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GUEST EDITORIAL

Strategic delta planning: launching new ideas on managing a Delta, and their travels along actor coalitions, participatory planning tools and implementation timelines

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Prominent scientific research reveals that major river and coastal deltas of the world are at risk due to human activities (e.g. Giosan *et al.* 2014; Renaud *et al.* 2013; Syvitski *et al.* 2009), but what sort of planning approaches could cope with these risks and possibly reduce them? In this Special Issue, we examine strategic delta planning as a relatively new approach to adaptively plan and manage deltas under conditions of urbanisation and climate change. As the coupled impacts of climate change and urbanisation are relatively new and affect the management of natural resources, questions arise as to whether one should preserve existing land and water uses by protecting them against these impacts, or whether one can anticipate the impacts by adapting land and water use to accommodate, and possibly even thrive, on the impacts (Haasnoot *et al.* 2013; Smajgl *et al.* 2015). As a result, strategic choices emerge for delta societies whether to continue with business-as-usual strategies for agriculture, transport and spatial planning, or whether innovative ideas should be promoted that could shape alternative development directions that are aligned with the growing pressures of urbanisation and climate change.

Delta research is a global research field by definition, due to the geographic spread of deltas (such as Missisipi Delta by Xu, Lam, and Liu (2018); Mekong Delta by Nittrouer *et al.* (2017) and Renaud, Szabo, and Matthews (2016)) and the global pressures of climate change and urbanisation affecting deltas and their societies. In the last decade, delta research has gained prominence and a solid research base has been developed, partly due to a number of delta comparison research projects (such as Urbanising Deltas of the World, Dynamic Deltas, DECCMA, ESPADELTAS (DECCMA 2017; Nicholls *et al.* 2018; NWO n.d; Van Staveren, van Tatenhove, and Warner 2018)), conferences and international delta collaborations (such as DeltaAlliance, DeltaCoalition), and other special issues (Karpouzogloua *et al.* 2019; Nittrouer *et al.* 2017; Renaud, Szabo, and Matthews 2016; Xu, Lam, and Liu 2018; Zegwaard *et al.* 2019). This issue is unique and complementary in the sense that it

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focuses on empirical studies of planning approaches that either implicitly or explicitly try to alter the development trajectories of deltas.

Strategic delta planning is a relatively new planning phenomenon (Seijger *et al.* 2017). It is undertaken to regain a more sustainable development of delta areas. Strategic delta planning is defined as a public sector-led process through which a long-term vision and the actions and means for its implementation are presented as a strategic policy and development goal. These delta-planning processes differ from traditional planning processes, not only by their focus on delta systems, but also by their long-term planning horizons, their emphasis on integration, and the financial, organisational, and implementation dimensions of the plan. Strategic delta planning places higher demands on integration, implementation and long-term adaptivity than regular planning does. This requires attention on strategic delta planning as a *process* that involves multiple stakeholders with different roles and interests. Hence, the aim of a strategic delta plan is to influence delta developments through political support and investment in a specific direction of strategic development choices, without controlling or predetermining the outcomes (Seijger *et al.* 2017). Outcomes cannot be controlled, as actor coalitions, new technologies, and knowledge may push developments in a different direction. Negotiating consent, or seeking ways through which the interests of actors can be accommodated (Checkland and Scholes 1990), thus becomes a prime topic, to explore how influential a strategic plan is in shaping and influencing ideas, and vice versa, how more local ideas and strategies may influence and transform implementation processes for a strategic delta plan.

Strategic delta planning thus offers opportunities to introduce new ways of thinking, and negotiating consent among changing actor coalitions, on how the delta should be managed. Yet, there is a stark difference between offering opportunities and actually influencing thinking and decision-making on how deltas are managed. Although it has long been known that plans are rarely implemented as designed (e.g. Brody and Highfield 2005; Mintzberg 1978; Pressman and Wildavsky 1984), there is renewed attention on how to incorporate adaptivity as a key element of planning and design processes (e.g. De Boer and Bressers 2011; Hermans, Slinger, and Cunningham 2013). Vested interests, actor coalitions and preferred technologies may constrain the strength of the negotiated consent, and thus the impact of strategic delta plans in influencing decisions, policies and projects. Recognising such challenging implementation timelines-pathways, this special issue studies strategic delta planning through a three-phase decision-making framework of agenda setting, plan formulation, and implementation.

