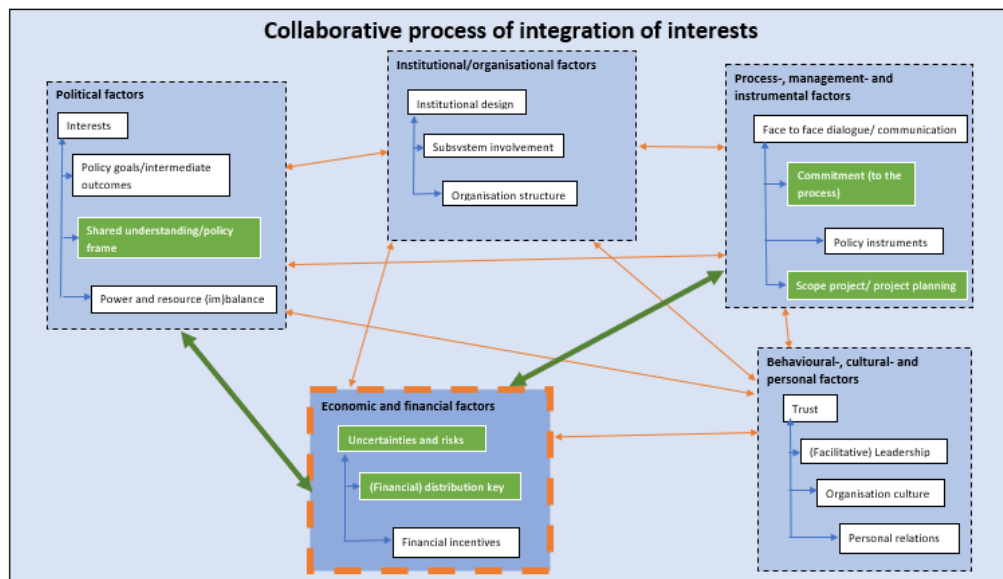


Figure 6.3: Visualisation of the important factors and relations for economic and financial factors

Process-, management- and instrumental factors

In this section the links between process-, management- and instrumental factors and other factors are described. In figure 6.4 the links and prominent indicators for the process-, management- and instrumental factors are visualised.

Scope project/ project planning: Project planning

The planning of the project has an influence on the allocation of the budgets for initiators as well, for the planning sets the amount of time that an initiator gets for allocating budget to a linking opportunity. When the planning of a project does not give enough time to allocate budget, this can be a barrier. The allocation of budgets can also have an influence on the planning of a project. If there is no clarity on if budgets are allocated, there could be a planning delay or it could be decided not to implement the linking opportunities. Thus there is an interdependence between the planning of the project on the one hand and the financial distribution key and uncertainties and risks, part of the economic and financial factors, on the other hand.

Face to face dialogue/communication: Discussing interests in advance

It becomes clear from the results that it is important to discuss interests at an early stage. This needs clear communication, clarity, transparency, honesty and openness about these interests. These are clear ground rules that are part of the indicator 'institutional design'. When these rules are followed, it is more likely the involved actors will discuss their interests.

It is important for the decision-making process to discuss the interests in advance with the decision-makers. In this way it there will be less surprises in the decision-making process. The decision-making process is part of the indicator 'organisation structure' and is identified as being part of the institutional/organisational factors.

Discussing interest in advance is a very central factor for this research, as it is emphasised as very important to discuss the interests the involved actors have at the start of a project. It is important to decide and talk openly about what the objective that could be collaboratively achieved. This involves the ground rules of communication, clarity, transparency, honesty and openness. In

advance, it is important to be clear about and openly discuss what each actor's objectives are, what their responsibilities are, what they can do for the project, and which role they can take on. This is stated as a starting point of eventually implementing linking opportunities.

Because the identification of interests by different actors and the perception on those different interests is of importance as well for this factor, there is a link with the indicator 'interest', part of the political factors.

Commitment

It can be stated that for implementing linking opportunities commitment is a very central factor. Commitment is a factor that occurs on different fields. For instance, financial commitment is stated as being important, as well as commitment on shared understanding and policy frame.

Commitment is beneficial for implementing linking opportunities, for the involved actors are committed when they perceive the way in which they are collaborating as the best way to achieve the cross-cutting objectives. In this way they would be collaboratively working at integrating the policies, among which linking opportunities and the water safety objective. Therefore the indicator 'personal relations' has a link to commitment, for it focuses on the perception people have on the collaboration.

The HWBP objective means for initiators of linking opportunities that they have to allocate their own budgets. This has a negative influence on commitment. When there is no budget allocated, it is not likely that initiators are able to commit financially. This indicates a relation with the variable 'economic and financial factors'.

A shared objective and problem definition (part of the indicator shared understanding/policy frame) has a positive influence on commitment. The more the objective is shared, the more likely actors are to commit.

A good collaboration process of the project team has a mutual relationship with commitment. When the collaboration is perceived as good this can lead to more commitment. When the commitment is high, actors are more likely to more collaborate more actively in the project team. Collaboration is part of the indicator 'personal relations'.

Trust is a factor that is perceived by actors as being needed for commitment. Simultaneously commitment leads to trust, for when commitment is reached actors know more what they could expect from each other.

Within the decision-making process commitment is discussed. Therefore this process has a direct link with commitment as well, which is part of the variable 'process-, management- and instrumental factors'.

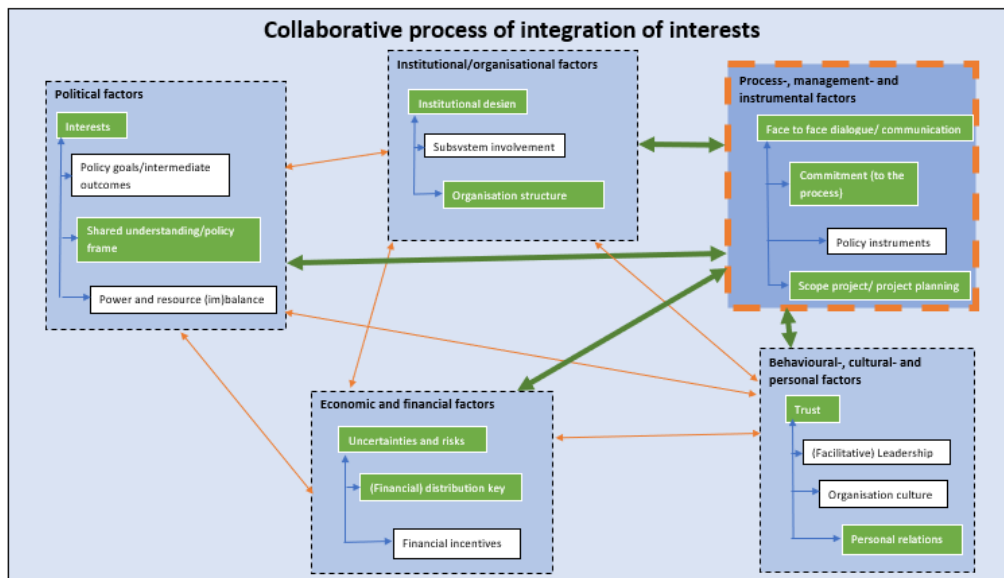


Figure 6.4: Visualisation of the important factors and relations for process-, management-, and instrumental factors

Behavioural-, cultural- and personal factors

In this section the links between behavioural-, cultural- and personal factors and other factors are described. In figure 6.5 the links and prominent indicators for the behavioural-, cultural- and personal factors are visualised.

