



Round table session Delta Approach 2.0

Report meeting Thursday November 20 2015, Unie van Waterschappen, The Hague

Prepared by Delta Alliance International secretariat.

1 Introduction

In close cooperation with urban deltas worldwide, the Netherlands has developed the Delta Approach for integrated water management planning in delta areas. This approach so far seems to be successful in the Dutch Delta programme can be used to focus delta development in other deltas. This is currently being investigated in Bangladesh.

Yet one of the key success factors in dealing with delta management in the Netherlands is continue critical reflection and improvement of approaches. Over the last years there have been developments related to the Delta Approach in practice and science, such as lessons learnt in the Mekong delta and Bangladesh, new insights on community based adaptation, participatory and agent-based modelling, and dealing with uncertainty. There has been divergence, reflected for example in different versions of the Delta Approach^{1,2}

Table 1; definition of building blocks as used by the 12 building blocks for a delta approach¹ and the report on adaptive deltamanagement² on the Delta Alliance website. The crosses indicate the overlap

Twelve building blocks for a delta approach												
Building blocks Dareport	1. Integrated approach	2. Sustainability, flexibility, solidarity	3. Anchoring in legislation and depolitization	4. Finance and implementation	5. Long-term approaches versus short-term measures	6. Cooperation with other government levels and stakeholders	7. Focus on key decisions and clear deadlines	8. Supported analysis instruments	9. Dealing with uncertainties and using scenarios	10. Dealing with uncertainties and using scenarios	11. Innovation	12. Quality label
	A. Agenda setting	x	x	x			x					
	B. Problem analysis	x					x		x			
	C. Strategy development	x	x	x		x	x	x	x	x	x	x
	D. Implementation	x		x	x	x	x	x	x		x	
	E. Monitoring and evaluation	x			x	x	x	x	x		x	



The objective of this round table session was to converge again, to bring new insights from theory and practice together in “the Delta Approach 2.0” or at least in improved understanding. This was done in a round table session organised by the Delta Alliance with a selected group of 15-20 participants from the Golden Triangle, from government, private sector and knowledge institutes, all active in deltas worldwide. The participant list can be found in the appendix.

This round table session was part of series of events organised by the Delta Alliance (www.delta-alliance.org/) around the Delta Approach. The idea of this session was born after a seminar on Adaptive Delta Management at TU Delft earlier this year³. Outcomes of this session will be shared and discussed with the Delta Alliance wings and other interested parties in a webinar early 2016 and at the Adaptation Futures conference (www.adaptationfutures2016.org) next year in Rotterdam.

The program was:

13:30-14:45 Opening and introduction participants

14:45-15:00 Coffee break

15:00-16:15 Groups discussions

16:15-17:00 Plenary convergence discussion and follow up.

17:00-17:30 Drinks

We look back at a fruitful discussion and hope to proceed this with the Wings in 2016.

2 Opening and introduction participants

The participants were asked to prepare for the round table by reading the Delta Approach documents on the NWP¹ and Delta Alliance² website and by preparing a short 2 minute statement on their most important recommendation for the decision makers in the deltas in Myanmar, Vietnam and Florida. This recommendation could follow from the Delta Approach documents or from a practical experience or from a new scientific development. A summary given in the table below.

Table 2; Summary of the recommendations given by the participants in categories and quotes for interpretation.

