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The logo for the International Institute of Social Studies, featuring the word "Erasmus" in a stylized, cursive script.

**Responding to Climate Change:
Policy translation from the Netherlands to Colombia, Jarillon Plan Cali**

A Research Paper Design

by:

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Disclaimer:

This document represents part of the author's study program while at the International Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

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Acknowledgments

This research encapsulates the real-life narrative through the lens of a theoretical discussion. Many stories could have been told throughout this journey, but it aims to do justice to the human drama experienced by some Colombians and resonates in various corners of the world. Here it is examined from a governance perspective, serving on academic tools to interpret social phenomena. It is the story of a city, its people, and its experiences as subjects of a developmental project read from the policy making level. With a genuine interest to understand how in today's globalized world, aid flows freely, but who truly champions the cause of the vulnerable?

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Table of Contents

Acknowledgments	iii
List of Tables.....	v
List of Figures	v
List of Images.....	v
List of Acronyms	vi
Abstract	vii
<i>Chapter 1: Introduction</i>	<i>1</i>
1.1 Research Objectives and Questions	3
1.2 Research relevance in the social science	3
<i>Chapter 2: Theoretical debate.....</i>	<i>4</i>
2.1 The Dutch Expertise in Water Management	4
2.2 Policy Translation in Water Cooperation.....	5
2.2.1 Vulnerability Framework.....	6
2.3 What is Policy Translation?	7
<i>Chapter 3: Context of the discussion</i>	<i>11</i>
3.1 Cooperation for Climate Adaptability in Colombia	11
3.2 An overview of the inhabitant's reality	12
<i>Chapter 4: Methods and Methodology</i>	<i>13</i>
4.1 Research Design.....	13
4.2 Data Collection Techniques	14
4.3 Data analysis	14
4.3 Positionality and Ethical Considerations.....	15
4.5 Challenges and Limitations.....	16
<i>Chapter 5: Findings.....</i>	<i>17</i>
5.1 What is being transferred?	17
5.2 Actors Negotiation.....	19
5.3 Translation Process	21
5.4 Context	23
5.5 Landing the Policy	25
<i>Chapter 6: Discussion and reflections.....</i>	<i>27</i>
6.1 Knowledge and Human Component	27
6.2 Technology transfer	28
6.3 Addressing and Creating Vulnerability	29

Conclusions.....	30
Appendices	32
Appendix A. Informed consent.....	32
Appendix B. Semi structure Interview Sample.....	34
Appendix C. Dutch Projects in Cauca River 2011-2016	37
References.....	38

List of Tables

Table 1. Variables developed from the Theoretical Framework	10
Table 2. Sources of information.....	14
Table 3. Recommendations given by the project Agublanca Dike	22
Table 4. Dutch Cooperation in the Valle del Cauca River 2011 – 2016	37

List of Figures

Figure 1. Agents involved in the negotiation to land the policy – formal network.	21
Figure 2. Local Actor for project implementation.....	25

List of Images

Image 1. Jarillon Profile 2012, before intervention	24
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List of Acronyms

CCA	- Climate Change Adaptation
CVC	- Regional Autonomous Corporation of Valle del Cauca
DAGMA	- Administrative Department of Environmental Management
DDA	- Dutch Delta Approach
DFPP	- Flood Protection Programme
DNP	- National Planning Department
DRR	- Disaster Risk Reduction
EMCALI	- Municipal Companies from Cali
FA	- National Adaptation Fund
IHS	- Informal Human Settlements
I&W	- Ministerie van Infrastructuur en Waterstaat
IOB	- Policy and Operations Evaluation Department
MZ	- Ministry of Foreign Affairs
NWP	- Netherlands Water Partnership
OSSO	- Southwestern Seismological Observatory
PvW	- Partners for Water
RHDHV	- Royal HaskoningDHV
RVO	- Netherlands Enterprise Agency

Abstract

In the last decades, climate change has been affecting human lives, and ways of relating and organizing in society. Major climate phenomena have pushed governments to respond to the need to adapt to the new climate conditions. In Colombia, in 2010-2011 La Niña phenomenon caused heavy rains affecting 9% of the population, remaining in areas at risk of flooding. In response, the Colombian government looked to have an agreement with the Netherlands Enterprise Agency to implement a project for Risk Reduction and Climate Adaptation. As a result, Plan Jarillon was led by Royal HaskoningDHV and OSSO Corporation in Cali, Colombia. Regarding the recommendations handed to the Cali Municipality, 8.775 families were forced to resettle in the city to allow the dike reinforcement. Nowadays, these families tell stories of dispossession and right violations and the exacerbation of conditions marked by violence and poverty. I investigated the mechanism for policy translation during the policy negotiation, design, and initial implementation with a broader overlook of challenges related to the translation of ideas. This research wonders how the policy was translated from the Netherlands to Cali describing the main components acknowledged by the literature (the translation processes the actors, level of translation, context, and lessons that facilitate or make it more difficult the implementation). The analysis pays careful attention to the understanding of vulnerability during the policy translation process to finally reflect on how vulnerability can be addressed and enhanced in the same process. Primary data was collected through semi-structured interviews with policy participants in the Netherlands and Colombia and secondary data through document analysis, which was processed using a framework analysis approach. We conclude that human relations played a key role during the negotiation process increasing the probability for cooperation. Additionally, challenges such as technical and meanings during transfer in the Jarillon project. I aim for a more integral perspective during the phase of project design and translation for the replication of policies in developing countries where the policy ideas can be adapted to the context, through innovative strategies for policy adaptation to avoid enforcing new expressions of vulnerability.

Keywords: Climate Adaptation, Disaster Risk Reduction, Policy Translation, Vulnerability, Plan Jarillon, Cali, Water Cooperation.

Chapter 1: Introduction

From October 2010 to May 2011 La Niña phenomenon, a multi-hazard event associated with the event of floods, windstorms, lightning, and landslides occurred in South America, affecting countries like Colombia, Panama, Brazil, Argentina, Bolivia, and Venezuela. In Colombia, 9% of the total population was affected and it caused economic losses of approximately US\$7.8 billion (Hoyos et al, 2013). This phenomenon affected communities with a high sensitivity to climate hazards, and vulnerable populations to protect themselves from external events due to social, economic, and demographic characteristics that made them susceptible to these externalities (Cutter, Boruff, and Shirley, 2003; UNISDR, 2009).

The impact of this phenomenon raised the awareness of the Colombian government to consider projects for climate adaptability and respond to climate hazards. Acknowledging the 'high vulnerability' for certain populations and the need to work towards adaptation, the government officialize a partnership with the Netherlands to attend the consequences of climate variability and climate change, including interaction with urban and rural planning, and related areas of interest (Dutch Water Sector, 2012).

In 2012 this agreement materialized in four main projects, one being the Plan Jarillon¹ in Cali, Colombia, one of those where more than 900.000 people were in risk of flood to the failure in the dike on the Aguablanca dike (FA, 2014). This is a project for Climate Change Adaptation - CCA and Disaster Risk Reduction -DRR purposes that was developed cooperation with the Colombian authorities and the Netherlands Enterprise Agency -RVO (based in Colombia). RVO had the role of partial donor paying directly to the commissioned Dutch consultancy 'Royal HaskoningDHV' – RHDHV, (in collaboration with the Colombian consultancy 'Corporación OSSO²') approached the risk of flood by providing recommendations to the municipality focused on raising the security level of the dike; resettling houses on the dike and the berm; and others related to the implementation of jurisdiction and institutions responsible of the dike maintenance and control of species in the area.

The Netherlands as a trusted actor with a large expertise in water management has branded itself with the knowledge to share the know-how in water management to sell abroad (Spitz, Muskens, and van Ewijk, 2013). One of the main knowledge areas that is transferred from the Netherlands around the world is the knowledge for dike reinforcement, as other policies such as Room for the River and Water as Leverage (RVO, 2017). The technical assistance offered by the Netherlands in the project in Cali was well received through the National Adaptation Fund -FA who coordinates with different agencies at the local level to execute the recommendation given by the donors.

¹ This is the project's name, written in Spanish referring to a concrete or earth construction made to control, contain, or conduct the waters of a river, to prevent the waters from overflowing or to protect land that is vulnerable to currents.

² From now OSSO, is the Southwestern Seismological Observatory – OSSO in Spanish, an NGO, dedicated to "promoting, supporting and executing scientific research, dissemination and extension of knowledge, appropriation and development of methodologies and technologies as well as activities related, in the fields of the dynamics of the Solid Earth, the Hydrosphere and the Atmosphere, and their interactions with Society" (OSSO Corporation, nd)

The translation of this initiative for dike reinforcement had a huge social implication in the relocation of 8.775 families. The project implementation started in 2015, however as of September 2023, only 51% of the housing infrastructure has been allocated, leaving numerous families on the waiting list for relocation (FA, 2023). This process has posed significant challenges for the municipality, as they encountered resistance to the resettlement process. Newcomers often settle on the former land, later seeking legal ownership. Those who have been moved frequently rely on municipality subsidies and must meet various conditions to obtain their own houses (Cali Municipality, 2022). Additionally, many families have found it difficult to adapt to new regulations and administrative responsibilities related to acquiring legal housing in the city (Uribe, Osorio, and Holguin, 2020). Furthermore, the relocation process is marked by numerous unique stories of dispossession and rights violation, involving families historically displaced by the internal conflict who face challenges in terms of constructing and appropriating citizenship (Uribe, Osorio, and Holguin, 2020).

This research unravels the recommendations transferred from the Netherlands as the starting point of a project in the city that had been running for the last 10 years (FA, 2014). Meanwhile, the community that had been moved due to the dam reinforcement argues for the loss of the community's livelihood, the enforcement of vulnerability, and the difficulties adapting to multicultural contexts (Diaz et al., 2017). The Plan Jarillon project has held a prominent position on the local political agenda by the municipality, citizens, and media, thus the project's shortcomings brought significant criticism, impacting the reputation of the mayors implicated (Soto, 2018). Economically, the project involves multiple stakeholders in its execution, that have been adversely affected by delays in the relocation process, which, in turn, have delayed the contract's execution.

This research will use the policy translation framework to explain the process of travel of ideas, meanings, and language from the original policy to the contextualized transfer process (Mukhtarov and Daniell, 2016). This approach has been previously used to analyze the performance of the Netherlands in delta countries, in the transfer of ideas from projects like Room for the River, Coastal Management, and Water Management (Hasan et al. 2020; Kang, Dieperink, and Hegger, 2022; Mukhtarov, 2007; and Laeni et al. 2021). Policy translation is a distinctive approach that refers to the exchange of ideas, and the evolution of shared understanding (Mukhtarov, 2014). Its core objective is to disentangle the dynamics through which knowledge about institutions, policies, or delivery systems in one sector or level of governance influences the development of these elements in another sector or level (Evans, 2009; Mukhtarov, F. 2014; and 2022).

A reading from the policy translation lenses that contemplates the approach on vulnerability during the translation process contributes to a new perspective on the academic research on this discipline. This analysis contributes to the ongoing discussions surrounding policy translation initiatives from the Netherlands to other countries, particularly in the context of how vulnerability is addressed and its potential impact on the reputation of project cooperation. Previous studies on this case had focused on the analysis of power relations in the project and providing a view into the population's experiences with the relocation process and challenges. Collazos & Hernández (2017), Moreno-Quintero & Selfa (2021), Orobio (2019), and Uribe, Osorio, and Holguín (2022) are offering a comprehensive view of the history surrounding the construction of the dike in the Jarillon area. Finally, Aguilar et al. (2014) and Jiménez, Burbano, and Velásquez (2017) track the

agreements during the project, outlining involvement of international actors like the Netherlands and the World Bank, justifying the dike's reinforcement and introducing climate change discourse as a strategic element to facilitate the execution of the developmental project and the resettlement of the affected population.

This strategy for Risk Reduction and climate adaptation in Cali Colombia is analyzed from an inductive-deductive approach. The methodology applied in this research is the framework analysis, looking into various documents and semi-structured interviews with actors involved in the policy negotiation and implementation process in the process negotiation in Cali, but also in the design phase from the Netherlands.

The goal of policy translation does not imply a direct conversion of research findings into policy designs or recommendations; rather, it primarily focuses on a distinct task or mission, to understand and describe the process (Mukhtarov, 2014). In this context, the results cannot be generalized or imposed, thus developmental discourse falls again replication elsewhere what might be helpful in a specific setting (Feek, 2010).

1.1 Research Objectives and Questions

This research aims to explain how the policy was translated from the Netherlands to Colombia in the Plan Jarillon Project in Cali, Colombia (2013 to 2022). Looking towards the translation of ideas to describe the policy implementation. This is to, first, describe the translation of policy ideas from the Netherlands to Colombia, in cooperation with the Jarillon Project. And second, to describe to what extent the Netherlands' cooperation in Colombia took into consideration the communities' vulnerability.

As the main research question, this investigation proposes to inquire:

How was facilitated the translation policy for Flood Protection in the Netherlands, and how was addressed people's vulnerability in the project for climate adaptability from the Netherlands to Cali, Colombia in the Jarillon project in Cali, Colombia?