(Facilitative) Leadership: Leadership

Leadership is influenced by the power and resource (im)balance. Leadership has an influence on the shared understanding and policy frame. The leadership role is mostly addressed to the organisation with the primary objective which is recognised and acknowledged by all. For an integrated area development this could be a barrier, although this depends on the leadership style. The person(s) with a leadership role, can also have the ability to create a shared understanding among the involved actors. Which would benefit the project. Therefore it also influences the collaboration of the project team, which is part of the indicator 'personal relations'. Leadership can be influenced by the organisation culture. Some organisations are less familiar with integrated area development, which could be a barrier for their leadership style.

Communication, clarity, transparency, honesty and openness, which are part of the indicator 'institutional design' have a positive relationship with leadership, for the more communication, clarity, transparency, honesty and openness there is, the more it is benefitting the leadership.

Personal relations/organisation culture: Personal factors

Personal factors are of importance to various factors as well. They have an influence on the leadership style present. There is also an influence of personal factors on the shared objective and problem definition, for it needs a certain creativity, drive and courage from persons to look outside their own and organisational boundaries to find a shared objective and problem definition. This is part of a shared understanding/ policy frame, which is a political factor. People should also be willing to work for this shared objective. Personal drive and expertise is also helping the collaboration of the project team. If a project team has the needed expertise and affinity with the project, this will benefit the collaboration. For the decision-making process it is important to have administrators that

are willing to look outside their own boundaries and take risks, which is seen as being influenced by personal factors. The decision-making process is part of the indicator 'organisation structure'.

Personal relations: Collaboration of the project team

As already stated, the leadership role can have a positive influence on the collaboration of the project team and the creation of a shared objective and problem definition has a positive influence on the collaboration as well. The better the leadership role is perceived, and the more the objective is regarded as being shared, the better the collaboration of the project team is perceived.

The collaboration of the project team is positively influenced by the organisation culture and history. The less the organisation is familiar with integrated area development, the less the actors are likely to collaborate closer. The organisation culture has also an influence on the communication, clarity, transparency, honesty and openness. Some organisations are more likely to have an open communication, and be transparent and clear. Therefore there is a relationship with the indicator 'institutional design'.

Trust creates more collaboration between actors, but collaboration creates trust as well. When there is a closer collaboration this can have a positive influence on the commitment of these actors in the end. When there is more commitment, actors tend to have a closer collaboration as well.

Organisation culture: Organisation culture and history

The organisation culture and the history of the organisation is a factor that has an influence on various factors, such as the collaboration of the project team. The more the organisation has a culture and history of collaboration and integrated area development, the more likely they are to collaborate. The organisation culture has, as already stated, a positive influence on the communication, clarity, transparency, honesty and openness. It has as well a positive influence on leadership.

Some organisations are more likely to look beyond their boundaries, which is part of their organisation culture. This has a positive influence on the commitment.

Trust: Trust

As previously stated, trust is positively influenced by the collaboration of the project team and communication, clarity, transparency, honesty and openness. Trust itself has a positive influence on the commitment and commitment has a positive influence on trust. There is a certain trust needed before actors commit. The more trust, the more likely actors are to commit. Commitment leads to more trust as well. Actors know in this way what they could expect. And once a commitment is reached in for instance the shape of an administrative agreement, this creates more trust.

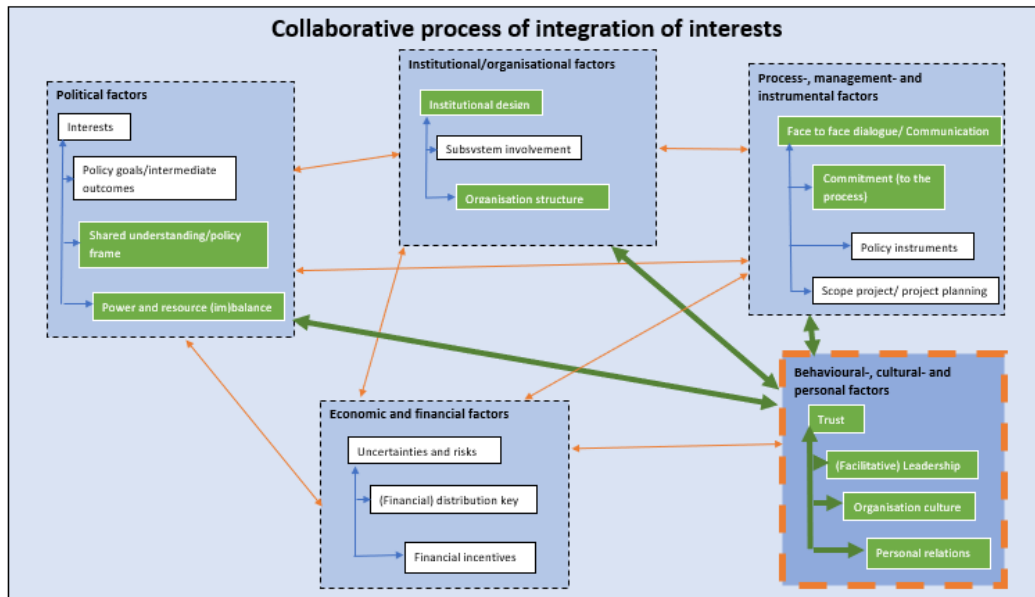


Figure 6.5: Visualisation of the relations for behavioural-, cultural-, and personal factors

7. Discussion

This discussion evaluates and explains the research results and conclusions, and relates this to the theoretical framework which was used for this research. In section 7.1. the results are discussed. This section discusses how the results could be linked to the theories and how they differ or apply to the theoretical framework and operationalisation.

In section 7.2. the theory is discussed. This section evaluates the theories that are used for this research. It discusses what this research means for these theories and to what extent these theories have been useful for this research. It also discusses some limitations that were found in the theories for the purpose of this research

With this discussion recommendations for both the theory and praxis could be made, which are included in chapter 8.

7.1. Discussion on the results

The results show different factors related to the process of policy integration. It could be stated that linking opportunities can lead to a process of policy integration. This process would imply that the actors have a shared understanding or a cross-cutting objective (Stead & Meijers, 2009; Candel & Biesbroek, 2016). When the actors that initiate a linking opportunity perceive the water safety objective as being a cross-cutting objective and when the linking opportunities are perceived by the other actors as being cross-cutting objectives as well, one could say the policies are integrated. The results show that the water safety objective is regarded as being cross-cutting, however for some linking opportunities this is not (yet) the case. The involved actors recognise the importance of water safety for every case, and the actors have mostly an interest in it as well. Some linking opportunities are recognised by other actors as being important, but they are not always perceived as a collective objective. Therefore it could be stated that the policies are not completely integrated according to the definitions of Stead and Meijers (2009) and Candel and Biesbroek (2016). It should be noted that the extent of policy integration seems to have a link with the phase the project is in. It becomes clear from the results that it is in the projects within the exploratory phase not yet insightful to what extent the linking opportunities can be implemented eventually. This becomes clearer in later phases. In later phases it is therefore more likely that the policies become integrated. At that time, it will become insightful what the linking opportunities entail and how they would be integrated. The issues can then become more cross-cutting. However, this does not per se have to mean that the linking opportunity is seen as a cross-cutting objective by all actors involved. Linking opportunities imply that it is something that is implemented next to a primary objective. This does not have to mean that the linking opportunity is perceived as cross-cutting to be executed, although it is more likely that this will be increasingly the case, for the linking opportunities become more specific.