Category	Illustration quotes
Tailor-made solutions, no 1 fits all approach	<p>“Customization is above all”</p> <p>“Much tailor-made solutions are needed and that makes it complex”</p> <p>“Do you want a hardwring governance system such as in the Netherlands”</p> <p>“divergence is a good thing”</p> <p>“Convergence is needed”</p> <p>“Local governance is governing”</p>
(De) integration	<p>“Make use of existing drivers for change/growth”</p> <p>“How to prevent that you make tomorrow’s delta for yesterday’s city”</p> <p>“look not only at future (scenarios) but also at the history”</p> <p>“To integrate all can lead to too much complexity. ‘Loosely coupled system’ useful theory to disentangle”</p> <p>“Balance between water and spatial and? economy”</p> <p>“Work across scales, not straight path”</p> <p>“Valuation of ecosystem services”</p> <p>“more attention for landscape planning and agriculture”</p>
Economic development at the centre	<p>“Delta planning is framing economic development”</p> <p>“from preventing and protecting to facilitating economic growth”</p> <p>“difficult to find closing business models in countries strongly relying on development aid”</p>
governance,	<p>“Data-availability is an export product”</p> <p>“More attention for cooperation across levels”</p> <p>“Transparency needs to be added as a separate building block”</p> <p>“projects need to be bankable, investable”</p> <p>“More attention needed for bottom-up participation”</p> <p>“Political context is very important”</p> <p>“Look more closely at Motivation and Ability of stakeholders”</p> <p>“Depoliticize, legal implementation”</p>
Need for technology?	<p>“When operating abroad, technical knowledge is available, culture is the challenge”</p> <p>“Add a 13th building block in¹ with technology solutions such as monitoring and building with nature”</p>
Implementation, operation and	<p>“look for fast and clearly visible results”</p> <p>“poor maintenance after implementation, because that is not in the system”</p>



Category	Illustration quotes
maintenance	
Business models for delta management and the Dutch water sector	<p>“Closed business case has been found internationally, not with Dutch partners”</p> <p>“Coalitions with local private sector have to be found in addition to coalitions with local government”</p> <p>“While operating abroad, the Dutch water sector is fragmented compared to other countries. We can learn from others here.”</p> <p>“When operating abroad, use local co-financing”</p> <p>“When cooperating with a country, first phase government to government and knowledge to knowledge, then move to business.”</p> <p>“Netherlands is very good at combining technology and ecobased design”</p>
(Non) Applicability of the delta approach	<p>“Building blocks are a clear illustration of the Delta Approach”</p> <p>“Building blocks presented¹ in are merely principles. For me true building blocks are behind these principles”</p> <p>“Difficult to merge the agendas of business and knowledge with regard to presenting a delta approach”</p> <p>“Start filling the presented frameworks with all experiences and viewpoints”</p> <p>“Delta approach as quality standard to get faster finances”</p>

Several participants asked clarification about the purpose of working towards a Delta Approach 2.0 and the role of the Delta Alliance in this. The Delta Alliance is asked by the Netherlands Government to facilitate an active discussion on the Delta Approach. Therefore we organised this round table with the Dutch Wing. Next year we plan to proceed with this discussion also with the international wings. We will hold a session at Provia Conference [Adaptation Futures](#) and also via the online Delta Alliance communities.