Sub questions:

1. How was facilitated the translation of the policy for Flood Protection from the Netherlands to Cali in the Plan Jarillon Project?
2. What were the challenges faced by the Municipality for the direct implementation of the recommendations provided by RHDHV and OSSO?
3. How was vulnerability interpreted throughout the policy translation process by the main actors? What are the approaches by the different actors?

1.2 Research relevance in the social science

The complexities of policy translation within water cooperation projects hold significant importance for both policy and governance discussions. Similarly, the experiences of local communities that are affected by climate change and later, communities as the recipients of climate adaptability and risk reduction initiatives are invaluable for drawing conclusions and encouraging

a continuous process of learning and project improvement in the debate of water cooperation initiatives. To achieve this objective, the aim is to gain an understanding of the various stakeholders involved in the project, where their interests, priorities, and benefits can thoroughly be described. This analysis seeks to clarify the translation of ideas between the international donors, the Netherlands, and the recipient country, Colombia, contributing to the ongoing cycle of policy learning.

In the current developmental agenda, there is a growing discussion about enhancing strategies in international cooperation for DRR and CCA. These have emerged as pivotal concepts, with ongoing efforts aimed at their integration into the broader developmental framework (Dwiraahmadi et al., 2013). Nevertheless, the translation of these concepts into practical policies at regional and local levels is uptight with complex political challenges, further exacerbated by the increasing frequency of disasters in many regions (Ogra et al, 2021).

An innovative approach to climate adaptability projects involves considering the vulnerability approach within policy translation as an independent variable. This approach is essential for shaping a literature that aligns with policymakers' perspectives and acknowledges the impact of community recipients on their ways of life. Therefore, this research may add to the developmental studies as it is approaching components of framing analysis on CCA that is changing the life conditions of vulnerable people.

Chapter 2: Theoretical debate

This chapter will situate the reader in the discussion, first, presenting the Netherlands as an actor that has relevant knowledge of water management and has sold its expertise globally. Second, explaining the context where Colombia requires Dutch expertise. Third, the concepts of policy translation are explained in the context of studies for water management with attention to the vulnerability of affected communities. Finally, a discussion to situate the concept of vulnerability.

2.1 The Dutch Expertise in Water Management

The Netherlands has used water diplomacy to govern through norm-building and soft law (Conca, 2006). An integral aspect of this international endeavor is 'water diplomacy,' which involves the collaborative efforts of both nation-states and non-state entities in establishing institutions, directing investments, fostering regional development challenges, and addressing water conflicts through prevention, mediation, and transformation (Mukhtarov et al 2021).

Water is branded as one of the main sectors to give a significant contribution to developing countries, working with organizations, networks, and programmed fund facilities, as stated in a report by the Netherlands Enterprise Agency -RVO (RVO 2017). In 2010, the Netherlands established Water OS as an instrument to guide their developmental cooperation efforts, with a primary focus on addressing global challenges while specifically targeting the unique barriers to achieving sustainable growth and self-sufficiency in individual countries (RVO 2017). From this resolution, the Netherlands decided to concentrate its work on topics such as the relevance of

poverty reduction, growth, and self-reliance in developing countries in addition to the strategic interest of the Netherlands, related to food security and water from 2011 onwards (RVO 2017).

For this purpose, the Dutch Ministry of Foreign Affairs fulfills the role of broker an initiator of cooperation towards governmental organizations, research institutes, the private sector, and civil society organizations. The purpose is to expand public-private partnerships to improve water management and adapt to climate change increasing the number of partner countries to work with (RVO, 2017). In the international arena, the Ministry of Foreign Affairs – MZ specially the area of Operations Evaluation Department – IOB, considers that investing in public infrastructure in developing countries is a tool to strengthen economies.

Public infrastructure is at the core of the structural transformation of economies. Demand for it even seems to be accelerating as developing countries' economies grow. There is broad international consensus that a country's infrastructure is a critical factor in attracting foreign direct investment (FDI), promoting trade, and sustaining growth. Infrastructure is also crucial to support social progress and to achieve the Millennium Development Goals (IOB, 2015, p.3).

However, infrastructural projects do not travel by themselves. In water management matters, the Netherlands has facilitated throughout their infrastructural works the creation of dedicated regional water boards, and a well-development expert community. This makes the country one of the most securely safeguarded delta regions globally and the international standard for effective delta management to offer this expertise to others (Van Buuren, 2019).

2.2 Policy Translation in Water Cooperation

The Netherlands has strategically and politically framed Dutch water management as a global solution for enhancing water safety and flood protection in other countries. This process of translation of ideas has been broadly studied through the lenses of policy transfer or policy translation (Hasan, Evers, Zwarteveen, 2020; Hasan et al. 2021; Hasan et al. 2019; Kang et al. 2022; Mukhtarov, 2007; Laeni et al. 2021). This thesis focusses on this cross-border travel of policies through the concept of 'policy translation', which brings attention to the dynamic interactions between different contexts and actors, delving into the active role of policy actors and the ways in which these actors influence the process of policy translation (Laeni et al. 2021, Mukhtarov, 2014). Policy translation allows attention to the role of actors who negotiate and create interest, being the actor more than a channel to transfer ideas and taking an active role in creating a policy result, being important the language, and meanings given to the message (Kang, 2022).

Policy translation differs from policy transfer because it looks at the role of language and negotiation to transform the meanings in the cross-border travel of policies innovating the construction of shared meanings in empirical cases (Laeni et al. 2021, Mukhtarov, 2014). As explained by Laeni et al (2021) policy translation focuses on several aspects when policies cross borders, such as programs, ideas, and projects that are taken from one place to be implemented in another setting. First, it highlights the divergence, mutation, and hybridization of policy ideas. Second, it underscores the concept of 'bricolage,' which involves the strategic and dynamic interactions among stakeholders as they communicate and exchange policy ideas and solutions. Third, the policy translation literature argues that policy actors engaged in cross-border policymaking should not be seen as passive and rational agents but rather as active policy 'brokers.'

These brokers strategically adjust, select, and adapt transnational norms and ideas to fit their national institutional context (Laeni et al. 2021).

The tools that the theoretical approach of policy translation offers to researchers have been broadly used to understand the Dutch Delta Approach-DDA as water experts in developing countries. However, these studies do not include in their reading the role of communities' vulnerability. Even when developmental policies, more specifically directed to water management projects have shown that water infrastructure projects can dispossess local communities increasing vulnerability and exacerbating poverty (Barlow & Clarke, 2005; Prakash & Piscopo, 2019; Patnaik, 2012); equally policies for climate adaptability had to attend vulnerability as a result from this adaptability policies (Watson, 2000; Brunner et al, 2010) however, there are little studies that contemplate this perspective from a policy translation frame.

2.2.1 Vulnerability Framework

The governmental responses to climate change and climate adaptability are being more studied, the experiences of affected actors are gaining relevance, and due to the disconcerting results of policies, social actors are being considered through the integration of vulnerability frames even when a policy well-considered this framework does not guarantee a proper translation in the efforts to address a vulnerability (Martens, McEvoy, and Chang, 2009; Le Masson, 2015). Thus, interaction between different policy actors is key to create a valuable contribution to produce informed policies that do not enforce the vulnerability conditions of communities.

Touching upon vulnerability through a climate change approach is situating in a politically charged approach, that considers the ecological, environmental, and social justice discussions, including climate justice and disaster justice, addressing the questions of justice, responsibility, and agency (Adger, 2006). It also connects the work done in various disciplines as "climate change" and DRRD which are often perceived as disconnected rather than overlapping (Mika & Leman, 2021). However, the conceptualization of vulnerability is still a bottom-up approach, meanwhile, adaptation is a top-down approach that discloses a conceptual power struggle between Western governments, financial institutions, multinationals, and others that reproduce a status quo (Bankoff 2022).

CCA is finally implemented at the community scale, through the response for adaptation to risk associated with the interaction of environmental hazards and human vulnerability (Smit, 2006). Therefore, climate change scholars have provided a model to understand vulnerability, explaining that it can be experienced at any scale, being reflective of the different functions of the exposure and sensitivity of the specific community to hazard conditions and its ability, capacity, or resilience of the system to adapt and recover the effects of those conditions. Representing the forces that determine the exposure and sensitivity that shape the local or community level in its subgroups (Smit and Wandel 2006). The results from environmental and social forces produce exposures and sensitivities, as social, cultural, political, and economic factors influence their capacity. At the same time these factors are dynamic and vary over time and weight regarding people's group. In this sense, vulnerability can be created by different climatic detonating factors. However, the effects on the community will depend on their exposure and sensitivity to the environmental risk, regarding its likelihood to experience main changes caused by their settlement location, livelihood, and land uses (Smit & Wandel 2006).

On the other hand, vulnerability from the DRR studies frames the concept from the exposure of communities to extreme events a situation, feeling unsafe, which is heavily influenced by societal order, and the relative advantages or disadvantages experienced by specific groups. This understanding of vulnerability has also provided a means to critique development projects that aimed to achieve material prosperity. This is because many development initiatives require the conversion of agricultural or coastal lands into industrial and commercial zones, often displacing communities without proper consultation. This displacement not only disrupts their homes and livelihoods but also infringes upon their rights to cultivate their land, impacting their dignity, identity, and roots. This phenomenon has led to the popularization of the term ‘development aggression’ to describe projects that harm communities rather than benefit them (Bankoff, 2022; Heijmas 2004).

Vulnerability as a hazard can also be interpreted from different epistemological positions regarding the objectives of the research, moving from a scope of vulnerability to hazards to vulnerability to social conditions may change the interpretation as Adger (2006) explains, vulnerability to global change has shown that institutions adapt to environmental risk and that there exists an interdependence between environmental risk, political economy of development, and resilience. For Adger (2006) this showcases the main challenges as the need to size vulnerability; to measure objective indicators to describe the vulnerability, and finally, from the governance implications of vulnerability.

What concerns this study, is the governance implications, which means the challenge to address vulnerability from governance solutions. This is because “vulnerable people and places are often excluded from decision-making and from access to power and resources” (Adger, 2006, p 276). Policy interventions must consider the causes of vulnerability and compensate for marginalization as a cause of social vulnerability. Moreover, they might recognize the different types of knowledge and governance systems in the globalized context to manage risk and promote resilience (Adger, 2006). In this sense, vulnerability must be discussed also from the governance perspective challenging the promotion of good governance to minimize exclusion and reduce perceived vulnerability.

This discussion must be central in the discussion for policymakers and decision-makers for adaptative action. Actions for adaptation can be directed in such a way that can reduce the vulnerability of the ones in a better position to be benefited by governance institutions, rather than reduce the vulnerability of the marginalized (Adger, 2006).

A critical perspective on policy translation should be complemented with an interpretive approach that highlights key areas for policymaker considerations. At the same time, policymakers face the challenge of addressing vulnerability, a concept open to various interpretations within the broader discussion. Considering the numerous criticisms surrounding the impact of development on vulnerable communities, this research seeks to delve to consider the approach to vulnerability within the context of the policy strategy known as Plan Jarillon.

2.3 What is Policy Translation?

The travel of policy ideas has been broadly studied having approximations from concepts such as policy transfer, policy diffusion, and lesson drawing, the different contributions from this literature offer variables and an understanding of the construction of variables that build on the travel of

ideas from one setting to another and are framed on policy translation, here we will study those to conclude with a selection of the main interpretations/variables for the data analysis.

First, policy transfer refers to “the process by which actors borrow policies developed in one setting to develop programs and policies within another” (Dolowitz & Marsh 1996, p, 357). Policy transfer is contextualized as a common phenomenon in the industrialized context, where globalization and international organizations play a role in the development of policies, administrative arrangements, institutions, and ideas in a political setting (Dolowitz & Marsh, 2000).

The study of policy transfer implies delving beyond its limitations to encompass the description, explanation, and prescription of the theory of policy change from an action-based perspective (Evans, 2009). This to make sense of a process of series or processes where knowledge regarding institutions, policies, or delivery systems is transferred. Here, ideas are reflected in between systems of governance moved through policy transfer networks and the intermediation of rational agents in the process. To study this process, Evans (2009) investigated the agents of policy transfer, the forms, obstacles to policy-oriented learning, and the outputs of the transfer. Moreover, he gives various proposals on the existing approaches to studying policy transfer and offers categories to explain the reasons for public organizations to engage in policy transfer.

On the other hand, policy diffusion examines the adoption of patterns across broad units and focuses on identifying listing points for early and late adopters, as well as policies with higher diffusion rates. This field of study primarily emphasizes structural factors like globalization and competition, often placing more importance on them than on the roles of diffusion agents and national-level politics (Mukhtarov, 2022).

Little attention is given to studying the optimal means to achieve a goal, instead, international organizations promote formal theories globally that are adopted by sub-global countries inferring the same policies will be effective for them (Dobbin, Simmons, and Geoffrey, 2007). Policy diffusion happens when a government -national legislature, state agency, or city adopts a new policy-, seeking innovation that can be instigated within the political system by the interest of advocating groups or electoral and institutional factors. Or by an external influence due to the transfer of innovative policies between governments (Shipan and Volden, 2008). However, this reduces the participating actors to instruments that can facilitate or prevent policy implementation (Hasan, Evers, and Zwarteveen, 2020).

