Delta environments and livelihoods are worldwide under pressure, offer strategic delta plans an adequate response for societies?
EGU General Assembly, HS 5.2.2 Advances in Socio-Hydrology, 10 April 2019

Chris Seijger, Wim Douven, Leon Hermans, Gerardo van Halsema, Dorien Korbee, Fida Khan, and Quan Nguyen
E: chris.seijger@ifp.uni-freiburg.de, w.douven@un-ihe.org
Deltas under pressure

Attractive living > 500 million people
Urbanisation
Agricultural intensification
Climate change
Salinity intrusion
Sediments for delta formation
Rapid spread of strategic delta planning (SDP)

**Definition:** A public-sector led process through which a long-term vision (the strategic delta plan), and actions and means for implementation are produced that shape and frame what a sustainable delta is and may become.” (Seijger et al. 2017)
What we draw upon

1) SDP over time (Seijger et al. 2017)

2) Implementation feasibility, what actors WANT and CAN do (Phi et al. 2015, Quan et al. 2019)

3) Stakeholder discussion a.o. Nov 2018

4) Special Issue (in prep.) California, Italy, Indonesia, NL, Vietnam
New ways of thinking on how a delta could be managed are introduced. Minds may change in line with strategic directions.

Agriculture “From rice bowl to agribusiness” (Mekong)

Delta landscape restoration (Po, Sacramento-San Joaquin), alternatives for flood protection (Jakarta, NL) and groundwater use (Jakarta, Mekong)

Weak embedment: political mandate and approval (Bangladesh, NL, Mekong, Sacramento-San Joaquin). Limited influence (yet) on planning (Jakarta, Po, Sacramento, Mekong).
Minds may change, obtaining support is a continuous undertaking

**Limited number of actors give their consent** to a strategic plan.
**Strong** consent → strong(er) convergence of minds and decisions (NL, Mekong, Sacramento-San Joaquin), continuation next phase.
**Weak** consent → limited convergence, less progress (Po, Jakarta).

Consent for strategic choices is subject to **new views and critiques**

(Based on: van Loon et al. 2019)
Conclusions on strategic delta planning

- Technical and political
- Highly ambitious
- Alternative strategies
- Proven influence

- Translation into short-term plans
- Challenging fit regional contexts

An adequate response for societies?
A vibrant field of research

- **Full trajectory of a strategic delta plan.** ~ 20 years, What does a strategic delta plan deliver within one society, political economy, human-water system?

- **Dilemmas in strategic delta planning.** Navigate between selective and directive in plans or loose and flexible (at the risk of not introducing directions for change)?

- **Tailor planning tools to strategic nature of planning.** Strategic issues, plan implementability, hydro-social consequences of envisioned strategic choices.

When still reading (good job!), frankly, there are many more topics: manoeuvring between top-down (strategic plan) and bottom-up planning (local realities), learning between strategic and regular planning, travels of innovative/alternative socio-hydrological constructs.

https://bit.ly/2HV0qoQ
Thanks: the audience, HS 5.2.2 session convenors, people in strategic delta planning project, funder NWO Urbanizing Deltas.

Don’t miss: EGU Tool for implementability of plans (Thursday, 08:30-10:15 PICO screen PICO 5b. strategic-delta-planning.un-ihe.org with outputs for research, practice and capacity building. chris.seijger@ifp.uni-freiburg.de
Insights (selection) for SDP in practice

**Vocabulary** Develop and apply a SDP vocabulary that adheres to the contents of strategic planning and avoid semantic issues in cultural diverse settings (e.g. a vision, not a plan; focus on strategic issues rather than understanding and delving into complexity; aim to select key strategic options)

**Politics** SDP in the realms of political decision making; e.g. negotiation of consent, confronting entrenched political agendas, power of representational vagueness and semi-finished designs). Hence, do not dive too deep into analytical preciseness – persuasiveness lays in the imagination not in the details (the power of leaving things out).

