



# The Vietnamization of delta management: The Mekong Delta Plan and politics of translation in Vietnam

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## ABSTRACT

With the identification of river deltas as especially vulnerable to the effects of climate change, efforts are underway to mainstream climate change adaptation into development planning in many delta countries. Yet understanding how these processes unfold demands attention to how knowledge is translated from one context to another and across levels of governance to influence action. This paper examines the “Mekong Delta Plan” (MDP), produced in partnership between the Vietnamese and Dutch governments in 2013, as a vehicle for the translation of knowledge to shape climate change adaptation in the Mekong Delta of Vietnam. Drawing on ethnographic research at sites in Vietnam and the Netherlands, the findings illustrate how the MDP has come to play a key role in the governance of climate change adaptation in the Delta, driven first by Dutch advisors and then by the Vietnamese government. This study suggests that attention to the politics of translation in climate change adaptation governance can shed light on important factors shaping the socio-material evolution of both the Mekong Delta in particular and deltas more broadly.

## 1. Introduction

For the past decade, the Vietnamese Mekong Delta (VMD) has been gaining attention as a hotspot of vulnerability to climate change (Dasgupta et al., 2007; IPCC, 2007), with adaptation to its immediate and future impacts often described as a matter of great urgency (McElwee, 2017). Scientific reports describe the Mekong Delta as especially vulnerable to sea-level rise and related impacts from flooding and salinity intrusion due to its low elevation, dense human population, and local and upstream infrastructure projects that starve the delta of needed sediment, enhancing subsidence and coastal erosion (IPCC, 2007; Tuan and Chinvanno, 2011; Thuc et al., 2016). Like other fertile and populous deltas, the VMD is an area of high agricultural productivity, and it is an important driver of the country's economic growth, responsible for 90% of Vietnam's rice exports and a majority of aquaculture exports, contributing 27% of the country's GDP (Tam, 2015). Yet under extreme climate change scenarios, the area could face nearly 40% inundation over the next the century, threatening millions of people's livelihoods and affecting domestic and international food security (Thuc et al. 2016). As such, the Delta has become an object of domestic and international efforts to steer development along a sustainable and climate-resilient path. This

paper considers the politics of translation involved in these processes, by examining the role of the “Mekong Delta Plan” (MDP) – a document produced in partnership between the Dutch and Vietnamese governments in 2013 – in climate change adaptation governance in the VMD.

With growing recognition that many effects of climate change are becoming increasingly unavoidable, efforts have been underway to integrate climate change adaptation (CCA) into development planning in many locales, a process requiring effective knowledge sharing and coordination across multiple scales and levels of governance (Adger et al., 2005; Dewulf et al., 2015; Stott and Huq, 2014). As this special issue makes clear, these efforts are particularly salient for the world's major river deltas, where effects of climate change such as sea-level rise and changes in river discharges, combined with subsidence and human impacts from dam and dike construction and urbanization, are identified as serious threats to sustainability (Foufoula-Georgiou 2013; Giosan et al., 2014; IPCC, 2007; Kuenzer and Renaud, 2012; Renaud et al., 2016). In this, Dutch actors and expertise are playing a prominent role, as witnessed with the creation of “Delta Plans” first in the Netherlands and then abroad in Vietnam, Bangladesh, and elsewhere. The promotion of Dutch expertise is also evident in fora such as international conferences<sup>1</sup> and networks including the Delta Alliance<sup>2</sup> and Delta Coalition<sup>3</sup>, as well as a recent feature article in the *New York Times*.<sup>4</sup>

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<sup>1</sup> <http://www.climatedeltaconference.org>; <http://www.climatedeltaconference2014.org>

<sup>2</sup> <http://www.delta-alliance.org>

<sup>3</sup> <http://www.deltacoalition.net>

<sup>4</sup> Kimmelman, M. (2017). “The Dutch have solutions to rising seas. The world is watching.” *The New York Times*, 15 June 2017. <https://www.nytimes.com/interactive/2017/06/15/world/europe/climate-change-rotterdam.html?mcubz=2>

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This paper presents a preliminary analysis of findings from a larger project on the governance of CCA in the Mekong Delta that attempts to answer the question: *How is knowledge translated across governance levels to influence local livelihoods in transnational climate change adaptation initiatives?* Here, I examine the role of the MDP in the translation of knowledge, ideas, and recommendations for responding to the effects of climate change from the Netherlands to Vietnam, and then into local projects and programs. I argue that analyzing processes of knowledge translation at work in the governance of climate change adaptation can help shed light on the political forces, tensions, and maneuverings influencing the socio-material trajectory of deltas.