Finally, lesson drawing is a stream that studies the understanding of the circumstances and extent that programs have in one place to be transferred to another. The lesson drawing explains the reasons behind the occurrence of transfer. This involves the initial examination of existing programs elsewhere, culminating in the prospective evaluation of the potential outcomes if such a program were to be transferred to a new context in the future (Rose, 1991).

Transfer of knowledge seems possible due to the existence of shared problems, at least in appearance, when these are unique and contextual. The desire to learn from others motivates the diffusion of processes that might have geographical, socioeconomical, ideological, and individual characteristics of the policymaker that play a role, which makes the process contextual to its environment. Even though the intention of scanning the experience of other nations does not anticipate becoming an expert, instead, it is to gain ideas to handle better own problems (Rose, 1991).

As a result, policy translation merges as a critique of the previous streams. This refers to the travel of ideas, the role of translation, and changes in meaning establishing shared understanding and how it can be cultivated (Freeman, 2009). In essence, it covers the concept of transfer, which involves the transmission of knowledge and evidence from one context to another, much like the process of moving knowledge ‘from bench to bedside.’

Translation, distinct from interpretation, focuses on understanding and emphasizes the creation of new meanings, which can be ideas, slogans, objects, and actions (Mukhtarov, 2014). It implies producing new products that reshape the identities and interests of social actors in relation to the text and the context (Freeman, 2009; Mukhtarov, 2014). For Freeman (2009) translation is not isolated; it can both lose and create information and meaning. The translation product serves various purposes and interests, depending on its usage for meaning creation. It also reflects the legitimacy of actors, some of whom wield more power in shaping discourse and language use.

This approach gives a special role to policy actors in this process considering who participated across networks, how the process took place, and what is the effect, engaging the actors in the social and political construction of problems and solutions (Freeman, 2009; Mukhtarov, 2014). In this way, policy translation contributes to the theory of public policy making the deliberate actors a central point explaining the transfer process.

However, policy translation is a concept under construction that results from a critical reflection on policy transfer and the blind spot this theory offers. Policy transfer assumes that actors are perfectly rational and undermines the role of the power of ideas in policymaking. Besides, it is limited to interpretations from the social constructions of problems and solutions being insufficient in having a constructivist idea. Finally, policy transfer literature does not consider the politics of scale which links the global, national, and local processes in the production of space (Mukhtarov, 2014).

The previous review enables us to position the research within the current debate. To fully comprehend the topic, it is crucial to recognize that relying solely on the Policy Transfer approach would be constraining, just as a Policy Translation analysis in isolation lacks context. Consequently, this study will concentrate on primary variables for a complementary understanding of the subject that are described in Table 1.

The categories under examination go beyond the understanding of why the actors decided to share in this collaborative project. They will equally explore, who are the key actors involved in the policy transfer process; what is transferred; from where lessons are drawn; what are the different degrees of transfer; what restricts or facilitates the policy transfer process. How is the process of policy transfer related to policy “success” or policy “failure” (Dolowitz & Marsh 1996; 2000; Evans, 2009). The main input from the policy translation studies is the broader analysis without the assumption of studying a field with completely rational actors, where constructive ideas give shape to the world of meanings and geography matter to localize a project.

The variables that are part of the policy diffusion stream are not considered in this research for being focused on the international scale of policy diffusion. This research is characterised to focus on a specific case, being a single case study with qualitative research tools.

Table 1. Variables developed from the Theoretical Framework

Variable	Focus	The range of interpretation based on policy transfer and policy translation inputs	Literature inspiration
Actors' identification	Who are the key actors involved in the policy transfer process?	All types of actors are considered in policymaking, including the informal networks.	Policy transfer: Dolowitz, D., & Marsh, D., 1996; Policy Translation: Mukhtarov 2014.
Subject of translation	What is transferred?	This can be policies, goals, instruments, institutions, messages, ideas, meanings, technology, symbols, discourses, identities.	Dolowitz, D., & Marsh, D., 2000; Mukhtarov 2014.
Origin of the translation	From where lessons are drawn?	Time period and geographical location (international, national, subnational, local) of the ideas, considering international organizations; giving importance to the space and scale in how policies are made.	Dolowitz, D., & Marsh, D., 1996; Mukhtarov 2014.
Degrees/Deep	What are the different degrees of transfer?	This can be copy, emulation, hybridization...; language and meanings given.	Dolowitz, D., & Marsh, D., 1996; Mukhtarov 2014.
Context	What restricts or facilitates the policy transfer process?	The complexity in the case; the environmental conditions as institutional constraints; ideological similarities; technology equipment; economic resources; studying into power relations present on it.	Dolowitz, D., & Marsh, D., 1996; Mukhtarov 2014; 2022.
Lessons	How is the process of policy transfer related to policy "success" or policy "failure"?	The categories from interpretation were in a starting point uniformed transfer, incomplete transfer, or inappropriate transfer. However, policy translation makes this category broader making it possible to analyse the social and political constraints that are meaningful to read the context.	Dolowitz, D., & Marsh, D., 2000; Mukhtarov 2014.

Own construction

The categories developed are part of an own exercise of interpreting and aligning the main characteristics considered essential for understanding the case. Components from policy transfer are complemented by the interpretation or reading from policy translation. For example, the role of the actors in the policy transfer perspective is limited, whereas policy translation takes all actors into account. Policy translation also innovates by reflecting on power relations and delving deeper into the context to consider international infrastructures such as organizations that may influence decisions.

Finally, policy translation extends beyond static categories to provide constructivist explanations. A constructive explanation emphasizes the role of human interpretation, perception, and social construction in shaping understanding and meaning. In the context of social sciences and research, especially in policy studies, a constructivist explanation suggests that reality is not objective and independent of human interpretation but is actively constructed through social interactions, language, and shared meanings (Zehfuss, 2002).

I discussed the main variables of policy transfer and policy translation, offering an overview of both to complement each other from its stronger points. In this sense, components from policy transfer will serve as background information to settle and explain this policy case.

The literature on water cooperation had used, in some cases infinitely both terms but also some authors had developed focused research to offer categories for its interpretation. Studies following the travel of ideas have also been applied to works focused on Integrated Water

Resources Management (IWRM), River Basin Management (RBM), or Public-Private Partnerships (PPPs); some of these studies focus on institutions, norms, and legitimacy.

Policy translation in water cooperation studies focuses on the policy environment that impact the evolution of water policies. It also pays particular attention to the motives driving policy actors (Mukhtarov and Daniell, 2016), beyond a solely rational assessment of interests when it comes to disseminating and embracing policy models (Dolowitz and Marsh, 2000). This approach highlights the intricacies of meaning formation and highlights how the policy context plays a crucial role in shaping these meanings (Mukhtarov and Daniell, 2016).

Chapter 3: Context of the discussion

3.1 Cooperation for Climate Adaptability in Colombia

In 2012 Colombia and the Netherlands joined to start the reconstruction and a climate adaptability plan in four large projects (in La Mojana, The Canal Del Dique, Jarillon de Cali, and Gramalote) coordinated in the national level by the ‘Fondo de Adaptación’- AF³. The Dutch government offered its knowledge, and the Colombia – Netherlands Water Partnership was founded, surfing challenges of cooperation, legislation, and conflicting interests as stated later (De Pater and Van Steenis, 2014). The Plan Jarillon project was one of the first to run in the mentioned agreement and was funded partially by the FA of Colombia and the Netherlands. The Dutch funding, allocated by the Ministry of Foreign Affairs, supported the project design formulated under the Partners for Water initiative commissioning the consultancy firm, RHDHV.



(Publimetro, 2011)

³ ‘Fondo de Adaptación’ is translated as ‘Adaptation Fund’ (FA by its initials in Spanish), this entity affiliated with the Colombian Ministry of Finance and Public Credit, established to address the construction, reconstruction, recovery, and socio-economic revitalization of areas affected by events resulting from the La Niña phenomenon of the years 2010 and 2011. Being the national entity responsible for the projects agreed in this alliance with the Netherlands (Fondo de Adaptación, 2012)

Plan Jarillon had as its purpose to provide technical assistance to ensure a detailed assessment of the structural condition of the Jarillon (river dam) and implement measures aimed at reducing the risk of flood. This became necessary due to the severe flooding experienced during 2010-2011 and the escalating vulnerability to floods caused by climate variability and increasing human activities in the upper Cauca River basin in previous years (Jiménez, Burbano, and Velásquez 2017). These developments posed a significant threat to the approximately 700.000 residents living in this region of Cali and exposed the largest water treatment plant that supplies water to approximately 60% of the city's population (RVO, 2012).

The Netherlands offered technical support for the assessment and recommendations regarding the dike, commissioning RHDHV. This cooperation involves evaluating the dike's physical condition and its current structural stability, with the goal of devising a plan for repairs or fortification, especially in response to damage incurred during recent floods. Additionally, the project aimed to analyze the influence of human activities on the dike's resilience, ensuring it met the necessary functional criteria to resist flood risks. This addresses the flood risk posed to informal settlements, enhancing overall city resilience, and contributing to ecological conservation (RVO 2012).

The project designers (the consultancy RHDHV from the Netherlands in collaboration with the Colombian consultant OSSO) approached the challenge from a technical perspective and recommended to: i) raise the security level of the dike; ii) resettling houses on the dike and the berm; iii) Install by law one entity with ultimate responsibility of the dike; iv) introduce a maintenance system; v) have an action for river bed and flood plain maintenance and construction; and other additional purposes related with the revision of rules and control of species in the area (RHDHV, 2013).

For the Municipality the project responds with a social and infrastructure proposal that works with three objectives: i) improving the quality of life and accompaniment of people who were registered in 2013 as beneficiaries of the Jarillon; ii) enforcing the governance over the territory, generating special use and care of the plant reservoir that makes up the Jarillon; and iii) carry out the work to reinforce the Jarillon dam that protects the city from a possible flood (Cali Municipality, 2015).

3.2 An overview of the inhabitant's reality

Plan Jarillon project took place in the city of Cali, located in the southwestern part of the country. The second largest city of the country by area, and the most populated in the region with approximately 2.5 million inhabitants. Is located two hours from the Pacific Harbour and is the main economic and urban center in the region, with fast economic growth. Known for its culture and Afro-Colombian heritage acquired from the Pacific migration and its traditions.

The residents of the Jarillon area bear a history of displacement, having been victims of the internal conflict and experiencing marginalization. Colombia is the second country with the highest quantity of internally displaced Population with more than 8 million displaced people (OCHA, 2000; Truth Commission, 2022). Some of these Internally Displaced People-IDP, mainly from the Pacific coast, migrated from 1962 to Cali (CIDSE, 2020).

This population arriving in the peri-urban area, later the neighborhoods, *Petecny*, *Las Vegas*, *Samanes del Cauca*, *Navarro*, *Brisas de un Nuevo Amanecer* had diverse affiliations as farmers, and peasants, and distinct cultural identities such as Afro-Colombian and indigenous communities, revealing a limited civic engagement, with self-managed ways of life, reproducing the logic of rural areas in the urban territory without the presence of the local municipality (Uribe, Ayala, and Holguín, 2020). Later the communities occupied terrains in the edge of Cali starting a peri-urban dynamic, to pursue an improvement in their livelihood, leaving behind the conflict (Winters, Steel and Sosa, 2021).

Chapter 4: Methods and Methodology

This chapter outlines the data collection methods employed for the significance in the study. It also explains how the collected data was processed to address the research questions, the research method, data collection, ethical constraints, and challenges and limitations. This research applies a deductive and inductive approach using the policy translation frame, framing what is expected from a translation of policies for CCA and DRR in developing countries, especially from the Plan Jarillon. Finally, a reflection on the case and method of analysis is offered, explaining the empirical analysis, and the plausibility of theoretical expectation and theoretical refinements.

4.1 Research Design

The current research is a case analysis, this design consists of “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 53). This case discusses the Plan Jarillon Project in Cali, Colombia (2011 onwards), looking mainly at the context and ideas of the translation in the phase of project design and the main technical and political discussions during its implementation.

Regarding space, this research looks at the actors participating in the design process of the project from RHDHV, OSSO, and the Municipality as the main actors in this phase looking at Colombia and the Netherlands interactions. It is limited to the discussions at the local level with some insight into the broader context being that the discussion contemplates the efforts of three local mayors’ administrations and three presidential administrations. Regarding the timing this project was designed in 2013 which means that most of the knowledge of how this was negotiated is in people that nowadays are not occupying the same functions, which significate a challenge for the obtention of information.

Policy translation has served as an analytical framework guiding scholars in comprehending how policy agents interact with the categories of meaning, scale, and contingency within the transfer of ideas. This framework aids in advancing their positions within the realm of policymaking (Mukhtarov, 2014). The decision to embrace a framing perspective is rooted in prior policy translation studies where ‘framing’ and ‘reframing’ are employed in a broader sense to encompass activities like conveying knowledge through narratives or altering the meaning of policy ideas during their dissemination.