The HWBP objective states that initiators of linking opportunities have to allocate their own budgets (van Rijswijk, 2014). The results show that actors perceive this as a barrier for implementing linking opportunities. In this case, the municipalities experience different factors, that make it harder to allocate budget in time. As is stated in the research problem statement, the HWBP objective seems to bring along barriers to implement linking opportunities (van Hattum, et al., 2014).

The collaborative process has an important influence on the integration of the objective. It could be therefore stated that the theories of policy integration as a process and collaborative governance can be used complementary. The three collaborative processes contain differences, but similar barriers and benefits can be identified. The results show that it is important to be aware of

the governance structure a project works with. Different governance structures work for different kinds of objectives and different kinds of actors. It could be stated that when one would have an integrated area development in which the objectives are cross-cutting, the governance should be balanced and asks for great involvement of actors. One should consider how the project team is structured, which role initiators of linking opportunities play regarding for instance stakeholder engagement management, what kind of leadership there is needed, and how the decision-making process should take place. One should ask themselves if the project really can be seen as an integrated area development as well. It is important to openly discuss this. The results show that with an integrated area development a close collaboration can be helpful. It becomes clear that communication, clarity, transparency and openness are of main importance as ground rules for the collaborative process on the levels of project team, decision-makers and local stakeholders. As well is trust among the involved actors. This facilitates the process. In this way actors know each other's ambitions and know what is at stake.

Eventually commitment is a very important factor, for commitment is for all projects regarded as essential to integrate policies, but is also important for a good collaborative process. Commitment is something that needs to be achieved collaboratively. There should be a collaborative agreement in which is stated that every actor that is involved has its own responsibilities and roles to play. It sets the line for further collaboration in which the policies can be further integrated.

Personal and organisational factors are of influence on the policy integration and collaborative governance as well, for involved actors need a certain expertise and drive. The project team needs a drive, expertise, courage and creativity to work for a shared interest and look beyond the boundaries. This is needed as well for decision-makers.

7.2. Discussion on the theory

This research presupposes a relationship between the theories of policy integration as a process and collaborative governance. The results of the thesis show that the identified factors are highly intertwined and that the frameworks by Ansell and Gash (2007), Stead and Meijers (2009) and Candel and Biesbroek (2016) are complementary to each other.

The frameworks of collaborative governance and policy integration are used together in this research, because they complement each other. It can be stated that the theory of policy integration by Stead and Meijers (2009) and Candel and Biesbroek (2016), without using the theory of collaborative governance, did not fit this research's objective entirely. Although the theory of policy integration has an processual approach, it does not include the involvement of actors in a shared process. As stated before, the theory of policy integration does not include the role of local actors, for they are not regarded as policy actors. The theory of policy integration gave tools to this research to identify which factors and aspects could be relevant for the integration of ambitions such as linking opportunities, and how to assess and interpret these factors within a process. It showed factors which were important or needed within a process, but did not give the needed tools to research the way in which the process took place within this local and spatial context. Therefore the theory of collaborative governance was needed.

The conclusions and results of this research show that the collaborative process of integrating policies has been very dynamic and contains many interdependencies amongst the factors. Therefore it can be stated that the theories and operationalisation used for this research can be used as a tool to assess such a process, but do not present a framework that will apply to each case in the same way. Every process is different and dependent on a certain context and thus for

every process other factors and links could be important. When comparing cases it is useful to identify similar and different factors that are of importance for the processes in the cases. However, it cannot be stated that a factor identified as successful for one project automatically would lead to success for other projects. Therefore the facilitators and inhibitors of policy integration (figure 2.1 and 2.2) identified by Stead and Meijers (2009) are very useful as indicators for which factors could be inhibiting or facilitating the process. It becomes clear from this research that these factors should not be regarded as being rigid for the purpose of this research, but should always be approached, placed and researched within a certain local context. For instance, one facilitator in one of the cases, could have little or no facilitating effect in other cases. Therefore the theory by Stead and Meijers (2009) is very useful for the purpose of this research as a starting point for researching a process, but it has to take case-specific aspects into account as well. Besides, the list of facilitators and inhibitors of policy integration should not be regarded as a complete list of possible occurring facilitating or inhibiting factors, for external, case-specific and/or processual factors can be facilitating or inhibiting as well, as becomes clear from the results and conclusion of this research.

Although, besides this critique on the theory, the facilitators and inhibitors and the five categories in which they were categorised have been an important starting point for this research and the operationalisation. The theory of collaborative governance by Ansell and Gash (2009) has, for the purpose of this research, been linked to these different categories. In this way the collaborative process which took place within the cases has been approached from these different categories. The results show that these different categories are highly intertwined for a collaborative process in this case. The theoretical framework by Ansell and Gash (2009) has been very useful, for it gave the tools to research a process. However, the results and conclusion of this research seem to show a more dynamic and intertwined process, in which the factors identified by Ansell and Gash (2009) seem to have more interdependencies. Therefore a processual approach should not be approached linear, but more iterative and highly dynamic.

The operationalisation and conceptual model (section 2.3, figure 2.9) of this research combines these theories and regards the collaborative process as dynamic and interactive. The theories complement each other so they could be used for the objective of the research and took above mentioned possible critiques into account. As becomes clear from the results the variables and indicators are highly intertwined and many links can be found. Therefore it can be stated that it can be difficult to allocate a factor to only one of the indicators. Many identified factors cut-across the formulated indicators and therefore need a nuanced elaboration on how they need to be interpreted.

8. Recommendations

This chapter focuses on the recommendations that can be made for both praxis and theory and future research.

8.1. Recommendations for praxis

From the experiences and perceptions that were collected in the different cases, different recommendations can be formulated. These recommendations focus on improving the process to successfully implement linking opportunities on the factors that are perceived as being a barrier or benefit for this.

For each project it becomes clear that open, honest, clear and transparent communication on different levels is of main importance for the project process. It could be stated that these are ground rules for a project process. These can lead to more trust. It is important that these ground rules are implemented from the start of the project, for it makes insightful which ambitions the actors have and what expectations and responsibilities individual actors have. In this way agreements can be made earlier on in the process. It is not self-evident that these ground rules are part of the project process, but they are influenced by several other factors. Leadership can have an influence on these ground rules by encouraging a more collaborative approach and shared understanding. This can be positively influenced by giving responsibilities to involved actors and be open and transparent as a leader. Leadership is mostly addressed to the initiator of the project. It could be recommended to these leading actors to implement these ground rules from the start of the project.

It can be recommended to involve decision-makers on the content of the decision prior the decision that has to be made. The project managers could play a role in this. By early involvement possible issues can be discussed in advance. Besides that, it is important to apply these ground rules to the stakeholder engagement management as well. It is important that there is clarity and consistency in the expectations of local stakeholders. When promises are made that cannot be kept, this could be a barrier to the collaborative process with local stakeholders. It is important that the interests of local stakeholders get a place in the project organisation and decision-making process as well. Therefore it is important that the interests are brought in within the project team by the stakeholder engagement manager. Face-to-face and individual communication are emphasised as being beneficial. It is important to be accessible as a project.