Of the 11 papers in this special issue, six are the direct result of research supported by the NWO UDW Strategic Delta Planning project¹; the other contributions were obtained through an open call for manuscripts. The contributions include studies that address (parts of) Bangladesh, California, Indonesia, Italy, and the Netherlands. Although Strategic Delta Planning is initiated at a delta level, the majority of the contributing papers contain specific local cases, thus centralising the question of how the strategic plan should, and can be, materialised into concrete policies and plans that may transform the delta according to the vision presented in the strategic delta plan.

The contributions are clustered into three interrelated topics of (1) innovative ideas, (2) actor coalitions, and (3) participatory planning tools. These topics are anchored in the framing and understanding of strategic delta planning outlined above and published previously (Seijger *et al.* 2017). Each cluster provides an alternative lens to explore the impact of a strategic delta plan on people's agendas and decisions, from national/

delta level to local level. The clusters and contributions are explained in the remainder of this Editorial.

1. (Re)introduction of new ideas and innovations to manage land and water resources

Strategic delta planning presupposes that changes are necessary in the way a delta is managed. How, and to what extent, are new ideas and strategies incorporated in a delta plan? Four studies feature the introduction of new ideas and innovations to manage a delta. First, Vo *et al.* (2019) offer an analysis of the agenda-setting phase and the introduction of innovative ideas in the Mekong Delta Plan (MDP) in Vietnam. For the MDP to be effective in shaping the future developments of the Vietnamese Mekong Delta, the agenda as set by the MDP will have to be shared and adopted by involved stakeholders. The article uses the lens of the Multiple Streams Approach to examine convergence and divergence between the development agendas for the Mekong delta as prevalent among key stakeholders. The results show that agenda-setting and convergence were a crucial step towards endorsement of the strategic planning process for the Mekong Delta by the Vietnamese government.

Second, the contribution of Kraus-Polk and Milligan (2019) introduces restoration as a crucial component of strategic delta planning. In their analysis, they focus on monitoring human use in delta restoration areas, to improve adaptive management programmes by better accounting for diverse human use (and emotions, agencies) that are otherwise externalised, unknown or ignored.

Third, Gaglio *et al.* (2019) assess whether an ecosystem services approach that relies on nature-based solutions (i.e. aquatic vegetation restoration) can assist the governance of deltaic areas towards more sustainable strategies, overcoming the limitations related to a sectoral and fragmented regulatory framework. The analysis focuses on the Po delta in Italy, and the authors demonstrate that sectoral management has been ineffective in maintaining the ecosystem services. Based on these results, an innovative, integrated management approach is proposed, focusing on restoring aquatic vegetation.

Fourth, Van Loon-Steensma and Vellinga (2019) describe and analyse the implementation pathway for the “wide green dikes” concept in the Netherlands. The Delta Programme offered a window of opportunity for change and innovation, and for a reconsideration of traditional dike solutions. The analysis of the long and complex implementation pathway for the wide green dike concept illustrates the importance of a long-term vision and the involvement of a variety of actors at national and local-regional levels to consent to the implementation of innovations. The importance of (changing) actor coalitions and their consent or dissent is further explored in the second cluster of contributions.

2. Changes in actor coalitions and institutional frameworks

Strategic delta plans aim to provide delta-wide solutions, thereby crossing sectoral plans and institutions. This does require new forms of collaboration and a strong and durable consent across key actors that cut across existing institutional arrangements. How are these ideas appreciated by various actor coalitions and are new coalitions formed? Three papers address the need for new actor coalitions and institutional frameworks in strategic delta planning processes. Korbee *et al.* (2019) provide a local level perspective on the implementation feasibility of strategic delta plans. Based on a

case study of the local institutional setting in Ben Tre province, Vietnam, the paper addresses the need to understand the motivations and capabilities of government actors at different levels in the Mekong delta. Both motivations and capabilities are instrumental for the implementation of policies and plans that adhere to the strategic choices put forward in the Mekong Delta Plan.