4.2 Data Collection Techniques

Primary and secondary data are used in this research. The first is a compilation of eight interviews done during the research process that includes representatives from RHDHV, OSSO, the Local Municipality, Propacífico and to a researcher from the IOB. The secondary data are the files, designs, signed agreements, blogs, and articles published by the Dutch cooperation and Colombian institutions regarding the project communication. The primary data had been collected with the aim of filling the gaps of information that was not provided by the information previously mentioned. In the next table is possible to observe the sources of information that had been used to retrieve information.

Table 2. Sources of information

NL Governmental Documents	IOB-Looking for new relationships with Latin America, 2013
	IOB- Return on aid for Dutch exports, 2014
OSSO Corporation	Summary Part 1 results project
	Seminar – Summary Risk Management in Cali, 2004. (Definitions)
	Concepts and strategies for the management and reduction of risks due to social natural phenomena: a vision from colombia, the cauca valley and cali.
Royal HaskoningDHV	Project Design – Royal Haskoning, 2013
Interviews	Interview # 1- IOB Researcher.
	Interview # 2 -Author-Engineers Project by Haskoning DHV.
	Interview # 3 -Coordinator of the Jarillon Project Propacífico (2019-2023).
	Interview # 4 – Engineer of OSSO Corporation; Cali consultancy.
	Interview # 5 – Mediator for the achivement of the Jarillon project local – national level.
	Interview # 6 – Coordinador Social area Jarillon Cali (2020 – 2023).
	Interview # 7 – Community Professional Jarillon Cali (2019-2022).
	Interview # 8 – Consultant Royal Haskoning DHV.
Community Voice	Book with diverse community testimonies (Uribe, Ayala, and Holguín, 2020).

The qualitative interview was through a semi-structured form that were designed regarding the actor inquired (see [appendix A](#), [B](#)), however each interview considered three main aspects. The first related to the structure and the operation of the organization they belonged to understand interests and actors’ descriptions; second, related to the process of transfer of ideas, context, and lessons; and last, related to the approach of vulnerability to understand how this approached for the different actors. The analysis of the secondary data focused on the project designed published by RHDHV reports of OSSO, documents of the national level to present the project (FA).

4.3 Data analysis

This research proposes a deductive-inductive approach to guide the research process, from a deductive perspective (top-down) where categories from policy translation and policy transfer had been used as main variables of analysis. To an inductive approach that allows to discuss the

information found during the data collection process giving meaning to what actors find meaningful, scoping the information that had been previously used in research (Fereday and Muir-Cochrane, 2006; Panke, 2018). The aim of using deductive and inductive approach is to offer a broader scope for information interpretation.

To analyze the qualitative information gathered, I utilized the framework analysis method, which is a form of content analysis. This method is particularly well-suited for addressing specific research questions for qualitative research related to policy matters. It allows to maintain a central focus on the research question while analyzing large volumes of information without losing the original context (Goldsmith, 2021). This approach offers systematic means for data analysis. Framework analysis presents information in a transparent format without disconnecting it from its context. The key stages include coding and charting to derive thematic conclusions. Additionally, this method offers flexibility to adapt to the data and research context. Unlike linear analyses, it permits data collection and analysis in the early stages and revisiting codes to capture information more precisely (Goldsmith, 2021). Additional to the use of this framework the sources had been systematized or transcribed, according to the source, and later analyzed through ATLAS.ti software using a coding system developed from the framework analysis method.

Framework analysis offers several advantages. It supports rigorous data management, reducing the potential influence of preconceptions. It accommodates the inclusion of new frames and themes that emerge during the research, allowing for comparability based on thematic distributions and facilitating the identification of patterns and differences. It also provides accessibility to summarized data (Goldsmith, 2021).

To implement the framework analysis, five stages are typically followed, which have been slightly adapted regarding this thesis proposal: i) familiarization with the collected information, which involves listening to audio interviews and reviewing documents to become acquainted with the data; ii) deductively identifying a thematic framework based on the theoretical discussion; iii) indexing the information by selecting relevant fragments and coding them, following various content analysis approaches; iv) summarizing and charting the information to construct a narrative from the fragments; v) mapping and interpreting the data by comparing themes, thereby establishing connections to provide an interpretation. This process commences with a description and interpretation of the data and findings, ultimately resulting in the creation of typologies based on the cases (Furber, 2010).

4.3 Positionality and Ethical Considerations

Understanding ethics remains an ongoing responsibility for researchers (Fuji, 2012), for this reason, I seriously reflected on the ethical limitations, human relations, and academic values, to prevent harm or situations of risk, through the ethical boundaries in research. In the initial stages of defining and proposing a research topic, this investigation focused on understanding the impact on livelihoods and the vulnerability of the relocated community. However, ethical considerations are principal in examining the purpose of academic research, the 15educel5nn of the academy, and the limits when it contradicts the rights and dignity of the relocated community. Thus, it has been considered the sensitivity of certain topics and a mindful understanding of what information is required to be discussed in a scenario where harm can be enhanced.

For these reasons, I discarded the necessity of direct contact with the community in this initial approach. This decision contrasted with the fact that previous researchers had already gathered testimonies and information from the same community, which offers enough data for documentary analysis. However, additional limitations emerged concerning the theoretical approach. During this stage, I reflected on my role as a researcher, a student, a citizen of Cali, and a Colombian woman. While maintaining my focus on understanding the case, I found various interpretations of the case, particularly at the policy level.

For this reason, the current research has considered focusing on interviews with policy designers from the Netherlands and Colombia, targeting professionals who have the role of interacting with Colombian partners to create and implement designs for water management and climate adaptability.

Regarding my positionality, I recognize myself as an inhabitant of Cali who has seen how a developmental project - Plan Jarillon- promoted the relocation of many families and had an impact on their livelihood conditions. As part of a second generation that migrated to the city, I can empathize with all the stories of families that have not found a place in Cali to dignify their lives. As a young woman, I can recognize the struggles of the youth to access education and transition into professional life. As a political scientist, I wonder about the governability of the city and the role of the municipality and official institutions involved in making this project happen. As a Master candidate in developmental studies is significant to understand how the cooperation for Climate Adaptability is taking shape in developmental countries and how the strategies are either mitigating or exacerbating conditions of inequality.

Furthermore, all the labels that can describe me. In this case, I make use of different theories to interpret what happened at the policy level and give insights to facilitate a policy learning process. This is to foster greater sensitivity and the development of improved strategies when engaging in discussions related to community involvement and a significant impact in their lives.

4.5 Challenges and Limitations

The first challenge I found was the time frame of the project. Being a design of 2013 that started to be implemented in 2015 implies that multiple local and national administrations had been, bringing as a limitation the knowledge-sharing capacity of the public institutions, which makes it difficult to find consistency in the information and a clear description of how everything happened ten years ago.

Hence, it required effort to identify individuals who could brightly remind this case. In many instances, I interviewed retirees, while in others, I spoke with individuals who had been in the institutions for shorter periods and could not recall the memory of recreating the negotiation process. A limitation to give a clear and institutional perspective of how the case was managed. Consequently, policy translation is proposed to use an ethnographic method (Mukhtarov, 2014), but this research encounters limitations in implementing fieldwork in the city of Cali. For that reason, the data collection is carefully made through semi-structured online interviews and document analysis. Additionally, during the last weeks of the thesis writing was possible to visit the community reallocated in *Pizamos*, community relocated as result of the Plan Jarillon. This

experience gave an experiential approach to the realities of people that had experienced the relocation process.

Chapter 5: Findings

The current chapter offers a description of the process of policy translation in the Plan Jarillon project. Acknowledging the differences and limitations of rationalist interpretation that are provided by the policy transfer scope, however, the main variables allow to present an explanation by stages of the policy translation process, following the main variables provided by the theoretical discussion: the subject of translation, the actors involved in the formal and informal networks, the transfer of ideas, an overview on the context for the policymakers and the way how the policy landed to be managed by the local actors.

5.1 What is being transferred?

The Netherlands as a low-lying country and prone to flooding, had developed a program to set out plans and protect the country from flooding, mitigating the impact of extreme weather events, and securing supplies of freshwater (Ministerie van Infrastructuur en Waterstaat [I&W], 2022). After the floods of 1953 in the Netherlands, the Dutch government introduced measures to prevent this from happening again, which unraveled in the Delta Program to guarantee flood safety, freshwater, and spatial adaptation (Van Buuren 2019). The first Delta Program was published in 2011 elaborating previous recommendations for flood risk management and maintenance of water supplies, up to today, each year this program is revised based on the insight provided by their researchers, as a continuous process of policy learning (Fritsch and Benson, 2020). Referring to the timeline of this research, the national Delta Program from 2010 to 2012 focused on the special planning of the country, dike reinforcement measures, strategies for flood risk management, and evaluation of the cost of dikes failure (I&W, 2023); the Delta Program for 2013 offer a more critical evaluation on the costs and benefits of flood defense and risk of flood fatalities, discussing the required level of protection, to finally in the report of 2013 offer a proposal for flood protection standard according to a risk-based approach (Delta Commissioner, 2012).

This national water management program has been transformed from a prevention-based strategy to an adaptive risk-based with a policy approach that looks to achieve different pathways to adapt inspiring policy and knowledge transfer to other delta countries (Minkman and Van Buuren 2019). The Netherlands has exported its delta planning, underlying values as solidarity, flexibility, and sustainability and technological innovations (Minkman and Van Buuren 2019).

The Dutch government employs the term ‘Delta Approach’, to move towards a broader International Water Ambition, transferring the Dutch Delta Approach - DDA to other deltaic nations as main objective (I&W, 2022a). This initiative seeks to provide bilateral support to these countries while creating business prospects for the Dutch water sector (Van Buuren, 2019). The Dutch Flood Protection Programme – DFPP, share knowledge that is part of the strategies the Netherlands had promoted for flood protection through the construction of hard infrastructure, at the national level. Even when the national level measures for flood defense and safety standards

construction were in debate regarding the local technical requirements for safety (2013-2015)⁴, the international exportation of the DFPP never stopped (Richard et al 2016; Van Alphen 2015).

Meanwhile, the Netherlands have had the possibility to reimagine how to establish its DFPP, strategies to promote a policy in the cooperation for development that focuses on flood protection as ideas branded and exported. This through a strategy of Flood Risk Management that entails mitigating risk by building dikes, dams, and other hydraulic structure to regulate water. However, the tendency is that developmental countries continue looking for innovative solutions from abroad when faced by water related problems. Dutch Policy entrepreneurs had been able to communicate their policy solutions through their policy networks, advocacy coalitions or academic communities (Dolowitz and Marsh 2000; Minkman and Van Buuren 2019).

On the other hand, the developmental aid offered by the Netherlands is packed in an agenda for cooperation branded by the notion of *Aid and Trade*. Here the Netherlands had spread solidarity, flexibility and sustainability through their main projects and policies that helped serving developmental aid, foreseeing the possibility to upgrade the relation between the donor country and recipients, as stated in interviews 3 and 8.

The Netherlands had the policy of Aid and Trade, so every development project must gain something back to the Netherlands. But you don't buy water, because it is a public good, it becomes very difficult. Food Security and Agriculture, you can imagine that you can design projects where you export products to the Netherlands and then NL can gain money, or you can sell seeds to another country (Interview 3).

A consultant from RHDHV had also express how after working for a couple of years abroad the Netherlands in Vietnam he was invited by the Dutch embassy to change the approach of the relations from Aid to Trade “I was called and invited to change the approach, what used to be called the development aid, now in the more modern ways, development, cooperation, and trade need to find a balance, then you're trying to find the right balance” (Interview 8). Moving from Aid to Trade is marked by a tension between the self-motivations and moral motivation of the Netherlands, in the embedded idea of neoliberalism as the “deep marketisation” in the cooperation for development (Biriukova, 2019). The Netherlands is a country that look for the possibility to convert the assistance given to other countries in a exchange that can give certain benefits in commerce matters.

This system of assisting and negotiating is far from being possible to challenge from the level where policies are translated. The cycle that the Dutch MZ follow to provide assistance is established from the Netherlands, centralizing the decision making and cutting a flow of project evaluation.

Policy makers from The Hague have to develop several programs a year and they have to look at all these national policies, not only from one country, but maybe 20 and then they have to design, to make an average design that is applicable for all these countries. That makes it complicated, so that makes them less coherent for some countries and more coherent for others..... it has to be with the system, with the contract system that has first quality at entry in The Hague or at the embassy and the plan has to be written very fast, and then there's a program developed for 3-4 years and that's it. It [has] certain goals and then they go into the field and they encounter many realities, many struggles (Interview 1)

The cycle for cooperation for development does not promote a process where previous to designing a project the organizations on the lead of designing can have the possibility to relate and get to know the context. Instead, it predominates the short timing, the centralization of resources and during the whole project implementation. It means the when a project implies feasibility studies, or implementation, this task have to be also assigned to Dutch entities, this to guarantee

⁴ The national standard to asses dike enforcement was re calculated during this period because is because the Netherlands initially calculated the dike construction based on flood probability and not on a risk-based approach (Van Buuren, 2019)

the efficiency and avoid any delays that can highly damage the project implementation (as corruption) (Interview 1).