For the collaborative process with local stakeholders it helps when a water authority has a history of collaboration or a starting point in which the collaboration with local stakeholders is emphasised. Although, it is important to consider the role of the water authority in the governance, because the water authority is generally not considered as an area developer.

All projects that are researched in this case study are regarded as having an objective that can be seen as an integrated area development, although only the water safety objective is seen as cross-cutting and the leadership is addressed to the respective water authority. Each project organisation and project team is structured in a different way. Therefore it is important to consider the governance structure that is used for the project. It is important to consider how the initiators of linking opportunities could be involved best. If a linking opportunity is a (possible) cross-cutting objective or issue, then it could be considered to involve the initiator in the project team. It is important for the governance structure that the actors feel involved, collaborate, and communicate,

be clear, transparent, honest and open. Make agreements on the roles and responsibilities of actors and be open about the expectations there are between the actors. Besides that, it is important to have driven people and people with expertise in the project team. A certain continuity is important, but it is important to have people fitting for their specific role in a specific phase as well. It helps if people are working for a shared objective, instead as for individual organisations, when more organisations are involved in the project.

The HWBP objective can be seen as a barrier to linking opportunities because of the various factors described in the conclusion. The sober and effective objective means that linking opportunities need additional financing and need to fit within the project planning. Therefore it is important to start with the identification of linking opportunities as soon as possible when the project starts. However, this is perceived as being hard for involved actors at this stage of the project. After the linking opportunity is identified, there are only several months to allocate budget. Because it is in the exploratory phase not insightful what would be part of the linking opportunity and what would be part of the integration efforts, it is not certain what amount of money is needed for the implementation of the linking opportunity (van Rijswijk, 2014). With these factors in mind, one could ask oneself to what extent this process is realistic and feasible. It is often the question if these linking opportunities will be implemented, because of this process and the needed commitment on linking opportunities in the exploratory phase when the preferred alternative is set. It is important to consider possible solutions to this occurring problem. Suggestions that are made in this research are to consider setting up a fund for implementation of favourable linking opportunities, which would be operated by the national state, province or individual water authorities. These budgets could be allocated when an additional value for the linking opportunity is perceived.

Another suggestion is to give initiators more time to allocate budgets and to accept that the planning of the project will be delayed. This also gives more time to identify what would be (financially) part of the linking opportunity and what would be part of the integration effort. One could also consider to be more flexible regarding the (financial) commitment that is needed for the linking opportunities at the moment the preferred alternative is set. Consider which aspects of the commitment should be clear in the exploratory phase, and which aspects could possibly be made specific in a later phase of the project. An option is to work out more alternatives next to each other, or to build in the ability to cut the linking opportunity loose from the water safety objective in a juridical way.

8.2. Recommendations for theory and future research

This research combines the theories of policy integration and collaborative governance, and applies it to specific local contexts. For this is not or not often done in past and present scientific literature, future research could be focused on further elaboration and application of the theoretical framework. The framework has been useful for this research and was shaped in a certain way that fitted its purpose. This does not automatically implicate that the theoretical framework is applicable to every situation. The framework had some aspects, varying for each of the cases, that were more central than others. It could be the case that for other cases factors could be missing. Therefore further research focussing on the development and reviewing and testing the theoretical framework is needed.

The HWBP objective is an important aspect that influences the implementation of linking opportunities, as becomes clear from this research. This is an objective set at programme level. It is

interesting to research HWBP on this topic at a programme level. Moreover, it would be interesting to research how these processes of policy integration and collaborative governance could be applied to the programme level. It would also be interesting to research the connections and integration between different policy programmes.

This research is focused on three cases, from which two are in the exploratory phase, and one is finished. It would be interesting and useful to research the process of policy integration and collaborative governance for the different phases of a project. There could be different barriers and benefits occurring for each phase. This research chose to research mainly the exploratory phase, for this is the phase in which linking opportunities are identified and when will be decided what would be part of the project when the preferred alternative is set. The collaborative governance and policy integration framework can be applicable as well for other phases.

It would be useful and interesting to apply the theoretical framework to other kinds of programmes or projects as. In this way it could be identified which factors are specifically applicable to the HWBP programme, and which factors are more widely recognised for project processes. It makes insightful if the conceptual model could be used for other processes as well, or should need alterations for that purpose.

As stated in the previous chapter on the discussion of the theory, the conceptual model (figure 2.9) of this research presupposes dynamic relationships between indicators and variables and defines different indicators as being important for the process of integrating policies. However, from the results and conclusions it becomes clear that not every indicator is of equal importance to each case, and that some links and influences are more important than others for cases. It is therefore very case-specific which factors are prominent and of importance. The conceptual model can therefore be used to get an insight in which factors are of importance, but should not be used as a concept that presupposes certain relationships and indicators and gives an equal weight to them. The conceptual model gives a starting point for researching possible links and occurring indicators. It should become clear which links and indicators are prominent from the research itself.

9. Reflection

During this research there are various aspects that can be taken into account as lessons learned for executing future researches.

During the execution of the research the theory of policy integration seemed to lack an emphasises on the role of local actors. The theory of policy integration as a process acknowledges the importance of the local context, but does not include the roles and influences by local actors within its framework. The theory is focused on the integration of different policy fields, whereof local actors are not part. In a spatial area, such as is the case for this research, a local context is important for the process in which the integration of policy fields take place. Therefore, at the start of collecting the data, it became clear that the theoretical framework with only the theory of policy integration would not be entirely fitting the research's goal and purpose. Therefore the theoretical framework of collaborative governance is added. Although it has been beneficial for the research to intertwine the theories eventually, it would have been more convenient if this intertwined theoretical framework was developed earlier in the process.

Various limitations of this research can be identified. During the data-collection it became clear that it was hard to find administrators that were willing to do an interview. Therefore there are less respondents that are part of the administrative level.

The respondents were exclusive. The respondents that were approached were little to not replaceable by other persons. As stated, this has been a barrier to interview administrators. Besides, there have been no interviews with respondents of the municipality Utrechtse Heuvelrug for the case of the Sterke Lekdijk, because of this reason. This can have its influences on the research. An improvement for this research would have been if this interview was conducted or another representative would have been available.

The stakeholder engagement managers for each of the projects are interviewed to identify their perceptions on the project process, but as well to identify the perceptions of local actors on this process. It would have been an improvement for this research to actually interview the local actors, or conduct a survey among the local actors, in which the perspectives come forward. Because of the duration and scale of this research, there is chosen to not do this.

It is important to state that this research and its results are very applicable to the context in which it is researched and is only generalisable to a limited extent. It is generalisable in the sense that it can be stated that at certain aspects during a project process are of importance due to various factors and that it is important to be aware of which choices you make and how you shape the process. This research can contribute in being aware of those aspects and giving possible suggestions that could be applicable to the specific context. Moreover, the research and conceptual model are to a certain extent theoretically generalisable, for the model could be applied to other cases as well. The results could be different, for other factors can be important for other cases, but the conceptual model could still be applied to those other contexts.