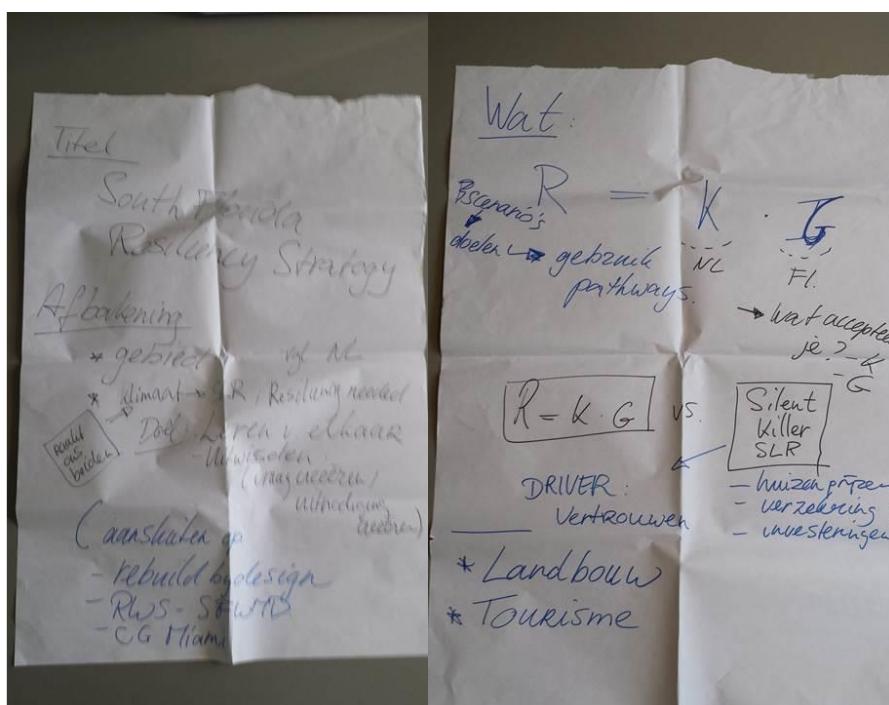
3 Group discussions

We worked around three case studies: Ayarawaddy Myanmar, Red River in Vietnam and Florida. The motivation for selecting these deltas is that the Netherlands is considering to collaborate with these countries in the development of a delta strategy or already agreed with local parties to provide support. We split in 3 groups and developed Terms of Reference for the hypothetical case that a consultant would be invited to develop a delta strategy for one of the case study delta. Based on the discussion in the first statement round we specified the focus to from principles to real action building blocks. Representatives from government, private sector and knowledge institutes were spread equally over the 3 groups. The discussions at the three tables were very different in nature. From very practical almost designing the Florida delta to more abstract discussions on underlying values at the Red River table. Myanmar clearly summarized the findings following the questions for the final discussion and Florida stayed closest to developing the TOR. Below a summary of the discussion at each of the tables is given.

3.1 Florida

The Florida table saw in cooperating with this delta primarily an opportunity for joint knowledge development. As Florida is far developed, there is a great potential for mutual learning, so cooperation should be really directed towards importing, exporting and cocreation of knowledge. This could build on Rebuilt By Design experiences in New York, existing collaboration between Netherlands water authorities and South Florida Water Management District, CG Miami etc. The use of pathways could be an export product of the Netherlands.

A second point raised was that acquiring interested investors is an important driver to achieve the overarching vision on delta development. The Netherlands water sector could play an important role in this because the proven Dutch knowledge on water safety could enhance thrust with potential investors.



3.2 Red River, Vietnam

Following points were discussed with regard to the Red River in Vietnam.

The Netherlands business involvement in the Red River so far seems more successful than in the Mekong. Several explanations were brought up for this. The Red River is closer to river systems in the Netherlands. Concepts as Room for the River can therefore more easily be translated to the local context. So far the cooperation in the Red River has focused on few concrete elements (e.g. Remote sensing) whereas the cooperation in the Mekong on a far more complex delta strategy.

At the Red River table, there seemed to be slightly different views on how the Netherlands government, knowledge and business (golden triangle) should cooperate in advising other deltas: clearly as one Netherlands water sector, or with clear separation of the independent advisory role and competitive business role.

Difficulties with financing large scale project were discussed. Separate tax system for water safety such as in the Netherlands do hardly exist anywhere else. The more senior participants in the group were sceptical about the export potential of water boards similar to the current developments in Semarang Indonesia. They think that this approach cannot be scaled to a delta scale. A more fruitful strategy would be to connect to large investment agendas. No individual projects for water but connect to particularly the agricultural development agenda for the case of Vietnam.



The participants were very sceptical about the applicability of the Delta Approach¹ in other deltas. The first point of critique was already mentioned in the introduction round, that is the building blocks are merely principles. Yet also these principles may not be globally applicable. As an illustration: it took one year for the organisations involved in the Dutch Delta Plan to agree on the building block "Sustainability, flexibility, solidarity". The process of finding these shared values was useful, so perhaps the building block should be to find a shared value system. Yet it was also argued that that might also not be generally applicable. Tailor made is again the key.



A good stakeholders analysis did seem a key building block. In the case of Vietnam particularly the role of the provinces and the peoples committee is often key. Some participants find a policy analytical approach (that starts with a solid stakeholder analysis) such as described in [2](#) widely applicable. This approach stems from the seventies, so one question would be what recent insights in the field of policy analysis could add.