The centralization of the project implementation also affect the evaluation phase, because the assessment has to be done by Dutch entities, what is challenging when wondering for the accuracy of the project results to look into peoples live improvement, as stated by the IOB researcher, “There's not enough time to develop these kinds of programs [centered on people] and the way how we try to look at, is that we went to the field and we have asked to what extent people are involved from the start and in what way” (Interview 1). On the other hand, for RHDHV a feedback process is not institutionalized neither expected from each consultation service, as supported during an interview:

We try to add it [learning assessment from the projects], but it's always a sort of good intention.. Because after a project is good to know how it works... but what you should do is that you come back after one year and say what you had learn and what could be better or immediately after a sort of standard form (the client satisfaction statement) because for the next assignment we will need to present it sometimes how satisfy where your clients before (Interview 8)

The RHDHV perspective of assessment is client based and for MZ is finance based on efficiency, following a trading logic of selling an expertise and approaching clients through, mostly, immediate results assessment in the case of RHDHV. At the same time, the for MZ it is not assessed the impact of the project on the communities lives, even when the discussion is gaining relevance nowadays:

I think Policymakers and our world realize that the way it was done, with just consultancy firms or a very Top-Down approach is not the right way, it is realized by everyone also in The Hague. So, things are definitely improving. But still, I have the feeling it still has to do with the system and the short-term policymakers have to work with them (Interview 1).

CCA and DRR projects that fall into the responsibility of RHDHV is not always subject of an evaluation, neither obliged to have a lessons learning report. It is problematic in the sense that lessons learning reports has the objective to point out the good practices and the opportunities to improve the performance of donors, however, even there exists an expressed intention in the Dutch water sector such to be more inclusive, mechanism are not placed to enforce a peoples-context based assessment.

There is no established mechanism for accountability on the consequences of policy implementation. However, it's evident that Dutch cooperation in Cali has extended its reach, particularly through the NWP continued presence in Colombia's Valle del Cauca region. The Plan Jarillon holds significance as it prepared the way for more extensive negotiations and the implementation of other policy programs, including Room for the River, which emerged in 2015. Furthermore, RVO has been actively involved in coordinating communication with the CVC for additional projects related to risk reduction and nature-based solutions for water management (see [Appendix C](#)).

5.2 Actors Negotiation

The branding process by the Netherlands has different actors cooperating depending on the background of actors and the context in which they might operate (Minkman and Van Buuren 2019), at the international level the Netherlands Water Partnership – NWP⁵ has the purpose of

⁵ has the mission is to enable the Dutch water sector to address global water challenges in a just, environmentally resilient way while expanding its global reach and business success. This is achieved through programs promoting

bringing together Dutch and local organizations eager to collaborate on flood prevention in a specific region (NWP, 2013). What concerns this project timeline, RVO took on the managerial activities, which funded the project in Cali, paying directly for the Dutch expertise service received (Interview 2; RVO, 2013). Another important actor is Partners for Water -PvW which focuses on joining forces to improve the international position of the Dutch water sector contributing to solve world water problems. PvW is carried out by the RVO and NWP, on behalf of the Ministry of Infrastructure & Environment, and on behalf of the Ministries of Foreign Affairs and Economic Affairs (NWP, 2016).

In the context of the climate emergency in Colombia, the national government led by the National Planning Department – DNP, was moving forward to create a strong agreement with the Netherlands. However, to make this possible a limitation was the lack of a central institutional infrastructure in the country to plan and coordinate the actions towards risk reduction initiatives (Interview 5), for this reason, the AF was created at the end of 2011 “to address the construction, reconstruction, recovery and economic and social reactivation of the areas affected by the events derived from the La Niña phenomenon of 2010 and 2011” (AF, 2014).

Meanwhile, at the local level a visit to Cali intermediated by the DNP made evident at the national level the big impacts of the floods, representatives navigated the whole area on a boat and concluded that it was possible to facilitate the Dutch assistance on this case (Interview 5). At that moment, the recently created AF and Semana News organized a conference in December 2011, where different actors were invited to evaluate the project with which the Netherlands was going to cooperate. Different delegates were invited to the Capital to get to know about the new projects and ongoing investments by the Netherlands in Colombia.

Due to the proximity of Cali technicians and some national bureaucrats from the same city interested on discussing DRR for the city improvement, this space signified an opportunity to present the urgency to attend to the risk of flood in Cali, as stated in interview 4:

I represented the spokesperson for these state and local entities and clearly expressed, with evidence from data and satellite images, that there were indeed some potentially severe effects in the Upper Cauca Valley. This generated interest in the technical component at that forum, as well as from international actors, to agree on a project for the Dutch mission.

This intervention was followed by studies provided by OSSO and technicians of Regional Autonomous Corporation of Valle del Cauca – CVC⁶ to the Dutch counterparts to justify the relevance of including Cali in the larger project that was being considered with the FA. Additionally, one member of the Dutch mission was originally from Cali and worked at RHDHV, facilitating ongoing communication for this initiative (Interview 5). Later, this national platform for negotiation gave results with an official Dutch Mission organized in Cali, where an evaluation of the situation was made in the Aguablanca area (El País, 2012). To maintain consideration, project formulation was delegated to CVC, a company with a long-term cooperation relationship

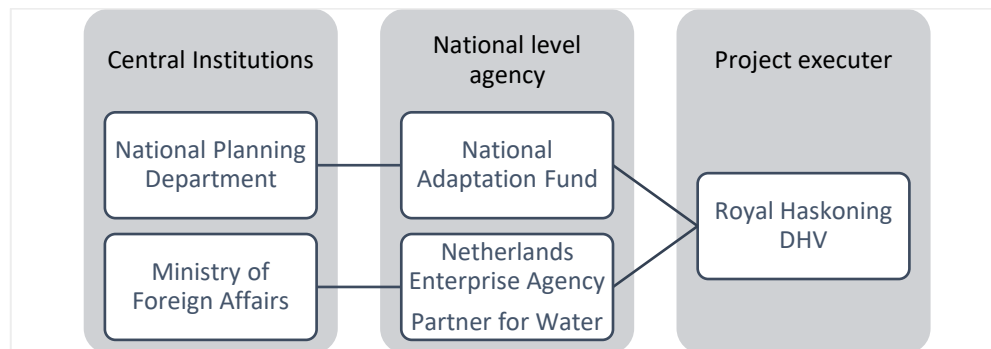
cross-sector collaboration, boosting international profiles, and jointly working on policy and UN Sustainable Development Goals. Their network makes possible to connect water organizations and individuals who might not otherwise interact (NWP, nd) <https://www.netherlandswaterpartnership.com/about-us>

⁶ Environmental management Agency in the jurisdiction of Valle del Cauca, responsible for the control of atmospheric pollution and the management of solid waste. Also responsible for the adequate supply of water in quantity and quality, the conservation of watersheds, the search for greater efficiency in land use, environmental sanitation, support for municipal and departmental development plans, as well as conservation and management of wildlife and protected areas. In accordance with the provisions of the current Ministry of Environment and Sustainable Development.

with the Netherlands (Interview 5), highlighting an important informal network within policy translation (Evans 2009; Mukhtarov 2014).

In June 2012 the DNP and the MZ signed a Memorandum of Understanding (MOU) with the government to establish the Holland House in Colombia (Dutch Water Sector, 2012), an instance with the purpose of assisting the Colombian water authorities in developing a long-term water management plan that finally was extended to four main projects coordinated by the FA.

Figure 1. Agents involved in the negotiation to land the policy – formal network.



(Own construction)

In a third phase of the negotiation process, it is possible to examine how the policy was translated and the processes underwent. It is evident that the human component played a crucial role in establishing agreements, as highlighted by interviewee 6. According to this source, various directors from each entity were tasked with coordinating and facilitating their responsibilities. However, challenges arose due to the lack of communication by the previous administration, complicating the implementation process further.

We identified that the violation of all the partners of Emcali, CVC mayor of Cali, national government and, as an articulating contractor within the Propacífico, we saw that the relations of the agreement were also deteriorated, we saw that there was no verbal communication but communication by offices and communication by sections or by committees that had been established with a certain periodicity and with the heads of the entities because there was no synergy between those directly responsible... everything was by trade and everything was a bureaucratic procedure of waiting 10 or 15 days for the other to answer. I couldn't use the telephone, there was no complicity. But at the end in my group [homologs from other companies] we all made friends and in a very trusting way we called each other, we tried to manage the situation and that caused another type of team synergy (Interview, 6).

The interaction between the agents responsible for the project implementation hints on the effects regarding the kind, frequency and quality of the interaction.

5.3 Translation Process

The translation process in public policy tries to understand the effect of language and meaning in politics, following how the ideas are materialized, into slogans, objects, or actions in practice that are later communicated (Mukhtarov 2014). The first phase of the translation was explained in the dynamic of the formal policy networks, meanwhile, the second level of the translation was carried out at the local level, by RHDHV and OSSO as project designers, and a third moment once the Municipality hands the recommendations. The partnership involved six weeks of collaboration between Dutch and local technicians at the Cali headquarters. The Dutch technicians frequently

traveled between countries, while the project leader had an extended presence in Cali. This arrangement allowed for close communication with the intervention area and an understanding of Colombia's expertise and response capacity (Interview 2; Cali Municipality, 2012). Continuous interaction also facilitated the exchange of Dutch expertise from global projects like those in Bangladesh and China, reinforcing the trust given by the local actors on the Dutch expertise (Interview 5).

The coordination capacity is key to be able of influencing the policy level (Hasan, Evers, and Zwartveen, 2020), at the local level some coordination mechanisms, where translated on meetings planned every two weeks with RHDHV, OSSO, and the FA to follow up and show the results advances, frequency and commitment that was recognized only possible by the Dutch actors. At the same time communication between the Dutch Consultancy and bureaucrats of the municipality was necessary to continue the discussion at the national Level.

We were lucky that from Royal HaskoningDHV we were working with Hans who spoke Spanish and had a lot of experience, traveled the world, and loved Colombia, we clicked and we try to be dynamic, he on his side and I was doing it here, if there was something with Holland I would say: "Hans, give me your hand" and here he would tell me "we need to get to the Ministry of such a thing", "come on, let's find out how we do it." And well, it was a very interesting collaborative work. (Interview 5)

Such coordination strategies through informal networks where the channels for the translation process communicating a concrete category of ideas in Flood Protection and water management, this is a cluster of interest drawn together between public official's interest groups, and professional experts (Rose, 1991). As a result of this process, in January 2013, RHDHV handed over the final recommendations to the Cali Municipality with eleven recommendations summarized below:

Table 3. Recommendations given by the project Agublanca Dike

Urgent	<ol style="list-style-type: none"> 1. Rehabilitation of the pumping station. 2. Rehabilitate 6 critical points in the Aguablanca dike and low points in the dike of Canal Interceptor Sur. 3. Remove ant nests and fill the cavities caused by these nests.
Short term	<ol style="list-style-type: none"> 1. Raise the security level of the dike. 2. Resettlement of houses on the dike and in the berm of the dike, for 15.000 families. 3. Install by law one entity with ultimate responsibility for the dike. 4. Introduce a maintenance system. 5. Evaluate existing plans for dike re-enforcement. 6. Control further spreading of the ant species 'Arriera'. 7. Action for riverbed and flood plain maintenance and construction debris control. 8. Review the operation rules of the Salvajina reservoir.
Medium and long term	<ol style="list-style-type: none"> 1. Improve land use planning.

Own construction, with information from the RHDHV (2013).

Public policy refers to political agreements on a course of action (or inaction) with the aim to resolve or mitigate problems in the political agenda, which can be regulations, orders, and government project programs (Fischer, 2003). The recommendations offered in the report obeys to a technical assessment of Dutch knowledge transferred for policy implementation as stated in interview 2.

After the delivery, our role came to an end. Royal HaskoningDHV is nothing more than an independent consulting company, and we are not involved in construction. Therefore, we have no relations with construction companies. Our report did not include social recommendations; we simply provided technical observations, such as the condition of the river, the statistical assessment of threats, and the sections of the dike that exhibited signs of deterioration. In summary, our recommendations focused on technical aspects.

However, from a managerial perspective this was far from political influence, as affirmed by the project leader of the RHDHV on an interview "always when we [RHDHV], have carried out projects

we try to include the knowledge that we apply here in Holland. For example, the rules, we are not politicians, but we include rules and regulations that we have here In Holland” (Interview 2). This discussing how adaptive are the policies proposed from abroad when they have to obey a design not always replicable to all contexts.

From an engineer perspective, was clear that the project is considering a technical view of the risk of flood and water management without considering the social consequences of the recommendations.