This research deals with issues that can be regarded as sensitive. The research is not completely anonymous, for the roles of the respondents are of importance for the research. For these reasons the process has been executed very carefully with various moments for respondents to reflect on the interpretations and written reports of their interviews. Although this process has been very important and was needed for a successful completion of this research, some difficulties regarding sensitivity and the right way to deal with it have been encountered. It took time and a lot of effort to correspond with the individual respondents on their individual data that had been used

for the research, without giving insight in other respondent's input. Although this has worked out well for this research, it is something that has to be taken into account when setting up a research and research planning. The sensitivity has also an influence on how the report is written. With a certain sensitivity and without anonymity there could be restrictions on writing certain aspects down in a certain way. It could be the case that some results cannot be presented due to a sensitivity issue, which is also something to take into account and be careful with. Therefore it should always be considered for these kind of researches, that dealing with sensitive issues involves a continuous and careful process of clear and intensive communication with the respondents.

References

- Aan de slag met de Omgevingswet. (2019, September 3). *Kerninstrumenten en de Omgevingswet*. Retrieved from Aan de slag met de Omgevingswet: <https://aandeslagmetdeomgevingswet.nl/omgevingswet/kerninstrumenten-wet/>
- Alter, C., & Hage, J. (1993). *Organizations working together*. Newbury Park: Sage.
- Ansell, C., & Gash, A. (2007). Collaborative Governance in Theory and Practice. *Journal of Public Administration Research and Theory*, 543-571.
- Arcadis. (2012). *Kustwerk Katwijk. Milieueffectrapport Kustwerk Katwijk*. Arnhem: Arcadis Nederland BV.
- Arcadis. (n.d.). *Kustversterking Katwijk*. Retrieved from Arcadis: <https://www.arcadis.com/nl/nederland/wat-we-doen/projecten/europa/nederland/kustversterking-katwijk/>
- Biesbroek, R., Termeer, K., Dewulf, A., Keessen, A., & Groothuijse, F. (2014). *Integraliteit in het Deltaprogramma: verkenning van knelpunten en mogelijke oplossingsrichtingen*. Wageningen: Wageningen Universiteit.
- Cabinet Office. (2000). *Wiring it up. Whitehall's Management of Cross-Cutting Policies and Services*. London: The Stationery Office.
- Candel, J. J., & Biesbroek, R. (2016). Toward a processual understanding of policy integration. *Policy Sci*, 211-231.
- Challis, L., Fuller, S., Henwood, M., Klein, R., Plowden, W., Webb, A., . . . Wistow, G. (1988). *Approaches to Social Policy: Rationality and Practice*. Cambridge: Cambridge University Press.
- Commissie voor de milieueffectrapportage. (2018). *Sterke Lekdijk. Advies over reikwijdte en detailniveau van het milieueffectrapport*. Utrecht: Commissie voor de milieueffectrapportage.
- Correljé, A., & Broekhans, B. (2015). Flood risk management in the Netherlands after the 1953 flood: a competition between the public value(s) of water. *Journal of Flood Risk Management*, 99-115.
- Deltacommissaris. (2020, February 28). *Wat is het Deltaprogramma?* Retrieved from Deltaprogramma: <https://www.deltacommissaris.nl/deltaprogramma/wat-is-het-deltaprogramma>
- Deltanieuws. (2017, June 28). Minister Schultz: 'Veiligheid gaat altijd voor'. *Deltanieuws* #3.
- Emerson, K., Nabatchi, T., & Balogh, S. (2011). An Integrative Framework for Collaborative Governance. *Journal of Public Administration Research and Theory*, 1-29.
- Fish, R. D., Ioris, A. A., & Watson, N. M. (2009). Integrating water and agricultural management: Collaborative governance for a complex policy problem. *Science of the Total Environment*, 5623-5630.
- Halpert, B. (1982). Antecedents. In D. Rogers, & D. Whetten, *Interorganizational coordination: theory, research, and implementation* (pp. 54-73). Ames: Iowa State University Press.

- Hartgers, E., van Buuren, M., Fontein, R., van Hattum, T., de Lange, M., & Maas, G. (2015). *Natuurrealisatie in het programma Ruimte voor de Rivier*. Wageningen: Alterra Wageningen UR.
- Hoogheemraadschap De Stichtse Rijnlanden. (2019, September 24). *Sterke Lekdijk*. Retrieved from Hoogheemraadschap De Stichtse Rijnlanden, Uw Waterschap: <https://www.hdsr.nl/beleidsplannen/sterke-lekdijk/>
- Hoogwaterbeschermingsprogramma. (2019). *Een sterke alliantie voor sterke dijken: Programmaplan Hoogwaterbeschermingsprogramma 2019-2023*. Utrecht: Hoogwaterbeschermingsprogramma.
- Huijsmans, A. (2014, July 14). *Hoogwaterbeschermingsprogramma*. Retrieved from Dijken versterken is ook gebiedsontwikkeling: <https://hoogwaterbeschermingsprogramma.nl/actueel/nieuws-actueel/283688.aspx?t=dijken+versterken+is+ook+gebiedsontwikkeling>
- Huxham, C. (1996). *Creating Collaborative Advantage*. London: Sage.
- Johansson, R. (2003). Case Study Methodology. *International Conference "Methodologies in Housing Research*, (pp. 1-14). Stockholm.
- Jordan, A., & Lenschow, A. (2010). Policy Paper Environmental Policy Integration: a State of the Art Review. *Environmental Policy and Governance*, 147-158.
- Kenniscentrum InfoMil. (2020, February 28). *Waterwet*. Retrieved from Kenniscentrum InfoMil: <https://www.infomil.nl/onderwerpen/lucht-water/handboek-water/wetgeving/waterwet/>
- Kickert, W. J., Klijn, E.-H., & Koppenjan, J. F. (1997). *Managing Complex Networks: Strategies for the Public Sector*. London: SAGE Publications Ltd.
- Ligtvoet, W., van Oostenbrugge, R., Knoop, J., Muilwijk, H., & Vonk, M. (2015). *Adaptation to climate change in the Netherlands - Studying related risks and opportunities*. Den Haag: PBL Netherlands Environmental Assessment.
- Meijers, E., & Stead, D. (2004). Policy integration: what does it mean and how can it be achieved? A multi-disciplinary review. *2004 Berlin Conference on the Human Dimensions of Global Environmental Change: Greening of Policies - Interlinkages and Policy Integration*, 1-15.
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2017). *Projectleidersoverleg Rijk Omgevingswet: notitie Integraliteit*. Ministerie van Binnenlandse Zaken en Koninkrijksrelaties.
- Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2019). *Verkenning kerninstrument projectbesluit voor implementatie Omgevingswet*. Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, Programma Aan de slag met de Omgevingswet.
- Ministerie van Infrastructuur en Milieu. (2016). *Pionieren met de Omgevingswet. Houd het eenvoudig, maak het beter*. Den Haag: Ministerie van Infrastructuur en Milieu.
- Nilsson, M., & Persson, A. (2003). Framework for analysing environmental policy integration. *Journal of Environmental Policy & Planning*, 333-359.