The paper proceeds as follows: I first elaborate on the conceptual framework employed to analyze the politics of translation involved in the governance of CCA in the Mekong Delta. This approach draws on the growing body of literature in science and technology studies, anthropology, political ecology, and development studies on the politics of translation in environmental governance, as well as the relatively younger literature on climate change adaptation governance. Next, I describe my methodological approach and research sites as they relate to CCA in the Delta, and reflect on my own role in the process of knowledge translation. In the third section, I present findings from the research, tracing the role of the MDP through its creation, promotion, and current status in implementation, focusing on several instances or modes of translation that emerged as significant in this process, through the lenses of *problematization, framing, enrollment, and materialization*. In the final section, I discuss what these findings illuminate about the politics around CCA in the Mekong Delta.

## 2. Conceptual framework

Recent years have witnessed efforts to mainstream climate change adaptation into development in many countries (Mertz et al., 2009; Stott and Huq, 2014; Weisser et al., 2013), with delta areas in particular becoming the targets of such efforts (Foufoula-Georgiou 2013; Kuenzer and Renaud, 2012; Renaud et al., 2016; Zegwaard, 2016). However, development pathways are constrained by the historical reliance on infrastructures, such as canals, dykes, and sluice gates, and institutions for the management of water in many deltaic environments (Biggs et al., 2009; Wesslink, 2007). Recognizing that path dependencies often result, the concept of “delta trajectories” has been proposed to describe the evolution of delta landscapes as shaped by the dynamic interplay between social, ecological, and technological systems (van Staveren and van Tatenhove, 2016). Adapting to climate change in such landscapes is thus a complex task that will both shape and be shaped by particular socio-material delta trajectories.

Knowledge, whether of long-term climate impacts in an area or effective local adaptation measures, is a crucial part of the human toolkit for responding to climate change, yet it is also an arena of contestation. Because adaptation actions occur at multiple scales, from individual livelihood changes to government-supported infrastructure projects (Adger et al., 2005), successful CCA involves effective communication and coordination among various state and non-state actors operating at multiple levels of governance (Amundsen, 2010; Dewulf et al., 2015; McElwee, 2010) and, increasingly, transnationally (Dzebo and Stripple, 2015). To promote long-term adaptability and social-ecological resilience, many scholars encourage an “adaptive management” approach (Nelson et al., 2007; Pahl-Wostl, 2009) that stresses the importance of learning and knowledge exchange to enable coordinated, flexible, and effective action. The centrality of knowledge exchange for CCA is acknowledged in both the literature and practice. It is evident in the Paris Climate Accord’s (UNFCCC, 2015) emphasis on the importance of both scientific and traditional knowledge for adaptation, and at meetings of development practitioners in Vietnam, where flawed implementation of CCA projects is attributed largely to “knowledge

gaps” between different levels or stakeholders<sup>5</sup>. Yet knowledge is never just applied to policy and practice in a linear fashion; it is shaped and changed by socio-political processes (Jasanoff, 2004; Keeley and Scoones, 2003; McFarlane, 2006). Understanding outcomes in CCA governance thus requires attention to the politics surrounding knowledge and its framings (Dewulf, 2013; McEvoy et al., 2013; Stott and Huq 2014; Weisser et al., 2013). The emphasis on knowledge “gaps” and the challenges of coordination and implementation suggest that what is needed is greater appreciation for how knowledge is *translated* from one context to another.

### 2.1. Politics of translation<sup>6</sup>

Translation, as used here, refers to how knowledge travels, is transformed, and gets established in socio-material effects or practical actions. This involves both relational and discursive processes, as translation draws together networks of actors via shared interests and interpretations (Corson et al., 2014; McElwee, 2016; McFarlane, 2006). This usage has been developed through applications of actor-network theory in science and technology studies (Callon, 1986; Star and Griesemer, 1989; Latour, 2005), as well as its extensions in anthropology, political ecology, and development studies to explore translations between “global” science and “local” situations in environmental and development politics (Choy, 2011; Goldman and Turner, 2011; Mosse and Lewis, 2006; Tsing, 2005).