**Local implementation** Low motivation and abilities of regional government officials and farmers make it difficult to widen up the problem analysis at local level and move the SDP from an abstract to a concrete local plan.

**Strategic explicitness** SDPs need to be clear on strategic choices and directions, making it explicit how and where it differs from existing policies.

**Adjustable innovations** Innovations for implementation need to cover multiple interests, flexible in interpretation, and subdued to multiple studies and negotiations. Strike a balance between flexibility to interpret and visualisation of persuasive narrative on the future to pursue.

**Choosing tools** Past choices seem primarily driven by prevailing mind-set of the tool engager (e.g. ecosystem services, scenarios, etc). Recognition of the diverse steps and phases of SDPs calls for conscious and tailored choices of tools for the right phase and process.
- **Evers**, J. et al. “A framework to assess the performance of participatory planning tools for strategic delta planning.”

- **Gaglio**, M. et al. “Ecosystem services approach for sustainable governance of brackish water lagoon used for aquaculture.”

- **Hasan**, S. et al. “Making waves in the Mekong Delta: recognizing the work and the actors behind the transfer of Dutch planning expertise.”

- **Hoang**, V. et al. “Political agenda-setting for strategic delta planning in the Mekong Delta – converging or diverging agendas of policy actors and of the Mekong Delta Plan?”


- **Kraus-Polk**, A. et al. “Affective ecologies, adaptive management and the restoration efforts in the Sacramento- San Joaquin Delta.”

- **Loon**, J. van, et al. “How ‘wide green dikes’ were reintroduced in the Netherlands: a case study of the uptake of an innovative measure in long-term strategic delta planning.”

- **Minkman**, E. et al. “Reconstructing the impasse in the transfer of delta plans: Evaluating the translation of Dutch water management strategies to Jakarta, Indonesia.”

Further reading


Figure 2. Innovation trajectories of novel ideas (1-8) in phases of delta planning, and ideas that are proposed to enrich delta planning (A-C). These ideas are discussed in Section 2 and further explained in the papers. 1-4 Mekong Delta: 1 is agribusiness, 2 is salinity adaptation, 3 is alternatives for triple rice, 4 is interprovincial collaboration. 5 The Netherlands: wide green dikes. 6-8 Jakarta: 6 is long term flood protection, 7 is urban offshore developments, 8 is halting groundwater pumping. A is informal urban growth, B is monitoring human use in Sacramento-San Joaquin delta, C is diversity of ecosystem services in the Po delta.
**Actor dynamics**

**Wide Green Dikes:** 1 is Second Delta Commission, 2 is Delta Program, 3 is Ministry of Agriculture and Nature, 4 is regional water boards in Wadden Sea area, 5 is nature conservation NGOs, 6 is researchers, 7 is water board Hunze & Aa’s, 8 is Flood protection Program HWBP, 9 is Ecoshape, 10 is Wadden Fund. Large arrow I: phase of national decision making, start of delta program. Large arrow II: make regional strategy for Wadden Sea area, Large arrow III: pilot green wide dike

**Jakarta delta plan:** 1 is Indonesian Government, 2 is Dutch government, 3 is technical experts for Jakarta Delta Plan, 4 is Ministry of Economic Affairs, 5 is governor of Jakarta, 6 is Korean Government, 7 is the Indonesian President, 8 is National Planning Agency, 9 are the 3 Ministries of Maritime Affairs, Environment, Fisheries, 10 is Save the Bay coalition. Large arrow I: agenda setting for Jakarta delta plan, Large arrow II master plan (rejected by President), revision process resulted in 2 separate plans.

**Mekong delta plan:** 1 is Vietnamese Government, 2 is Dutch Government, 3 is technical experts for Mekong Delta Plan, 4 is Ministry of Agriculture and Rural Development, 5 is Ministry of Environment and Natural resources, 6 is Southwest Steering
1 is scenarios, 2 is design workshop, 3 is Denvis, 4 is MOTA, 5 is assessment of tool performance