- Nollkaemper, A. (2002). Three Conceptions of the Integration Principle in International Environmental Law. In A. Lenschow, *Environmental Policy Integration* (pp. 22-35). London: Earthscan Publications Ltd.
- OECD. (1996). *Building Policy Coherence, Tools and Tensions*. Paris: OECD.
- Olde Wolbers, M., Das, L., Wiltink, J., & Brave, F. (2018). *Eindevaluatie Ruimte voor de Rivier. Sturen en ruimte geven*. Utrecht: Berenschot Groep B.V.
- Persson, A. (2004). *Environmental Policy Integration: An introduction*. Stockholm: Stockholm Environment Institute.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Harlow: Pearson Education Limited.
- Staf Deltacommissaris. (2018). *Deltaprogramma 2019*. Den Haag: Ministerie van Infrastructuur en Waterstaat, ministerie van Landbouw, Natuur en Voedselkwaliteit, Ministerie van Binnenlandse Zaken en Koninkrijksrelaties.
- Stead, D., & Meijers, E. (2009). Spatial Planning and Policy Integration: Concepts, Facilitators and Inhibitors. *Planning Theory & Practice*, 317-332.
- Terra Incognita. (2016). *Kwaliteitskader eindrapport. Noordelijke Rijn- en Lekdijk Amerongen - Schoonhoven*. Utrecht: Terra Incognita.
- Underdal, A. (1980). Integrated marine policy. What? Why? How? *IPC Business Press*, 159-169.
- van Hattum, T., Kwakernaak, C., van Tol, T., Roelsma, J., Broekmeyer, M., Schmidt, A., . . . Nysingh, S. (2014). *Water en Natuur: een mooi koppel*. Wageningen: Alterra Wageningen UR.
- van Oosten, C., Uzamukunda, A., & Runhaar, H. (2018). Strategies for achieving environmental policy integration at the landscape level. A framework illustrated with an analysis of landscape governance in Rwanda. *Environmental Science and Policy*, 63-70.
- van Rijswijk, M. (2014). *Hoogwaterbeschermingsprogramma - Handreiking landschappelijke inpassing en ruimtelijke kwaliteit*. Den Haag: Programmadiirectie Hoogwaterbescherming.
- Vennix, J. A. (2011). *Theorie en praktijk van empirisch onderzoek*. Harlow: Pearson Education Limited.
- Veraart, J., Vos, C., Spijkerman, A., & Witte, J. (2014). *Meekoppelkansen tussen Natura 2000, Kaderrichtlijn Water en het Deltaprogramma in de Klimaatcorridor Veenweide- een quickscan klimaatadaptatie*. Utrecht: Nationaal Onderzoeksprogramma Kennis voor Klimaat.
- Vermeer, K. (2017, March). *Het succes van Kustwerk Katwijk*. Retrieved from Over Ondernemen: <http://www.overondernemen.com/projectmanagement/het-succes-van-kustwerk-katwijk>
- Verschuren, P., & Doorewaard, H. (2016). *Het ontwerpen van een onderzoek*. Amsterdam: Boom uitgevers Amsterdam.
- Waterforum. (2018, September 18). *IenW-begroting: 375 miljoen voor aanpak rivierengebied*. Retrieved from Waterforum: <https://www.waterforum.net/ienw-begroting-375-miljoen-voor-aanpak-rivierengebied/>

- Waterschap Limburg. (2017). *Ruimtelijke kwaliteit Noordelijke Maasvallei: Visie & Leidende Principes. Hoogwaterbeschermingsprogramma Noordelijke Maasvallei*. Waterschap Limburg.
- Yin, R. K. (2014). *Case Study Research: Design and Methods*. Thousand Oaks: SAGE Publications, Inc.

Appendices

Appendix 1: Dutch policy context

History of Dutch Water safety

The Netherlands always has been a country with a potential risk to a catastrophic flooding. The Dutch management and approach regarding water safety has shifted through the time. For decades the Dutch flood risk management was based on creating defenses that decreased the probability of a flooding in the Netherlands. This has been a very technocratic approach. Technical solutions were found for reducing the flood risks. Higher and stronger defenses were established repeatedly. Often times protection against flooding was realized simultaneously with the reclamation of land. This new land provided opportunities for agriculture and other economic activities. This was in interest of the Dutch prosperity (Correljé & Broekhans, 2015). Therefore it could be stated that the flood protection was to a certain extent dependent on funding that only was invested when there was an economic value in protecting the area. Flood risk management as a collective interest had to compete with various private interests and values in water management. Correljé and Broekhans (2015) state that *'flood protection was dependent on a complex play between local and national political, economic and other goals, the values associated with these goals, the fait in technological water management solutions, and the complex of rules that determined the costs and benefits for the private and public parties involved'* (Correljé & Broekhans, 2015, p. 102).

In the year 1916 the 'Zuiderzee Werken' were constructed. This came from the idea of as well safety as land reclamation. Between 1948 and 1952 the quality of the Dutch coastal defenses was not an issue in the politics (Correljé & Broekhans, 2015).

An important moment in the history of Dutch flood risk management has been the flood of 1953. This flood has had an enormous impact on the Netherlands. After this event the Dutch government appointed the Delta Commission. The Delta Commission had the task to give recommendations for standardizing and improving the flood defenses and its management. Most valued in this flood protection approach was to guarantee that the population in the economically valuable areas was protected (Correljé & Broekhans, 2015). It is in the year 1953 that the first large scale plan for dike strengthening was established. The construction of the dikes took place in the 1960s and 1970s. The dikes were heavy, robust and large. The already existing (dike)landscape and the environment changed heavily. This change came with a lot of protest and critique (van Rijswijk, 2014).

As result of the protests, the minister of traffic and waterstate installed the research commission 'Becht' in the year 1975. This commission pleaded for designing dikes that included the environmental-, natural-, and cultural-historical value for the implementation within the river area (van Rijswijk, 2014). After the commission-Becht, the commission Boertien was installed. Again, they advised to take the landscape, nature and culture into account when a dike is constructed. The idea of 'integral designing' was established.

In the year 1995 the Netherlands faced a flood risk. This resulted in an enormous reinforcement task with a high priority. The dike reinforcements were executed under the 'noodwet'. This entailed that the decision-making- and permit procedure were accelerated. The public consultation procedure was shortened. Because of this high priority there was a fear that the execution would only consider the interest of water safety. However, because of the advice of the commission Boertien, there was attention for the spatial implementation in the landscape (van Rijswijk, 2014).

It can be stated that there has been a cultural-/mindshift on water safety in the Netherlands. Since only around fifty years there is a discussion about the spatial quality of dikes, instead of an approach in which safety was the only concern (van Rijswijk, 2014; Correljé & Broekhans, 2015). For decades there has been an approach wherein flood protection was dependent on local and national political and economic goals. When you place this in the context of linking opportunities and integrality it could be stated that economic and political goals like agriculture, shipping and land reclamation were the main priority why flood protection or water management was executed. Post 1953 the approach shifted to the main and only importance on the water safety. Less room was given to other objectives and spatial quality. Because of societal resistance spatial quality became more and more included in water safety measures. With the Deltaprogramme, Ruimte voor de Rivier and MIRT there has been an increasing attention for spatial and integral designing within water safety projects (van Rijswijk, 2014).