3.3 Myanmar

Myanmar's delta is still at the beginning of development, although upstream dams lead to blocking of sediment, which has degraded the mangrove system downstream. From the seaside many lives and properties were lost due to the Cyclone Nargis in 2008. They did not open the borders for foreign aid but that started to change in recent years. It is interesting to see what will happen now after the elections. The Netherlands has made an assessment and drafted a first plan. There are already many investors from Japan, China and Korea among others who are interested to set up projects in Myanmar. Myanmar really needs to start to make choices about their future.

Adaptive long-term strategy and decision making

- Start with assessment and elaboration of the existing development plans if these exist, instead of designing a new plan from scratch. Often ministries do not like to let go of their existing plans and it is more efficient. We can help to optimize these plans based on our knowledge and experience.
- If assessment or experience shows that the existing plan will lead to undesirable results suggest to change it supported by examples of lessons learned before; both mistakes and successes.
- Scenario's cannot only be used to deal with uncertainties and to draw adaptive decision making paths, but also to outline what the future may look like. If, for example, you let investors develop plantations now, how will this affect the delta in 10 years? Based on this reflection stakeholders can be asked what they see as the desired developments based on their own values and select corresponding pathways.
- Reflecting on future scenarios with different stakeholders may help to define practical development steps that fit in these paths.

Integrated approach

- An integrated approach would be very suitable in Myanmar because a large part of the delta lies within the country and it is still at the beginning of large developments. In terms of governance an integrated approach is a challenge because the government is very sectoral orientated and in some parts and sectors decentralized. However, centralization does not have to be favourable, because the regional organization of Myanmar also gives less financially strong areas, like the rural hinterland, an equal vote in the delta planning process. This might help the country to choose a more solidary and sustainable path than other delta's. So thought should be given to which extent integration is favourable in some deltas.



Nature based approach and Innovation

- To protect the ecosystems and thereby the high natural value that Myanmar still has, a nature based delta approach with building of nature concepts seems a good fit.
- The Netherlands could show what the benefits are, also when seeking for finance, based on our lessons learned in the Netherlands and in cooperation with other countries.
- Building with nature concepts can go hand in hand with innovative techniques. For example remote sensing and sensors can be used to monitor the effectiveness of eco based adaptation measures. This ties in well with the wish from Myanmar to sustain its natural values but to develop at the same time.



Long-term approach vs. short-term measures

- To try if potentially successful ideas identified during the planning process work, couple them to pilot projects implemented locally.
- To gain support for alternative ideas and convert them into implementable pilots you need to support frontrunners who can think ahead and set out their own path as drivers of change. Studies show that frontrunners are found in all cultures, although they may have very different ways of thinking.
- In setting up a consortium for pilot projects, NGO's can be a good partner, because they often know the local context very well and also who the frontrunners are.
- Carrying out pilots locally will show what the most feasible applications are and whether the project will be successful. The results should be coupled back to the long-term plan of course.
- Coupling the lengthy process of scenario development and capacity building to concrete applications, development of business cases and visible progress, is also good for the credibility of the process.
- Carrying out pilots locally and evaluating the potential with the local people shows if a solution will be accepted and supported in the cultural context, because it does not exclude the cultural filter. Also, by implementing a pilot locally it can benefit from local knowledge and skills.



- If the government does not only share top down information but is also involved in the building process together with the local people it will create a real participatory project.

Capacity building (top down and bottom up)

- We need to build local institutional capacity both top down and bottom up to make sure that there is local ownership of projects and follow up.
- To achieve real participation between top down strategic plans and finance and bottom up knowledge and solutions we must learn how and where these different levels can connect.
- An approach to bring top down and bottom up closer to each other is to support the creation of an alliance between the local NGO's and civil grassroots organisations. The board of this network could represent local suggestion for improvement of the water management, could be involved in the planning of the pilot projects and coordinates lessons learned and concrete suggestions for improvement during the pilots. This information can be used for improving the pilots and as feedback to the long-term strategic plan. If needed these boards can be supported with courses on how to address government officials, read governmental communication etc.
- The Netherlands should focus more on cooperation. The adaptation process takes a long time, which asks for long-term involvement. This does not mean that all parties should be present all times, but within the Netherlands we should coordinate follow up. Long-term involvement is also a business model because parties that are involved from the start, like knowledge institutes and consultants can introduce other parties that can take over, from first assessment up to maintenance.
- Spatial disciplines should be involved because delta planning and spatial developments are very interlinked.
- Within the Netherlands we should also cooperate better to make sure our efforts adjoin each other. For example, a PhD topic may be extremely interesting for companies, 4 years of PhD research does not correspond with the timeframes companies work with.