The recommendations handed by the RHDHV where finally received by the municipality to be implemented after a process of discussion and prioritizations. Where the CVC took the lead on the technical matters and the Municipality had to coordinate the social impacts of the policy. The implementation of the recommendation did nit bring mayor problems, this because Colombian experts could perfectly hand the recommendations given on the technical matter, but the bigger challenges were on the social aspect.

Jarillon plan did not have a technical challenge, but in the conception it had what to do with cement columns, gravel, technology... and in 4 years, I never had anything common to solve technically. That is why I could tell you that the Dutch government's recommendations were followed and were adapted to the needs of Jarillon, but the greater challenge, on Risk Management was on the social matter. Because it was never a social project, the challenge was to agree with the communities, ad that people would let the machines in [for the reinforcement phase] (Interview 3).

Therefore the implementation of the recommendations brought challenges for the local municipality, related to translating the policy on a people center design, but also related to the technical challenges for the implementation.

5.4 Context

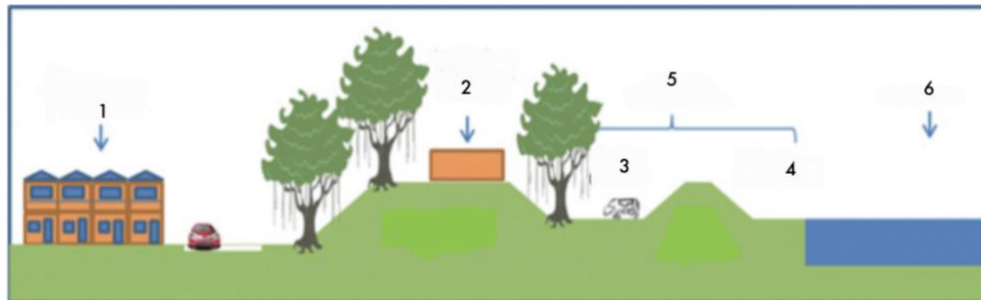
For policy translation, the policy setting can modify or create policy ideas by the policy actors, what occurs within a sociopolitical context where the policy actors are immersed, such as political institutions and main events (Kang, Dieperink, and Hegger, 2022). As a result, the discussion and events surrounding the agents cannot be ignored.

The main objective of the project is to reinforce the dike barrier of 26km length which implied the relocation of 8.775 people living on the berm and risk area, to make possible the technical infrastructural improvement or to relocate for safety purposes (AF, 2016). Meanwhile, the Netherlands has clear rules to define the distance from a dike where people can live and this is respected by society (Interview 2, Van Buuren, 2016), in Cali, it did not work in the same way, in 1954 the Jarillon was designed with USA cooperation in coordination with the CVC to be arable for the 10-year flood, as it was cultivated twice a year, to harvests the crops (Interview 5). As a consequence, due to the national conflict in the 80s, multiple families start to arrive and allocate in this area of the city (Interview 4, 5, 6, 7; Uribe, Ayala, and Holguín, 2020). From that moment multiple people arrived and build Informal Human Settlements – IIHS⁷ on a risk area. Due to the

⁷ The Incomplete Informal Human Settlements is a precarious human settlement that concentrate households in the urban or rural area with irregular land tenure, with the precariousness of their housing and without access or with restricted access to urban mobility infrastructure, domiciliary public services, and basic and complementary equipment (Municipal Council of Cali city, 2017).

incapacity of the government to avoid the population of this area, the population was massive and unsupervised (Interview 3). Image 1 illustrates the normal distribution of the people living in the Jarillon area, showing how the improvised houses and their cattle and crops were located after the safe area of the berm.

Image 1. Jarillon Profile 2012, before intervention



1. Urbanization Valle Grande; 2. Informal settlement Samanes del Cauca; 3. Grazing area; 4. Area of inundation; 5. Informal settlement Potrero Grande; 6. Cauca River.

Uribe, Ayala, and Holguín, 2020

The cooperation for Risk Reduction in this area means an opportunity to enter the dike and start a strategy of governance that did not exist until that moment. In 2012, for policymakers, was a challenge to enter because not even the police had sufficient control of the area, we refer to a territory that had more than 10 I, with narcotraffic businesses and informal companies taking advantage of the public sewer without paying for public service distribution and population owning houses that were not registered in the official record of the municipality (Interview 3, 5, 6).

Facing this social configuration in 2013, the recommendations given by the experts were handed to the FA, and the Cali Municipality with the recent, also promoted by the Netherlands, creation of a local Secretary for Risk Management with the purpose of coordinating the project at the local level. At this point for the Municipality, this project for Risk Reduction was also offering a solution to the large problem on I located along the Aguablanca River, as stated in Interview 5.

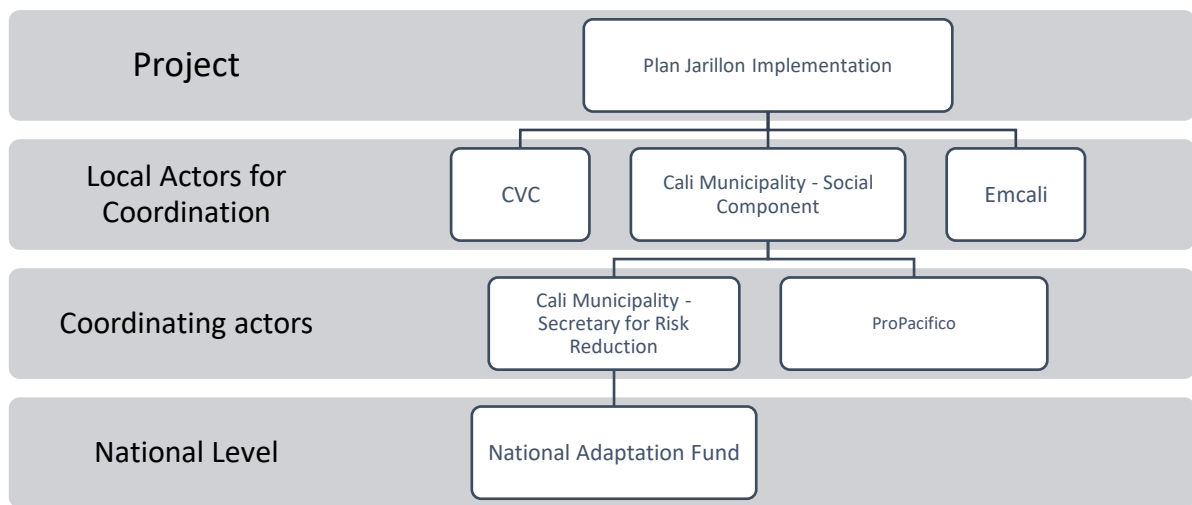
It became evident that the protection that the civilian population of Jarillón had was minimal. Initially, the Jarillon had been built to facilitate planting, but today the defense against the flood had serious problems because the people first invaded and occupied the area. The entire space respecting the Jarillón, but at the end of the day the problem became so complicated, and little attended to by the municipal administration that people got closer to the Jarillón every day until some decided to climb on top of the Jarillón, and of course! They had a river on the other side, they could take water from there and they began to drill to be able to install their homes.

The Municipality was tasked with implementing a project in an environment where trust between them and the inhabitants was lacking, making it difficult to initiate a negotiation process for resettlement (Interview 6). It was problematic the weak institutions at the local level, that difficulty the coordination process (Interview 5), additional to the necessity to find further financing (Interview 2).

5.5 Landing the Policy

At the end of 2013, it was already a discussion the project implementation, due to the weak infrastructure of the recently created FA to accompany the Jarillon Plan, Propacífico⁸ was hired to take the responsibility for coordinating the project at the local level. Next to it the Secretary of Risk Reduction of the Cali Municipality was having an overview of the project working together with the Direction of the Social Component within the municipality to coordinate the relocation process and all kind of interaction with the inhabitants, (see figure 1 to understand the coordination distribution).

Figure 2. Local Actor for project implementation



(Own construction)

A more technical task was given to the CVC, which as mentioned had a relevant role as legal administrator of the dike from 1954 to 2012; with the capacity to coordinate the technical assistance. Additionally, it was necessary the coordination with the Municipal Companies from Cali – EMCALI, a state-owned company in charge of providing water, telecommunications, and electricity services in Cali (EMCALI, n.d); working in a second-level the Administrative Department of Environmental Management- DAGMA, the highest environmental authority of the municipality of Santiago de Cali, in charge of administrating within the urban and rural perimeter, the management of the environment and natural resources, and promoting their sustainable development (Cali Municipality. 2012); but did not have a central role to facilitate the program implementation further than approving license, what was frequently interrupted by oversee political interest.

The translation of the Plan Jarillon project did not stop once the designs were handed over the municipality. After this the Municipality had to start a period of reflection and later (after 2015) start self organized process of censuring the population and gaining presence over the territory. The presence of the Municipality starts a phase of reactions towards Municipality actions to address vulnerability.

⁸ PROPACIFICO is a private, non-profit foundation that, through alliances with public and private sectors, promotes high-impact projects and initiatives that contribute to the sustainable development of Cali, Valle del Cauca, and the Colombian Pacific (Propacífico, nd).

Vulnerability can also be read as the result of the interaction between the policy implementation with the context dynamics. During the theoretical discussion, vulnerability was viewed as both a top-down and bottom-up approach, encompassing vulnerability from DRR but also vulnerability as a hazard. The reduction of vulnerability was addressed during the data analysis, where the municipality and consultancy demonstrated awareness of the social costs for not addressing the flood risk. While they were successful in addressing the vulnerability to Climate Change reducing the risk of flooding, the interviews also revealed a lack of awareness within the municipality for the new scenarios of social vulnerability created (Interview 6, 7). This situation highlights the complexity of actions aimed at reducing vulnerability, which can inadvertently lead to the emergence of new vulnerabilities.

...in our management of the concept of social vulnerability in the already resettled population, so what do we find in many cases? By mitigating an environmental risk we began to generate a context of social vulnerability and in many cases the housing projects where the populations ended up appeared other series of factors that they did not have in their original territory or that if they did, let's say that there were already some codes and there were some ways of coexisting (Interview 6, Former leader of the Social Component, Cali Municipality)

Like many other projects with the aim of achieving transformations for Climate Adaptability, Climate Resilience, or Water management by the Netherlands in developing countries, this project implied the resettlement of many people (Kempenaar et al, 2022; Warner and Wiegel, 2021). Without considering proper frameworks to guide the social process of resettlement. Once the solutions started to get technical less attention was paid to the distribution of cost and benefits for the affected population, where communities had to be relocated increasing their vulnerability and a loss in their livelihood conditions (Warner and Wiegel, 2021).

What remain unclear to the public are the levels of responsibility taken in a context where there exists time limits, a budget that constraints decisions, a non-existent background to address effects on people in projects for CCA and DRR. The effects of the Plan Jarillon in Cali have resonated on public debates, is considered that this had help to raise an awareness of the responsibilities taken by the communities. A consultant from RHDHV that participated on this project acknowledge the big impacts this consultancy project took and how being aware of the effects of project execution can be meant in a more thoughtful manner.

I found a bit guilty, because in fact, we just wrote a technical report that you should not have buildings on the construction in the dike because that's the debt, the fact that the dikes integrity has to be preserved, but if you're not sure how an organization can arrange that, because it needs, in our opinion, that needs to do to be arranged, you will have to take all international considerations into account (Interview 8).

Like many other projects with the aim of achieving transformations for CCA, Climate Resilience, or Water management , for more 'sustainable strategies' by the Netherlands in developing countries, this project implied the resettlement of many people (Kempenaar et al, 2022; Warner and Wiegel, 2021). Once the solutions started to get technical less attention was paid to the distribution of cost and benefits for the affected population, where communities had to be relocated increasing their vulnerability and a loss in their livelihood conditions (Warner and Wiegel, 2021).

The areas where these families are resettled continue to maintain conditions of structural poverty. Additionally, the municipality falls short of expanding individuals' freedom to pursue their own development. Within this context, concepts such as development, modernization, and sustainable livelihood are imposed without a framework for community participation, thus

undermining economic security. This is exacerbated by new fiscal responsibilities placed on homeowners (Collazos and Hernández, 2017).

The thing is that the Mayor's Office only thinks that they are going to change our location: from the 27edu27n to those squalid apartments. The reality is different: they are going to change our lives. We have to start by changing neighbors, changing the kids who are studying, changing their schools; rather, everything you have done here, even the church, changes you. But that doesn't matter to politicians (Carlos Andrés Guerrero, Former City Major in Collazos and Hernandez, 2017)

Notably, there was a lack of institutional efforts to acknowledge the cultural practices these families had cultivated and the bonds of neighborliness and solidarity they had formed. These cultural practices, intended to be protected by municipal guidelines, were violated by municipal institutions during the relocation process (Interview 6). Residents in these localities have organized into social groups led by community leaders to negotiate their position and voice their disagreement regarding the project's implementation (mainly social leaders, and the Afro Community Council 'Raices del Cauca').

Chapter 6: Discussion and reflections

This chapter presents a discussion of the findings taking further the analysis presented during the research. It first acknowledges the influence of human component during the translation process as a component that explains how policy translation is facilitated. Next, to dive into the challenges in the understanding and use of technology; and finally, the reflections related to vulnerability.