Much work on the politics of translation in environmental governance demonstrates the importance of considering how knowledge is translated across scales of analysis and intervention (Brosius, 2006; Choy, 2011; Tsing, 2005). Tsing (2005) argues that it is precisely in these interactions, where supposed “universals” meet local particularities and “productive friction” results, that global knowledge can become practically effective. Translation has political effects: it produces tensions and contestations in governance processes (Brosius, 2006; Velásquez Runk, 2009; West, 2005), or creates slippages and ambiguities of meaning that enable cooperation among disparate actors (Salemink, 2006; Star and Griesemer 1989; Zink, 2013). Actors translate ideas to suit particular interests and purposes, as Mehta et al. (2016) illustrate with the spread of Integrated Water Resources Management in Africa, and Weisser et al. (2013) demonstrate for the “climate change adaptation paradigm” on the same continent. To the degree that the translations involved in CCA governance discussed here are about shaping people’s futures with regard to livelihoods, economies, and landscapes, they are deeply political.

From the literature, we can identify several modes or mechanisms of translation. Loosely based on Callon’s (1986) “moments” of translation and the many extensions and applications of the framework since then, these should not be taken as distinct steps. Rather, they are heuristic lenses which bring into clearer focus different modes by which knowledge is translated to spur action on a specified problem. First, *problematization* and practices of knowledge-making are used to identify a problem and the relevant evidence and authoritative expertise to address it. This can include defining problem parameters, such as specific impacts of climate change in an area, and include techniques of visualization, comparison, or calculation to represent them (Brosius, 1999; Choy, 2011; McElwee, 2016). Second, choices about *framing* shape how knowledge is communicated to others, often using

<sup>5</sup> Specifically, at the international conference to “Formulate and Implement National Adaptation Plan for Vietnam based on Local Adaptation Practices and International Experiences,” held on July 25, 2017.

<sup>6</sup> This approach differs from Spivak’s (1993) notion of “the politics of translation” in that it is not primarily about language or texts. However, it is similar in emphasizing the importance of context and recognizing that translation typically occurs between asymmetrical relations of power in which the translator possesses a kind of political agency.

narratives, and define relevant goals and relationships between elements (Dewulf, 2013; McEvoy et al., 2013; Leach et al., 2010). Third, *enrollment* is the process of bringing in participants and allies, whether human or not, to provide support and legitimacy for the knowledge claims at hand (Latour, 2005; Mosse and Lewis, 2006). Fourth, in order to spur action and socio-material change, *materialization* embeds knowledge in material forms, such as official documents, financial flows, technologies, or living matter (McElwee, 2016; McFarlane, 2006). Together, these heuristics can help shed light on the “moments of influence” (Witter et al., 2015) at work in environmental governance processes.

### 3. Methodology and research sites

This paper is based on multi-sited, multi-scalar ethnographic research (Corson et al., 2014; Marcus, 1995) undertaken between 2014 and 2017 in Vietnam and the Netherlands. Research was conducted at sites spanning international, national/subnational, and provincial/local levels of governance. Methods consisted primarily of semi-structured and informal interviews with a range of actors including planners and policymakers, scientists, development practitioners, extension officers, local officials, and farmers. In addition, I participated in meetings, conferences, and workshops at multiple levels, and reviewed conference proceedings and key agency and policy documents. These varied sources of data were used to triangulate, crosscheck, and compare perspectives on important events and processes, to gain a deeper understanding of how knowledge is translated in the governance of CCA in the VMD. Because this paper is concerned with negotiations around the Mekong Delta Plan, it focuses primarily on the discourses and practices of elites, rather than, for instance, those of farmers. Below I elaborate on the sites/governance levels where research was conducted, before briefly reflecting on my own positionality.

**The Netherlands:** The Netherlands has emerged as a key site of knowledge production and international engagement on water and delta management, based on the country’s long-standing experience at home and through the active promotion of their water sector abroad (Bakker et al., 2017; Kimmelman, 2017; Wesselink, 2007; Zegwaard, 2016)<sup>7</sup>. In 2010, the governments of Vietnam and the Netherlands signed a “Strategic Partnership Arrangement” for long-term collaboration on climate change adaptation and water management. The Mekong Delta Plan was produced under this framework in 2013, led by a consortium of Dutch organizations. Research in the Netherlands was carried out in 2014 and 2016, first via participant observation at the “Deltas in Times of Climate Change Conference II,” and later through interviews with many of the key actors involved in the production and promotion of the MDP, including consortium partners involved in advising and drafting the plan, and other representatives of the Dutch water sector.