The contribution of Minkman, Letitre, and van Buuren (2019) investigates the international transfer of the (Dutch) Delta approach in the National Capital Integrated Coastal Zone development plan in Jakarta, Indonesia. This plan is analysed to understand the barriers and facilitating factors that influence the international transfer of the Delta approach. The analysis reveals that policy transfer is a complex process that might result in deadlocks; transferred knowledge is neither adopted nor rejected. The authors show that, in the case of the Integrated Coastal Development project, fundamental policy change is required for the adoption of strategic delta planning. Three related interpretations are presented to demonstrate why this change has not yet been observed.

Hasan *et al.* (2019) describes and analyses the Dutch–Vietnamese interactions and relationships around the development of the Mekong Delta Plan as a case of policy transfer. The article shows that the financial and political support for Dutch Delta Planning expertise in Vietnam needed to be actively and continuously wielded to keep the process going. The authors conclude that policy transfer has its merits when understood as a process of translation between many actors, all of whom change, learn, and influence not only each other but also what is transferred.

3. Application of participatory planning tools to stimulate learning and consent across stakeholders

The introduction of new ideas and support across different actors could be strengthened through participatory tools. Participatory planning tools are increasingly being applied in strategic delta planning processes to come to a new understanding and stimulate learning among participants, and to gain alignment between public, private, sectoral, long-term, and short-term interests in a strategic delta planning process. How can planning tools support the shaping of a strategic delta plan, and how could tools support conversions among actors from strategic innovative plans into specific changes in practices at local and regional levels? Three papers address the introduction of new planning tools and approaches to create new understandings in planning processes.

Two contributions introduce and discuss the motivation and ability framework (MOTA). First, Nguyen *et al.* (2019) propose a toolkit for agricultural transformation and livelihood options. The results of the application of the livelihood toolkit in Ben Tre province, Vietnam, offer insights for agricultural transformation analysis and can be used as input for the strategic delta plan for the region.

Second, Hoan, Khoi, and Trung (2019) assess the adaptive capacity of farmers towards saline intrusion in different saline environments in the Vietnamese Mekong Delta. This study could help managers and policy-makers to propose appropriate and feasible options in a ‘bottom-up’ approach for the adaptation plan to guarantee sustainable livelihoods for the local farmers.

Third, Evers *et al.* (2019) introduce and evaluate a framework that assesses the performance of participatory planning tools. These tools commonly promote a facilitation of communication, knowledge sharing, social learning and supporting consent. However, tools are rarely evaluated in a structural way on these dimensions. The

authors apply the assessment framework in a training workshop on participatory planning tools for strategic delta planning. The analysis points to the potential of the assessment framework in advancing our knowledge on the performance of tools in participatory planning activities.

The synthesis article by Seijger, van Halsema, and Korbee (2019) integrates the findings of the aforementioned studies. The studies are used to test and validate working hypotheses that were developed at the start of the NWO UDW Strategic Delta Planning project. The hypothesis testing reveals that strategic delta planning is a deliberate effort to influence delta developments, wherein wishful thinking on how a delta could develop is repeatedly confronted with vested practices and interests. These confrontations produce expected (e.g. institutional embedment, changing people's minds) and unexpected changes (e.g. actors suddenly consenting or stepping out). Strategic delta planning is, therefore, not only an ambitious planning process with an evidenced influence on altering decision-making, it is also highly uncertain, as consent on strategic directions has to be renegotiated across phases and arenas.

Returning to our opening sentence "what sort of planning approaches could cope with these risks and possibly reduce them?," it can be concluded that strategic delta planning is one approach that has the potential to alter decision-making on strategic priorities for a delta, for which – in order to be impactful – consent has to be renegotiated across phases and arenas. Each contribution, therefore, provides an intriguing account of how delta societies could cope with the coupled impacts of urbanisation and climate change.

Note

1. The project is part of the Urbanising Deltas of the World program, funded by the Netherlands Organisation for Scientific Research (NWO). The objective of this project is to better understand the dynamic delta planning process and the roles of stakeholders, experts and policy-makers therein. More info: <http://strategic-delta-planning.unesco-ihe.org>

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