Recent and current water safety policy

Deltaprogramme

Every year, since the year 2010, a new Deltaprogramme is presented. In this Deltaprogramme the national strategy regarding the water domain is formulated. In this programme the national government, provinces, water authorities and municipalities cooperate intensively in order to achieve collaborative and national goals formulated in the Deltaprogramme. An strategy of 'adaptive deltamanagement' is used to achieve the collective goals. With adaptive deltamanagement there is looked into the future for challenges ahead, collective measures are taken and there is a constant check if the tempo and direction of the strategy is effective. Adaptive deltamanagement is used for the multiple themes the Deltaprogramme focuses on. These are: Water safety, fresh water supply and spatial adaptation (Staf Deltacommissaris, 2018).

Integrality is central to the development and execution of the Deltaprogramme. Spatial coherence and the connection of different problems and solutions between various sectors and/or levels of governance is of importance to integrality. Specifically for the Deltaprogramme integrality means the realization of ambitions for water safety or fresh water supply, by connecting these with ambitions of other policy fields (Biesbroek, Termeer, Dewulf, Keessen, & Groothuijse, 2014). Integration always goes with making choices in what and how to include certain ambitions. Integrality is diverse. It includes the search to smart links to other ambitions, the creation of synergies with already existing ambitions, but also the synchronization of administrative processes, broadening the balancing of interests, and improving the societal benefits (Biesbroek, Termeer, Dewulf, Keessen, & Groothuijse, 2014, p. 3).

Links to other policy fields, such as nature, urban development, agriculture and more, lead to new ways of integration. There will rise new links between public and private and between ambitions of the national government, with regional, local and international ambitions.

The deltaprogramme has no formal dual objectives. The primary aims of the Deltaprogramme is to maintain or strengthen the water safety, fresh water supply and spatial adaptation.

Within the deltaprogramme of 2019 there is room for linking opportunities and integrality. It is stated that where is desirable an integral approach is used. This approach does not only focus on other aims of the Deltaprogramme, but also to other objectives and ambitions in the specific area (Staf Deltacommissaris, 2018).

From an evaluation of the Deltawet in 2016 it became clear that linking opportunities that had themes outside the themes of the Deltaprogramme were more successful than linking opportunities between the three themes of the Deltaprogramme itself. Therefore regions will give more attention to internal linking opportunities (Staf Deltacommissaris, 2018).

Ruimte voor de Rivier

In the year 2006 the 'Ruimte voor de Rivier' programme started. This programme had a dual objective. Besides the objective of water safety, an objective for spatial quality was included as part of the programme. Water safety and spatial quality were together the main focus of the 'Ruimte voor de Rivier' programme (Olde Wolbers, Das, Wiltink, & Brave, 2018). In the 'Planologische Kernbeslissing – Ruimte voor de Rivier' (PKB Ruimte voor de Rivier) it was decided by the cabinet which selection of measures that would be taken. Within the decision-making process they included which contribution the specific river widening could have for the local and/or regional spatial quality. Within the programme an independent quality team for spatial quality was installed. This so called 'Q-team' had the task to advise on the spatial quality in the specific measures and to check if the spatial quality improved. The Q-team stated that by finishing the projects the spatial quality in the project areas had improved in comparison with the initial situation in the year 2007 (Olde Wolbers, Das, Wiltink, & Brave, 2018). 'Ruimte voor de Rivier' was the first programme that did not only focus on reinforcing dikes, but also integrally focuses on lowering the water level of the rivers by giving more room to the riverbed (van Rijswijk, 2014). Within the programme 34 projects are realized. The programme was finished in the year 2016.

Hoogwaterbeschermingsprogramma (HWBP)

The Hoogwaterbeschermingsprogramma has a primary goal of establishing water safety through strengthening primary flood defenses so they meet the safety standards. These defenses could be dikes, dams, dunes and infrastructure works. The HWBP is part of the 'Deltaplan Waterveiligheid' what is respectively part of the Deltaprogramme. Most of the urgent projects of HWBP are located in river areas.

Van Rijswijk (2014) sets out practical and procedural recommendations regarding landscape integration and spatial quality within the Hoogwaterbeschermingsprogramma. It is stated that within the HWBP landscape integration is part of every measure. For landscape integration efforts there are possibly location specific measures or provisions needed in order to prevent, confine or compensate negative consequences (van Rijswijk, 2014). The level of the spatial quality in the area after the development of the measure will remain minimally the same as in the original situation. There is no explicit goal or aim in increasing or improving the spatial quality in the project areas. However, it can be an indirect consequence of a measure that has been integrated in the landscape well (van Rijswijk, 2014). Depending on the specific context linking opportunities, integration efforts and/or integral development is possible in the project area. Specifically provinces can have an important role as competent authority that is responsible for approving the content of spatial quality and integration in the area. Including more societal goals within projects has an possible positive impact on the image of the water authorities and the Hoogwaterbeschermingsprogramma.

The Hoogwaterbeschermingsprogramma will be realised in a sober and effective (Sober en Doelmatig) way. In this starting point there is room for efforts for a good integration in the landscape in order to prevent, confine or compensate negative impacts, as stated before (van Rijswijk, 2014). For other additional measures that are not water safety, there is an additional

financing needed from external parties (van Rijswijk, 2014). Examples of additional measures are improving and strengthening the spatial quality and improving the local traffic situation. Therefore linking opportunities and integral plans need to have time to establish (co)financing. From 2019 on the Hoogwaterbeschermingsprogramma gives this time to initiators by creating a 'potloodprogramming'. This entails a long-term programme of water safety projects in the coming six years (the formal programme) and the six year after that. Every year this potloodprogramming will be actualized for the next twelve years. In that way stakeholders gain insight in an earlier phase of the project on where the primary dike strengthening will take place. In this way they can become earlier involved in the project and can take steps to create an integral approach in the specific programme (Staf Deltacommissaris, 2018).

As can be seen in practice there are examples of integral approaches within HWBP projects. These examples focus mostly on exploring the combination between dike strengthening, creating more room for the river and area development. Creating room for the river can also contribute to ecological goals and improvement of the spatial quality (Staf Deltacommissaris, 2018).

Future water safety policy

Integral river management

With the program 'integral river management' a framework will be established by the Minister of Infrastructure and Waterstate on which measures can be chosen that will be implemented in the river area. One of the connecting measures of this program is broadening the river flowing area. This measure establishes water safety but contributes to other objectives as shipping, area development and other regional objectives (Staf Deltacommissaris, 2018). Within the Deltafund there is €375 million reserved for the programme integral river management. This programme can be seen as the successor of 'Ruimte voor de Rivier'. The programme integral river management will be included in policy in the year 2020 (Waterforum, 2018).

Environmental act

The new Environmental act of the Netherlands will be implemented in the year 2021. The act combines all laws for the living environment. The aim for this law is to bring coherence to different parts of the physical space. There should be room for local initiatives and customized solutions (Aan de slag met de Omgevingswet, 2019).

The environmental act has different themes or starting points. In this research these are translated as: 'Cultural change', 'participation', 'acceleration', 'integrality & coherence', 'plan-development process', 'sustainability' and 'digitalization' (Ministerie van Infrastructuur en Milieu, 2016).