**Vietnam:** In Vietnam, research took place from mid-2016 through the end of 2017 in multiple locations: Ho Chi Minh, Hanoi, and Can Tho cities, and Tra Vinh province in the coastal Mekong Delta. Semi-structured interviews were conducted with key actors and experts, many of whom were involved in coordinating, planning, consulting on, or helping promote the MDP, or otherwise key actors in the governance of CCA in the Delta. Sampling at the national/subnational level was done by snowball method, aiming to trace networks of relations and in that way cover the majority of key actors actively engaged and communicating with one another in this process, including both Vietnamese and foreigners. I observed and participated in workshops and conferences with scientists, development practitioners, government officials, NGOs, and private sector representatives on topics relating to CCA and sustainable development in Vietnam and the Mekong Delta,

agricultural sustainability, and the Dutch “strategic delta planning” approach. At the provincial/local level, research sought to understand how officials, scientists, extension officers, NGOs, and others attempt to implement policies and projects for CCA, exploring the transformations that ideas, plans, and policies go through in their expression in local projects and programs.

Of course, this paper itself is a form of producing and translating knowledge about the Mekong Delta. I have selected particular claims to represent the Delta, from the opening sentences of the introduction to the evidence I draw upon in the results that follow. As such, this article presents one version of a reality that is inherently messy and uncertain, and which should be acknowledged for participating in that very reality by amplifying certain elements or patterns over others (Law, 2004). Several points follow from this.

First, many of my choices have been about navigating the challenge to both take seriously the pressures the Delta and its inhabitants currently face as well as the construction, framing, and use of these by particular actors. This is not about parsing out “true” statements from “false” ones, but rather about the ways in which such statements gain momentum, how they are shaped by power and politics, and with what effects. Second, as a participant-observer I have been enmeshed in this very world of knowledge practices, and my choices have been influenced by the discourses of those who have been directly involved in delta planning in Vietnam. Thus I concede that in this paper I am not especially critical of the concepts, categories, or terms they use and deem significant, and I may even be complicit in amplifying the importance of the MDP, where others might downplay it. Lastly, I focus on the things I do because of my particular mode of inquiry, or conceptual and methodological approach (Law, 2004). In ethnographic fashion, I aim to represent the voices of my interlocutors in order to shed light on some of the ways that these knowledge practices are inherently social, political, and messy, aspects not typically acknowledged in official accounts. Rather than being pre-given, these events are uncertain and contingent. Yet they have important practical ramifications.

### 4. Findings

In this section, I trace the history and fate of the MDP as a vehicle for the translation of knowledge to influence climate change adaptation in the VMD. Drawing on data collected and academic literature, I discuss its movement from origins in Dutch expertise to current status in implementation, focusing on aspects of translation that emerged as significant in the course of research, as highlighted by the four modes described above. In this story, the Dutch advisory team is the primary agent of translation, around which the translational network pivots. But in the final phase the locus of translation shifts. This analysis sheds light on the politics of knowledge shaping the governance of CCA in the Delta, including some of the strategies, interests, tensions, and resistances at play, and provides insights into the fate of the MDP in influencing the Delta’s socio-material development trajectory.

#### 4.1. Problematization, knowledge-making, and promotion of expertise

In creating the Mekong Delta Plan, a problem first needed to be identified, and the potential means for addressing it provided. This was done through defining deltas as comparable objects, whose problems could be diagnosed and treated in standardized ways, and then marshaling the knowledge and experience of the Dutch government, scientific, and business communities to solve them. Building on the foundations laid by the first Dutch Delta Committee in the 1950s, whose flood protection schemes became the engineering marvels known as the Delta Works, and reacting to the devastation wrought by Hurricane Katrina in New Orleans in 2005 (Wesselink, 2007), the government of the Netherlands established a second Delta Committee in 2008, with the mandate to advise policymakers on developments in the context of climate change. From this committee flowed several

<sup>7</sup> See also <https://www.hollandtradeandinvest.com/feature-stories/the-dutch-delta-approach>, accessed 2 October 2018.