6.1 Knowledge and Human Component

The translation of the DDA is made through communication and branding efforts where multiple actors from the Netherlands play a role, but the ones in direct relation with translation are the consultancies (engineers) and embassies (as brokers) (Minkman and van Buuren 2019), as was possible to see through the local actors for implementation (Figure 2) and how personal relations flow between the individuals as representatives of an organization but also mediated by their unique characteristics.

In policy translation one of the limitations studied is the process of transferring the knowledge and the difficulties that it can mean to do this in a context with ideas navigating through language or technical barriers (Mukhtarov, 2014). However, the mechanism for coordination between the consultancy with external actors shown that the local actors had the possibility to work with a leader of RHDHV that even being an international, could speak Spanish and related with the ways of living in Colombia, what, regarding what is stated in the interviews facilitated the discussion process of communication.

Policy translation in the Cali case emphasizes the significance of informal networks (Evans 2009), particularly the role played by individuals working for RHDHV in relation with workers from the Municipality, and the proximity to mediate at the national level, what contributed to shaping the agreement. Language posed a challenge, but the main engineer's proficiency in Spanish eased communication. These informal networks were instrumental, with previous connections

between the Netherlands and CVC aiding local understanding and relations between local and ministry bureaucrats facilitating discussions. Additionally, the presence of a University of Valle, Cali, alumnus working for RHDHV in the Netherlands expedited project prioritization.

At a second level, the personal relationships between actors from the Netherlands and Colombia, extended to friendships, significantly influencing the perception and performance of the entire organizations these actors represented, what was possible to observe during the interviews. During the implementation phase, coordination challenges primarily facilitated by personal characteristics. Over the three different administrations involved in the project, two periods experienced critical difficulties in mediating and establishing regular communication between institutions. However, with changes in local governments, new individuals assumed leadership roles, leading to synchronized changes within the coordinating organizations (Emcali, CVC, Propacífico, Municipal Social Direction). This transition provided an opportunity to improve coordination and enhance communication as a crucial factor for the project implementation.

6.2 Technology transfer

Policy translation looks out to the use of technology, being important to reflect on the limitations to the implementation of ideas due to technical constrains (Dolowitz and Marsh 1996; Laeni et al 2021). However, in this case, the expertise did not suggest solutions that were not possible to implement. Certainly, the cooperation between OSSO and the Netherlands sharing office was helpful in promoting constant communication to facilitate the integration. Moreover, policy transfer cases from the Netherlands to Bangladesh have shown that promoting symmetrical conversation requires an effort where technical knowledge is not enough and requires diplomatic efforts as to the ability to deal with political and cultural differences (Hasan et al, 2021). This project coordination efforts illustrates the different components that made it possible to establish a closer relation between executers.

This policy transfer shows a case of emulation, as the transfer of conventional solutions that had work in the Netherlands to Cali through assumption of the effectivity this have to be implemented in Cali, assumptions like government capacity (Dolowitz and Marsh, 1996). Another example is the transfer of specific rules regarding the safe distance to live from a dike, guideline that end up being ambitious compared to what the municipality could facilitate. From 2013 to 2015 the project advance in 7km of the expected 26km that had to be reinforce, because the area was not inhabited, what showed a little level of compromise to lead efficiently a process with the inhabitants to go further in the intervention. This signifies the biggest challenge for the municipality, in 2018 after a long-term process of exhaustion due to the impossibility of executing advances in the project because the dike was still inhabited.

The legitimacy conferred by the Dutch consultancy is highlighted from the policy translation reading (Freeman, 2009), in Cali RHDHV was seen with enough legitimacy to argue and justify the need to make adaptations and a resettlement proposal in the city (Interview 3, 4, 5, 6). Conversations with the bureaucrats involved in the process of officializing the agreement express in their discourse that international cooperation became an ideal solution for addressing an urgent problem in the city: the informal settlements in the eastern part of the city. Therefore, the project with Dutch cooperation presented an opportunity to justify intervention. Their legitimacy showed

to be an important asset in terms of making the project implementation. Facilitating the municipality to talk, deal, and negotiate with the city inhabitants to argue the need to follow an international recommendation. This also provided a way to shield the project, as a result, two administrations later the discussion was no longer if the project was ideal, all the efforts were directed at: how to make it possible.

6.3 Addressing and Creating Vulnerability

A particular critique focuses on the necessity of promoting a more comprehensive approach to addressing vulnerability, both prior to and after project implementation. The gathered information provides insights into how to expand the knowledge transferred from a technical perspective, encompassing a broader implementation scope that considers the numerous variables that can arise when the project interacts with an implementation environment. In this context, the local institution was not robust enough to execute the technical strategies carefully, which undoubtedly should have been accompanied by a sustainable strategy.

The intense experiences during the relocation process are beyond the scope of this research, but they are here mentioned to address a gap in Policy Translation literature. This refers to the lack of acknowledgment of the community as a significant actor in the translation process. Case studies analyze on policy translation often discuss how policies were received and whether conflicts on the ground took place. These social effects are essential also when discussing policy failure or success, thus understanding the role of residents and their reactions to the policy gives light on the results of this. Certainly, this is not a minor discussion because ongoing improvement in Dutch Cooperation is considering the participation of various stakeholders to enhance sustainability, however, structural changes to considers people's perspective looks into a real transformation are not existing.

This effort addresses a gap in the existing literature, specifically the limited consideration of policy beneficiaries as active policy actors in the policy translation literature (Martens, McEvoy, and Chang, 2009). After all, these beneficiaries are the ones who directly experience the success or failure of policies and contribute to shaping and sharing their perspectives.

Vulnerability was created and reinforced by the lack of a framework for the resettlement project, what is problematic on the eyes of diverse analysis the affirms it is necessary now to guide a relocation process (Arnall, 2014; Chimhowu and Hulme, 2006; Walelign and Lujala, 2021) what did not happen in Cali. The act of forced resettlement is considered an innovative measure within the CCA initiatives being the concept of adaptation to climate change a traveling concept translated and used politically to frame environmental and developmental concerns (Gebauer and Doevenspeck, 2015). Meanwhile, in South Asian countries broader ideas translated from the Netherlands as 'Water as Leverage' and 'Room for the River', which had promoted the relocation of people. Even when such a project has had the opportunity to develop a potential design to plan the resettlement, research has pointed out that they failed in doing so, instead a design-led approach hasn't been translated sufficiently nor has it been receptive to local situations, and initiatives (Kempenaar et al, 2022).

In the current case study in Cali, the Dutch consultancy suggested as an action plan the relocation of 'approximately 15.000 families', a number that was later reduced by the municipality to 8.775 families. The relocation process started in 2015 and as of today it hasn't finished, but to September 2023, just 5.207 families have been relocated (Cali's Municipality, 2022). However, the

relocation process included different unfragmented strategies that were not guided by a unique framework (Collazos and Hernández, 2017). The inhabitants living in this area represented the rural voice historically marginalized in the country. In the city, they were once again compelled to resettle.

The social and political constraints during policy translation (Mukhtarov, 2014) open a new discussion where the debate on governance becomes a key aspect that may have either facilitated or, in other cases, interrupted the implementation process. This relates to what local and international actors could perceive as existing infrastructure.

Initially, to facilitate cooperation, the Netherlands promoted the creation of the FA at the national level in Colombia, and at the local level the Secretary for Risk Reduction, establishing a central agency responsible for receiving recommendations and coordinating actions for risk reduction. However, due to the recent establishment of this institution, some time was needed for self-learning to ensure effective policy implementation and management. Part of the governance discussion also involves the Municipality's interest in establishing its presence in the Jarillon area, transitioning from a period of non-existence as a local authority to embarking on a significant infrastructure transformation. Furthermore, it underscores the significance of territorial control and governance, which was a long-term effort facilitated by frequent visits from local bureaucrats. They discovered innovative ways to safeguard the area against potential encroachments, exemplified by the local strategy known as "Huertas Urbanas"⁹.

Finally, a central question that persisted throughout the discussion relates to an initial insight collected from an early interview. It was clearly stated that the Netherlands' cooperation in projects or countries is often driven by a focus on generating profit, which aligns with the broader framework of the Aid and Trade Dutch strategy. This leads us to consider what additional benefits the Dutch cooperation might derive from this approach. Notably, the absence of a monitoring system to assess the outcomes of Dutch cooperation in this project has prompted public reflection on the underlying strategy, as reported by (Kuijpers and Mutz 2016).

Conclusions

This chapter summarizes the progress of Chapters 5 and 6 by matching the findings with the research questions and sub-questions, indicating the implication these findings may have on the process of policy translation. Initially this study wondered, how was facilitated the policy translated in the Plan Jarillon project with the aim of explaining what were the main conditions that facilitated the results of the project, its challenges and the considerations on vulnerability. With the purpose of addressing this question, I had use the policy translation lenses to understand the process of translation where the Netherlands as origin country of the transfer has branded and exported once more, their knowledge for Flooding Protection in developing countries, in this case in Cali, Colombia.

⁹ Huertas Urbanas translates, urban gardens, this are communal garden that are taken care by the community in the área.

To answer this question, I used policy translation as a variable to approximate the policy discussion, in the context of a broader literature that considered transfer, diffusion, lesson drawing, and policy translation to have variables that make it possible to explain the translation process. As a result, the findings describe with a policy translation approach the actors implied in the formal and informal networks, the idea, and the level of transfer of the policy program affected by the interaction during negotiation. Here the role of human relations has shown to be a key factor for the unfolding of the policy negotiation. At the same time, for the research case in Cali, it was shown how normal general challenges addressed by the literature as language barriers or technical limitations were not experienced during this project.

This research unravels the Dutch Flood Protection knowledge as the policy of translation, describing how the aid for cooperation raised strongly with a logic that is facilitating the trade from the Netherlands to Colombia. Pointing out as a problematic aspect the lack of structure to establish a policy learning process for the improvement of developmental project, pointing out the managerial way of proceeding by the Dutch actors. This research identifies the actors involved at the national and local level that participated in the process of negotiation, and could catalyzed or suspended the translation regarding they personal skills. This research also took into account the context and overall steps to implement the policy approaching from a broader perspective peoples vulnerability.

Vulnerability emerges as a central theme, prompting a reevaluation of how the lives of beneficiaries are affected by CCA and DRR projects. This study reveals that while vulnerability to climate hazards diminished, the Municipality inadvertently introduced new forms of vulnerability among the relocated communities. Instead, the Municipality's failure to establish a relocation framework led to the creation of additional vulnerabilities for the population. Furthermore, the absence of the community's voice during the relocation process highlights a top-down approach in this policy.

The motivation to write this thesis goes further of the discussion that can be seen, I started my thesis with certain assumptions on how the international consultancy could have any kind of responsibility for the consequences of this project implementation that had caused so many difficulties for the city governability. However, the research made it possible to propose diverse reflections and place the responsibilities on the right actors. Here had been described a process were an international consultancy certainly aided to avoid the risk of the flood without considering any kind of social effect on the population, but where the challenges throughout implementation show it was necessary to have a more integral approach when starting to implement the recommendations handed by RHDHV.

Appendices

Appendix A. Informed consent

INFORMED CONSENT FORM

*The informed consent was designed in both English and Spanish, with adaptations made based on the interviewee's language preference

Project Title	Policy Translation in Water Cooperation Projects: Use of the frames for vulnerability in the Dutch Colombian agreements
Name of Principal Investigator	Karen J Vargas Perlaza
Name of Organisation	International Institute for Social Studies (ISS) of the Erasmus University Rotterdam
Purpose of the Study	I am inviting you to participate in this research project about the policy translation process in the Dutch water cooperation sector. This research project aims to have a deeper understanding of the relevance of the scope to interpret and implement vulnerability in water cooperation projects.
Procedures	You will participate in an interview lasting approximately 60 minutes. You will be asked questions related to your role in the field of projects for Water Cooperation in the relationship between Colombia and the Netherlands. Sample questions include: <ul style="list-style-type: none"> - How do you define your experiences in the action coordination between the actors from the Netherlands and the influence actors in public policy in Cali. - What were the main challenges when designing/implementing the Plan Jarillon Project? (Regarding actors' coordination, technical knowledge, mutual understanding)
Platform to hold the interview, and date	The interview handle between the <u>Name of the interviewed</u> and Karen Vargas will be through an <u>Online platform/or specify location</u> ; on <u>Day, Month, Hour</u> .
Potential Risks and Discomforts	There are no obvious physical, legal, or economic risks associated with participating in this study. You do not have to answer any questions you do not wish to answer. Your participation is voluntary, and you are free to discontinue your participation at any time.
Potential Benefits	Participation in this study does not guarantee any beneficial results to you. As a result of participating, you may better understand some of the interests that are in academia related to your working field.
Sharing the re- sults	The research findings will be shared with you upon request after 16 November 2023.