Integrality is one of the main starting points of the Environmental act. Integrality is an abstract and theoretical concept. The theoretical concept has different implications in practice. From the theoretical view of the Environmental act there could be defined two different kinds of integrality: integrality in content and integrality in process (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2017). The content in this case is focused on policy. In integrality in content, the physical environment should be approached in an integral way. In this way integrality can be regarded as a result (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2017). Integrality as a process encompasses the way in which the content of policy goals will be reached. The aim to have an integral policy asks for taking right process steps to achieve integrality. In the process-approach

integrality can be regarded as method (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2017).

In the practice of integrality it is of importance to make a distinction between interests and decisions. Interests are part of the content of policy. Integral policy is aimed at the substantive integration of all interests. These interests must be weighed integrally and must lead to a decision. This is part of a process, a decision-making process (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2017). Within the concept of integrality both the result (content/interests) and a specific method (process/decision) are of importance.

An integral consideration is a consideration in which all substantive interests are included in the process of consideration. In these types of considerations there could be stated that all interests get a place in the policy in the particular area. However, an integral consideration does not necessarily have to lead to an equal representation of all interests and policy goals. Some policy goals or interests cannot be united, some are prevailed above others or some are of such importance that they displace other interests (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2017). A process has to be integral, but the result does not necessarily have to be integral. However, integrality is one of the pillars of the Environmental act, it does not necessarily mean that there always has to be a greater extent of integrality on both content as process (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2017).

Participation can be regarded as part of integrality. A person who participates is a stakeholder that has an interest. Integrality can occur on three levels. On a local level, on national government level and on the level of government parties.

Appendix 2: Interview Guide

Dutch interview guide

Onderzoeksvragen:

Hoofdvraag:

“Which barriers and benefits can be identified for implementing linking opportunities in water safety measures?”

Subvragen:

“Which sorts of linking opportunities can be identified?”

“In what way is dealt with linking opportunities in the current situation?”

“Which factors are perceived as being a benefit and by whom?”

“Which factors are perceived as being a barrier and by whom?”

“Why are these factors perceived as a benefit or a barrier and by whom?”

“Which actors or factors can either positively or negatively influence linking opportunities?”

• Opening interview

- Persoonlijke introductie
- Dank voor interview
- Doel interview en achtergrond onderzoek
- Besproken recht op vertrouwelijkheid en anonimiteit
- Recht op het onthouden van een antwoord
- Wat er gebeurt met de data
- Audio-opname interview: toestemming

• Thema's interview

Politieke factoren

- Belang van actor
- Belangen van andere actoren
- Gewenste uitkomsten
- Perceptie van doelbereik tot op heden
- Gemeenschappelijke definitie van wat er speelt in het gebied
- Overeenkomsten in doelen
- Gemeenschappelijke waarden
- Wederzijdse afhankelijkheid van actoren
- Organisatievermogen van actoren
- Expertise bij actoren
- Mogelijkheid om te participeren

Institutionele en organisatorische factoren

- Inclusiviteit van actoren
- Alternatief forum
- Samenwerkingsregels
- Transparantie
- Betrokkenheid van actoren
- Interactie tussen actoren
- Besluitvormingsproces
- Structuur projectorganisatie

Economische en financiële factoren

- Ervaren onzekerheden en risico's
- Verdeelsleutel proceskosten
- Verdeelsleutel realisatiekosten
- Verdeling van verantwoordelijkheid
- Stimulering samenwerking

Proces-, management- en instrumentele factoren

- Communicatie
- Commitment
- Draagvlak (omgeving)
- Beleidsinstrumenten
- Scope project
- Flexibiliteit
- Project planning

Gedrags-, culturele-, en persoonlijke factoren

- Vertrouwen in andere actoren
- Manier van bouwen van vertrouwen
- Leiderschap (empowerment, mobiliseren, consensus, vertrouwen, betrekken)
- Samenwerkingsrelaties
- Historische relaties
- Wederzijds begrip

• **Afsluiting interview**

- Heeft u nog vragen?
- Dank voor interview
- Verwerking data
- Vervolg voor onderzoek
- Toesturen concept
- Mogelijk vragen naar volgens hen interessante personen om te interviewen

Research questions :

Main question:

“Which barriers and benefits can be identified for implementing linking opportunities in water safety measures?”

Sub-questions:

“Which sorts of linking opportunities can be identified?”

“In what way is dealt with linking opportunities in the current situation?”

“Which factors are perceived as being a benefit and by whom?”

“Which factors are perceived as being a barrier and by whom?”

“Why are these factors perceived as a benefit or a barrier and by whom?”

“Which actors or factors can either positively or negatively influence linking opportunities?”

- **Opening interview**

- Personal introduction
- Appreciation of the interview
- Aim of the interview and context of the research
- Already discussed right on confidentiality and anonymity
- Right to not answer questions
- What happens to the data
- Audio-record of the interview: Permission

- **Themes of the interview**

Political factors

- Interest of an actor
- Interests of other actors
- Desired outcomes
- Perception on the outcomes until present
- Shared definition of occurring issues in the area
- Similarities in goals
- Shared values
- Interdependence of actors
- Ability to organise of actors
- Expertise among actors
- Ability to participate

Institutional and organisational factors

- Inclusiveness of actors
- Alternative forum
- Rules for collaboration
- Transparency

- Involvement of actors
- Interaction between actors
- Decision-making process
- Structure of the project organisation

Economic and financial factors

- Perceived insecurities and risks
- Distribution key of the process costs
- Distribution key of the realisation costs
- Distribution of responsibilities
- Incentives for collaboration

Process-, management-, and instrumental factors

- Communication
- Commitment
- Support of local actors
- Policy instruments
- Scope of the project
- Flexibility
- Project planning

Behavioural-, cultural- and personal factors

- Trust in other actors
- Way of trust-building
- Leadership (Empowerment, mobilisation, consensus, trust, involving)
- Collaborative relations
- Historical relations
- Mutual understanding

● **Closing the interview**

- Do you have any questions?
- Thank you for the interview
- Processing data
- The following steps of the research
- Sending the draft
- If possible ask for persons that are interesting to interview, according to them.

Appendix 3: Overview of the roles of interviewed respondents

Kustwerk Katwijk	Date of interview	Wijk bij Duurstede - Amerongen	Date of interview	Baarlo – Hout-Blerick	Date of interview
Project manager first phase, Arcadis	24-10-2019	Hoogheemraad, Hoogheemraadschap de Stichtse Rijnlanden	11-12-2019	Stakeholder engagement manager Noordelijke Maasvallei, Waterschap Limburg	12-12-2019
Project manager second phase, Arcadis	25-11-2019	Project manager, Hoogheemraadschap de Stichtse Rijnlanden	19-12-2019	Stakeholder engagement manager Baarlo - Hout-Blerick, Waterschap Limburg	13-1-2020
Project manager, Hoogheemraadschap van Rijnland	21-10-2019	Stakeholder engagement manager, Arcadis	19-11-2019	First project manager, Arcadis	18-11-2019
Stakeholder engagement manager, Arcadis	6-12-2019	Stakeholder engagement manager, Hoogheemraadschap de Stichtse Rijnlanden	5-12-2019	Second project manager, Arcadis	6-12-2019
Project manager flood defence, Hoogheemraadschap van Rijnland	22-11-2019	Official municipality of Wijk bij Duurstede	9-12-2019	Official municipality of Venlo	13-1-2020
Project manager parking garage, Municipality of Katwijk	30-10-2019			Official municipality Peel en Maas	16-12-2019