recommendations, among them the establishment of a Delta Program with a long-term future orientation to the integrated management of the Dutch delta. Building on the emerging scientific consensus about river deltas as particularly vulnerable to climate change and faced with challenges to sustainability (Foufoula-Georgiou et al., 2013; Giosan et al., 2014; IPCC, 2007; Kuenzer and Renaud, 2012), the Dutch government almost immediately made efforts to export the model abroad (Zegwaard, 2016) as part of its “Aid-to-Trade” agenda, in which international aid projects are expected to transform into trade relations (Bakker et al., 2017). The model coalesced into the “Dutch Delta Approach,”<sup>8</sup> a pamphlet on which describes the defining features of deltas, current delta “pressures,” and 12 “building blocks” of sustainable delta management as applied by Dutch experts globally. The latter include such elements as an integrated and long-term approach, flexibility and dealing with uncertainties in decision-making, prioritizing financing, and the “quality label” that comes with Dutch expertise. Following visits by the Vietnamese Prime Minister and other high-level officials to the Netherlands to see firsthand the accomplishments of Dutch planners and engineers, in 2010 the Prime Ministers of both countries signed a strategic partnership arrangement on climate change adaptation and water management for the Mekong Delta and Ho Chi Minh City, leading to publication of the MDP in 2013.

In this way, Dutch technical advisors established themselves as “prime mover” (Callon, 1986) in the translation of delta management to Vietnam. By simultaneously defining the problem and offering a solution, they sought to make themselves indispensable to CCA in the Mekong Delta. The Dutch “strategic delta planning” approach and its product, the MDP, thus became the “obligatory passage point” (Callon, 1986) through which all actors must pass in order to successfully address the problems faced by the VMD.

#### 4.2. Framing: strategic delta planning and scenarios

Development of the MDP first required framing the scale of the problem, objectives, and approach used to address it, a process that produced significant tensions between the Dutch and Vietnamese partners involved. On the Vietnamese side, the process was led by the Ministry of Natural Resources and Environment (MONRE) followed by the Ministry of Agriculture and Rural Development (MARD), on behalf of the Vietnamese government. On the Dutch side was a board of strategic advisors with experience in the Dutch Delta Committee and a consortium of technical experts from science and industry<sup>9</sup>, all coordinated by a chief technical advisor based in Vietnam and financed by the Partners for Water program of the Dutch government (Bakker et al., 2017; Mekong Delta Plan (MDP, 2013).

An important component of the Dutch approach to “strategic delta planning” is the use of “scenarios” for envisioning long-term (100-year) futures for development planning. Scenarios are narratives about plausible futures used to consider more and less desirable outcomes based on current trends and future uncertainties. These are then used to assess the robustness of short-term policy and investment decisions to identify “no-regret” measures. From the perspective of the Dutch planners, a crucial part of this approach is remaining open to multiple scenarios to allow for flexible and adaptive decision-making in the face of uncertainties. Yet for the majority of the Vietnamese participants, such an open-ended approach to planning was useless, as it would not provide a strong enough direction to guide actionable policy in Vietnam. Instead, they insisted on choosing one from among the four scenarios envisioned to be the “preferred” development scenario: “agro-business industrialization.” This scenario assumes effective

<sup>8</sup> <https://www.dutchwatersector.com/uploads/2014/11/140209-01-delta-approach-a4-web-07.pdf>, accessed 2 October 2018.

<sup>9</sup> The consortium included experts from Royal Haskoning DHV, Wageningen University, Deltares Institute, and Rebel Group.

implementation of land and water management policies and strong economic growth for successful development of the delta’s “natural competitive advantages” for high-value agricultural production, processing, and export (Mekong Delta Plan (MDP, 2013).

In Vietnam, for a plan to be applicable and legitimate, it must assign concrete implementation procedures and responsibilities, leaving little room for local discretion. Lower levels of governance do not have authority to make strategic decisions over that which has not been approved from above. Dutch advisors expressed frustration with the apparent Vietnamese desire to “reduce uncertainty to zero,” saying, “they merely asked us what should we choose, which is the best one?”<sup>10</sup> But for the Vietnamese experts involved, too much uncertainty in the plan was a weakness, suggesting there was more work to be done in order to adapt it to the locally specific context and determine steps to be taken. Moreover, because of great differences between the two countries’ deltas, they needed to first set a clear target to aim for, and only then would they be able to navigate a path to get there. Without a “practical plan of implementation,” however, “the MDP is like a dream.”<sup>11</sup>

While participants on both sides described disagreements and tensions in this process, the intersection of the “strategic planning” approach with Vietnamese planning culture also sparked a kind of productive friction (Tsing, 2005) with regard to the types of scalar framing represented in the MDP (Choy, 2011; Dewulf, 2013). Settling on a singular overarching vision enabled not just longer-term thinking, it also helped encourage the kind of integrated, region-wide and multi-sector planning perspective emphasized by the Dutch advisors. But perhaps most importantly, it provided a plausible-yet-optimistic vision upon which numerous actors could project their agendas.