Participation Method	This consent form acts for the implementation of an interview that will take part through the online platform....	
Confidentiality	<p>Your privacy will be protected to the maximum extent allowable by law. No personally identifiable information will be reported in any research product. Moreover, only trained research staff will have access to your responses. Within these restrictions, results of this study will be made available to you upon request.</p> <p>As indicated above, this research project involves making audio recordings of interviews with you. Transcribed segments from the audio recordings may be used in published forms (e.g., journal articles and book chapters). In the case of publication, pseudonyms will be used.</p>	
Right to Withdraw and Questions	<p>Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. The data you provided before you stopped participating however will be processed in this research; no new data will be collected or used.</p>	
Statement of Consent	<p>I agree that I am at least 18 years of age</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Your questions have been answered to your satisfaction and you voluntarily agree that you will participate in this research study.</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>I have been given sufficient information about this research project. The purpose of my participation as an interviewee in this project has been explained to me and is clear.</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>My participation as an interviewee in this project is voluntary. There is no explicit or implicit coercion whatsoever to participate.</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>I consent to have an audio recording of my interview.</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p>	
Signature and Date	NAME PARTICIPANT	NAME PRINCIPAL INVESTIGATOR Karen J Vargas Perlaza
	SIGNATURE	SIGNATURE
	DATE	DATE

Appendix B. Semi structure Interview Sample

INTERVIEW SEMISTRUCTURED QUESTIONNAIRE

*The questionnaire was designed in both English and Spanish, with adaptations made based on the interviewee's language preference

Date	Day	Month	Year	Interview location	Online (platform) / In person (location)	
Interviewed Name						
Current professional role						
Relevant experience (Related to the research purpose)						
Involvement in the Jarillon Project				YES		NO
Audio recording available				YES		NO

Introduction Questions	
1	When did you start working in the field of water governance & cooperation/Flood Protection?
2	What kind of actors have you been accompanying in this field of WG&C?
3	What has been your role in the WG&C field? (Policy maker, researcher, technician, or community benefit from a project?)

IOB researchers in the Netherlands		
Policy Translation	1	What are the main values and guidelines promoted by the Netherlands in the water cooperation projects/programs?
	2	Are these values in any point conflicting with the recipients' countries' policies?
	3	Do you consider there is any shift necessary in the way how the cooperation for water is planned in NL and later implemented in third countries? (Is there any specific observation related to the policy schemes, content, technologies, and instruments)
	4	Have you experienced differences related to the way how projects have been meant to be and how these are finally implemented? -What are the actors implied?
Colombia	5	Do you have knowledge of projects for water cooperation implemented in Colombia?
	6	What values do you consider important in the Colombian international policy for water cooperation?
	7	To negotiate with Colombia is there a necessity to make significant changes to the policy meant in the Netherlands? Are there various or little common points?
Vulnerability Framework	8	How would you understand the concept of 'People in vulnerable condition'?
	9	Does the Netherlands include in its international policy an understanding of how to approach vulnerability?
	10	Based on the knowledge you carry out in your professional role; do you know if there exist debates related to how vulnerability is reduced through the projects?
	11	How is vulnerability asset, considered and analyzed in the projects by the Ministry of Foreign affairs? If the question is applicable for the interviewed*
Conclude	12	Do you have any questions for me?

Consultancy level (Royal HaskoningDHV)
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Policy Translation	1	What are the main political guidelines given by the Netherlands that the consultancy must follow while designing a water cooperation project abroad? And specially in the case in Cali?
	2	When designing a project in another country is there any input before starting the design? Any input related to important aspects of the recipient population? (For example, cultural barriers, and constraints)
	3	Do you have experience in projects for water cooperation in Colombia? What projects?
	4	Comparing your experience in the design of projects in Colombia to other developing countries, do you consider there exist specific challenges to aligning the Dutch Foreigner Policy and the Colombian policy and reality?
Project Jarillon Cali	5	What was your role in the project “ <i>Aguablanca Dike along the Cauca River, Cali, Colombia</i> ”?
	6	How would you describe the work coordination between the Netherlands and Colombia?
	7	Had the consultancy taken enough awareness of the impacts that could produce the proposals?
	8	What had been the role of the consultancy handling/being responsible for the effects of the project?
Vulnerability	9	Did it exist any hint of conceptualization of discussion of ‘vulnerable people’?
	10	In the recent years had you experience any change in how the approach of ‘vulnerable people’ is considered?
Conclude	11	Do you have any additional reflection you would like to share with me?
	12	Do you have any questions for me?

Administrative and local actor in Colombia			
Plan Jarillon	1	¿Bajo qué etiquetas categorizaría el Plan Jarillon? -Qué tipo de proyecto es, Cooperación para gestión del agua,	
	2	¿Qué rol tuvo durante su involucramiento con el Plan Jarillon?	
Policy Translation	3	¿Considera que ha habido algún nivel de incoherencia entre lo que fue propuesto y lo que se empezó a hacer en la primera etapa del proyecto? ¿cómo fue el proceso de comunicación y trabajo con la consultoría holandesa? - ¿Cuál fue el acompañamiento cuando empezó la implementación? - ¿cuál es el proceso durante la implementación del proyecto? - ¿Enfrentó el municipio dificultades para interpretar el propósito del proyecto?	
	4	¿Considera que en Cali se ha tenido el conocimiento adecuado para la implementación del proyecto según fue planteado?	
	5	Respecto a las expectativas de lo planeado; ¿hubo incoherencias entre las condiciones reales del territorio, los términos de negociación y las dificultades? (Texto 41)	
	6	¿En qué medida fue clara o confusa la comunicación de los objetivos del proyecto? ¿Hubo algún tipo de acompañamiento?	
	Implementación	7	En el diseño del proyecto se realizaron 3 recomendaciones urgentes, 8 a corto plazo, ¿De qué modo se priorizaron las recomendaciones que se iban a implementar? ¿Qué esfuerzos realizó la alcaldía para implementar las recomendaciones? - Uso de la tierra en la zona; Qué tan fácil fue entender las negociaciones al POT
		8	¿La alcaldía llegó a experimentar algún tipo de desacuerdo, incomodidad con las recomendaciones que se hicieron en el proyecto? ¿En qué medida estás estaban o no alineadas?
9		Planes de inspección fueron señalados y descritos por la consultora, ¿en qué medida estos fueron implementados y seguidos como se planeó? - Los ingenieros de la CVC recibieron capacitación?	
Hilos políticos en el valle	10	¿Considera que el cambio en la administración municipal de algún modo influyó la implementación del proyecto?	
	11	¿Hubo algún tipo de agencia por parte de la CVC para hacer el diseño del proyecto?	
	12	Cómo el tipo de acuerdos que se hacían y las diferentes responsabilidades gestionadas afectaron otras entidades. Por Ejemplo, EMCALI y la responsabilidad de reparar las válvulas para el dique.	
Vulnerabilidad	13	Related to the project ‘Plan Jarillon de Cali’ in the moment of the implementation did it existed any awareness of the ‘vulnerable people’?	
	14	¿Cuál fue el rol y entendimiento de la comunidad que sería reubicada? ¿Cuál fue el entendimiento de las posibles consecuencias en la implementación del proyecto?	
	15	Durante las visitas de evaluación de factibilidad, ¿cuál era el rol de la comunidad que vivía en la zona? ¿Cuáles fueron los otros actores involucrados?	
Concluir	16	¿Este proyecto dejó algún aprendizaje para el relacionado con la implementación de proyectos de cooperación en agua?	
	17	¿Tiene alguna pregunta para mí?	

Corporación OSSO		
Policy Translation	1	Siendo una corporación que apoyó el diseño del proyecto del Plan Jarillon, ¿cómo define que fue su experiencia en la coordinación de acciones con la consultoría Royal HaskoningDHV y las entidades involucradas a nivel regional (CVC, DAGMA, EMCALI)?
	2	¿Existieron lineamientos o políticas generales que se debían obedecer para diseñar el proyecto de acuerdo con la política exterior holandesa? ¿Qué tipo de lineamientos estipulaban la cooperación holandesa?
	4	¿Hubo algún tipo de influencia política en el periodo de diseño del proyecto?
	5	¿Cuáles fueron los principales desafíos para lograr el diseño del proyecto del Plan Jarillon?
	6	¿Considera que es necesario algún cambio en la forma que se planificó el diseño del proyecto y las capacidades de lo que se podía hacer en Cali? (Hay alguna observación específica relacionada con los esquemas de políticas, contenidos, tecnologías y/o instrumentos)
Project Jarillon Cali	5	¿De quién es la responsabilidad de administrar el Dique?
	6	¿Durante el periodo de implementación del proyecto hubo claridad entre las capacidades técnicas que se tenían a nivel local para implementar las recomendaciones técnicas?
	7	¿La administración municipal tenía conocimiento de los alcances políticos que implicaba la implementación del proyecto?
	8	¿Considera que para la implementación de las recomendaciones hubo algún tipo de priorización? ¿Qué recomendaciones fueron priorizadas? ¿Por qué motivo?
	9	En el proceso de implementación del proyecto, ¿existió algún canal constante para la comunicación entre la cooperación holandesa, la corporación OSSO y la alcaldía?
Vulnerabilidad	10	¿Al momento de diseñarse el proyecto existió alguna consideración de los efectos sociales que el diseño podría conllevar?
Proceso Feedback	11	¿Identifica algún tipo de lecciones aprendidas a partir de la ejecución de este proyecto? ¿Identifica cambios en la forma como se negocian actuales proyectos de cooperación para el manejo del agua y la forma en cómo se hacían 10 años atrás?
Concluir	12	¿Tiene alguna pregunta para mí?

Appendix C. Dutch Projects in Cauca River 2011-2016

Table 4. Dutch Cooperation in the Valle del Cauca River 2011 – 2016

Project Name (Date)	Purpose	Financing and project partners
Colombia Alliance Forum – Holland for Water June 29 2011	Prepare the country to face this phenomenon through the application of a comprehensive water resource management policy, applied to the deltas and Colombian basins.	The National Development Plan included 26 billion pesos of investment in adaptation and reconstruction projects of the areas affected by the winter emergency. In addition to the Funding from NL.
Partners for water in the first phase of the project Jarillon Cauca River (July 2012-Dec 2013) Fondo de Adaptación sobre el Plan Jarillón. Nivel de Avance	Funding for this programmed is provided by the Netherlands Ministry of Infrastructure and Water Management as opposed to other programmed reporting on the Development Cooperation Project Database , which are funded by the Netherlands Ministry of Foreign Affairs.	<i>The project operated with a total budget of €102,584 and involves collaboration with project partners, including HASKONING Nederland B.V. and the Netherlands Enterprise Agency. It primarily focuses on the Disaster Risk Reduction sector.</i>
Partners for water 2, project Jarillon Cauca River (July 2012; Nov 2013) Jarillón Agua Blanca, Calí 2	This project is a follow-up of the previous project Jarillón Agua Blanca, Cali. The aim of this project is to send an extra expert to give a presentation to President Santos. A funding of 2.065 EUR for this program is provided by the	Netherlands Ministry of Infrastructure and Water Management as opposed to other programs reporting on the Development Cooperation Project Database , which are funded by the Netherlands Ministry of Foreign Affairs.
Identification mission Room for the River Cauca (Feb 2013; Dec 2013) OMC2 B.V advice	CVC Cauca started the project 'Pilot project in the hydrographic zone of upper Cauca'. In the context of climate change, the objective of the project is to restore the natural resilience of the Cauca basin. An extra expert was requested to give advice of the scope of the work to be performed for a joint project between Colombia and the Netherlands called Jarillón Agua Blanca. OCM2 B.V. together with partner Concorde Group Global Translation Services has been commissioned to carry out the scoping Jarillón Agua Blanca, Cali. based on a drafted Terms of Reference.	The project operated with a total budget of €24,029 and involves several project partners, including Concorde Group B.V., OMC2 B.V., and the Netherlands Enterprise Agency. It primarily focuses on the Disaster Risk Reduction sector.
'Room for the River' in Cauca River Technical Assistance (Oct 2013; March 2016) By Arcadis in Cauca River Valley	The Cauca River as a basin of one of the most important regions of the country for agriculture and the city of Cali. sits on its riverbanks. From 2010 until 2012 onward populations suffered severe flooding. In the city of Cali population of almost a million people is in risk to be flooded. The aim of the project is to offer technical assistance to the CVC for the implementation of the pilot project in the hydrographic zone of upper Cauca.	This project operated in collaboration with various partners, namely the Netherlands Enterprise Agency, Concorde Group B.V., and ARCADIS Nederland. It falls within the Disaster Risk Reduction sector and is framed under the title 'Building with Nature.'
FLAG – Flooding and Groundwater (Pilot CVC Cauca) CVC Communication CVC News (September 2014; Oct 2016)	Project conducted by Deltares and Unesco IHE in cooperation with Fugro, Eijkelkamp and CVC Cauca to provide best practice guidelines to study the interaction between groundwater and surface water that can be further applied in other areas of Colombia, and for which Dutch companies can provide support, technology, and advisory products.	This project involves collaboration with two key partners, namely the Netherlands Enterprise Agency and Stichting Deltares. It operates within the sector of Disaster Risk Reduction.

(Own construction with available information from RVO)

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