#### 4.3. Enrollment: mobilizing support and building alliances

For the MDP to gain any traction with the hope of being implemented in the governance system of Vietnam, it needed support from the wider donor community. After the first draft was completed nearly entirely by Dutch advisors, having received little support from the Vietnamese partner ministries, the government of Vietnam was reluctant to embrace it. It took the efforts of several key actors on the Dutch side working to enlist the support and participation of Vietnamese and international development partners for the plan to move forward. Early factors included support from the Southwest Steering Committee (SWSC), a Vietnamese agency functioning as an intermediary between the party-state and provinces of the Mekong Delta<sup>12</sup>, and the International Union for the Conservation of Nature (IUCN), both of which recognized shared agendas in the MDP project and provided input. With the assistance of IUCN, consultations on the draft version were organized with a number of Vietnamese experts, who provided critical feedback that were then integrated into the next draft. Gradually more support followed, as Vietnamese experts reached out to provincial authorities and the Dutch coordinators brought additional partners into the discussion, including foreign embassies, NGOs, and donor organizations. Eventually, a number of these development partners issued a joint statement to the Vietnamese government supporting the sustainable development of the Delta following the principles laid out in the MDP, thereby legitimating its status before the government. Yet it was the very vagueness inherent in the MDP that allowed it to attract so much support. In this way it became a boundary object (Star

<sup>10</sup> Interviews with Dutch advisors on 12 July and 7 September 2017, respectively.

<sup>11</sup> Interview with member of Vietnamese expert focus group, 20 July 2017.

<sup>12</sup> In October 2017, the Party Central Committee of Vietnam announced the disbandment of the SWSC, along with the two other regional steering committees in Vietnam (<http://en.nhandan.com.vn/politics/domestic/item/5562902-vietnam-to-disband-regional-steering-committees-in-bid-to-downsize-public-sector.html>, accessed 2 October 2018).

and Griesemer, 1989), enabling cooperation between diverse actors by creating space for the reinterpretation of their interests (Zink, 2013). Both Vietnamese experts and foreign development partners could agree on many of the principles and general recommendations outlined therein, but as a “visioning document” describing what the delta could look like in the future, it lacked concrete details for how to get there.

#### 4.4. Materialization and Vietnamization<sup>13</sup>

To have any material effect, recommendations in the MDP have to be translated into Vietnamese policies, targeted investments, and practical actions. Indeed, as many interviewees conceded, it was not really a “plan,” but just a “vision.” As mentioned above, many of the Vietnamese participants faulted the “strategic planning” approach for its lack of specificity, desiring a more practical master plan for implementation. Many also saw the MDP as a foreign document not well suited to the Vietnamese system of governance, even if they appreciate many of its recommendations in theory. While there have been some efforts to promote recommendations from the MDP at the provincial level through training workshops for provincial officials organized by research institutes or the SWSC, in the end changes must be formalized in relevant policy documents and funded to take effect. This is how CCA gets “mainstreamed” at the local level: by channeling activities through existing development programs. The primary mechanism by which this occurs is the “Resolution” (*Nghị quyết*) issued each year by the provincial People’s Council, which provides the socio-economic development orientation for the province, adapting central government policies to local conditions and priorities, and delegating responsibilities to various entities. Other relevant policies include the “New rural areas” (*Xây dựng nông thôn mới*) program, which provides financial incentives to communes for implementing rural development goals, and the “New-style cooperatives” (*Hợp tác xã kiểu mới*) program, which reflects aims also promoted in the MDP, namely economic cooperation and spatial coordination between farmers. Activities must fit within the framework of such programs, and through these, extension officers, development organizations, and other technical advisors try to promote the newest climate-resilient agricultural models. These approaches generally focus on applying technical solutions (like new crops, seed varieties, irrigation technology, or local infrastructure) to increase household incomes, and can be seen as reflecting predominantly technocratic and economic biases (Dewulf, 2013), with limited attention to long-term or system-wide sustainability. The translation of CCA through such policies can also be seen as a means to mobilize scientific expertise and international funds to reproduce elements of Vietnamese society (Zink, 2013) in line with the developmentalist goals of the Vietnamese state. Indeed, Vietnam maintains a strict policy of “protecting domestic politics” (*bảo vệ chính trị nội bộ*) from outside interference, seeking to closely control how foreign recommendations are implemented.

What all this signals is that with materialization, the prime mover has shifted. Responsibility for translating CCA for the VMD moves from the Dutch advisory team to the government of Vietnam. New programs and development priorities must be initiated by the central government through declarations aimed at orienting national and regional development trajectories and then applied top-down, authorizing specific activities and implementation procedures. Actors then find ways to maneuver within this formal structure.

This shift was evident in late September 2017, at the government-hosted “Conference on Sustainable and Climate Resilient Development of the Mekong Delta of Vietnam” in Can Tho, where the role of the MDP as

a vehicle for the translation of knowledge, but not of implementation, was made clear. In his concluding remarks, Prime Minister Nguyễn Xuân Phúc of Vietnam summarized the consensus items that had taken shape over the course of two days (and several years) of discussions, including, among others: the need to move away from a long-standing emphasis on rice monoculture; to adapt to, rather than attempt to control, the Delta’s natural hydrological dynamics, including allowing for flood retention in the upper delta floodplain and a more brackish environment in the coastal zone; rehabilitating mangrove forests along the coast; diversifying agricultural production and enhancing product value-chains; and central to all of this, pursuing a long-term, integrated, regional and multi-sectoral planning strategy. The prior articulation of these items in the MDP was acknowledged, but now the focus was on implementation. Many initiatives will be funded by a USD \$310 million World Bank loan, approved in 2016. Not long after the conference, the government codified these principles into Resolution 120 (Government of Vietnam (GoV, 2017), establishing a new obligatory point of passage to guide CCA activities in the delta for the foreseeable future, and a master plan is in the works to provide detailed implementation procedures.

## 5. Conclusion

By chronicling the story of the Mekong Delta Plan through the four modes of translation explored here (*problematization, framing, enrollment, and materialization*), we can discern political processes at work that produced tensions, transformed meanings, and allowed knowledge to travel, eventually spurring action on climate change adaptation in the VMD. Building on the emerging scientific consensus around delta vulnerability to climate change and promoted through a foreign policy of economic cooperation in the water sector, Dutch actors helped create a specific demand and provided a supply to fill it. The MDP became a means for Dutch advisors to translate delta-planning knowledge to Vietnam. Yet as the “strategic delta planning” approach confronted Vietnamese planning culture and a hierarchical politics of implementation, the intended meaning of “scenarios” was transformed while its scalar implications were successfully translated to the new context. This was a compromise that produced a document both attractive and open to interpretation enough to enlist the support of numerous Vietnamese and foreign development actors, a process that nonetheless required active networking, and further transformed the plan through participant feedback. However, in order for the MDP to generate practical action and material effects, it needed implementation procedures authorized within the framework of official Vietnamese policies. Here, the prime mover of translation shifted from the Dutch advisors to the Vietnamese government, establishing a new translational network and new passage point through which CCA activities in the Delta must fit.

For the Dutch, the Mekong Delta Plan was an experiment in applying the Dutch Delta Approach in a new setting, which succeeded in shaping the terms of discussion towards the need for transformative changes in the Delta’s development pathway. Picking up the momentum and political will generated by the MDP and embracing this discourse, the Vietnamese government has been able to mobilize a large source of funding, scientific expertise, and international support to pursue its goals through a long-term, region-wide, and multi-sector approach to climate-resilient development. This study demonstrates how the politics of translation at work in climate change adaptation governance influence the ways that knowledge and ideas travel, are transformed, and are applied in practice, thus shaping the dynamic evolution of deltas.

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<sup>13</sup> I employ this word intentionally to evoke its usage during the Second Indochina War in reference to the United States’ policy of transferring responsibility for the war effort to the South Vietnamese government, in order to highlight similarity in the process of “handing over” translational agency and responsibility for implementation from foreign actors to the local government.

## Conflicts of interest

None.

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