5 Plenary final discussion

The final discussion was centred around the following questions, also addressed in the groups.

5.1 To which extend can be find consensus on the Delta Approach 2.0?

What are areas of disagreement?

Generally there is agreement on recommendations done in the introduction round and suggestions group discussions. There seems also consensus that the Delta Approach 2.0 does not exist and that is a continuous cycle of developing, implementing and learning.

5.2 What are remaining knowledge gaps?

From the discussion followed the following knowledge gaps

Around use of information technology:

- How to make effective use of system models? Most computer models have a specific focus on a certain subject or part of the process. Therefore there is too much fragmentation between models to make integral system assessments and forecasts. These are needed especially for assessments of the whole delta, design and policy making. Once the overall plan is established and its specific measures have to be designed then more specific models are needed of course. Explore the use of loosely coupled system analysis in this
- How to improve the match between model outcomes and the local situation? Model outcomes and the real situation are sometimes very different. How to assimilate local sometimes fuzzy or messy data and make more use of remote sensing
- Visualisation of adaptive pathways needs work

Around process and project management:

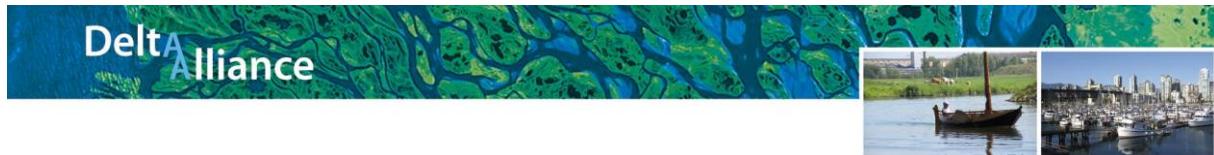
- How to connect top down and bottom up? How can long term strategic planning be combined with bottom up front runner projects
- Effective bottom up participation methods?
- Ways to coordinate long-term collaboration and enjoyment of Dutch organisations.
- Business models for delta management.

Around ecosystem based design:

- Ecosystem service valuation. Still a lot of work needs to be done to fully take the value of ecosystems for humans into account. The work of Liesbeth Ruighrok from Witteveen and Bos was mentioned as a good start but needs more follow up. More ecosystem quantification

Around the overall approach:

- “Culture value” free definition of the Delta Approach. The question if this is possible was also directly raised.



5.3 Is the approach transferable, widely applicable and marketable?

The most mentioned remark was that tailor made solutions are needed and that there is no one fits all delta approach. The logical question is then if the delta approach documents that form the basis of this discussion do contain generic building blocks ^{1,2}. The general opinion was that ¹ provides a nice illustration of how the delta approach was implemented in the Netherlands and can serve as inspiration but not as a directly transferable and widely applicable approach. ² may be a start but need also more work as the title *Towards* indicates. The business case is still very difficult.

5.4 Follow up

This report will be published on the Delta Alliance website and form the starting point for further discussion with the wings. Most probably the Delta Alliance will continue in period 2016-2019 as a Community of Practice. Thought leaders from the Netherlands and other deltas worldwide will be invited to lead the scientific-practitioner debate on topics relevant to delta's. One of the topics will be the delta approach or few building blocks it consist of.

6 References

¹http://www.nwp.nl/_docs/140209-01Delta_approach_A4_web_07.pdf

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

³<http://www.tudelft.nl/en/research/thematic-cooperation/delft-research-based-initiatives/delft-infrastructures-mobility-initiative/agenda/dimi-on-tour-2015/adaptive-delta-management-0406/presentations-adaptive-delta-management/>

Appendix participant list

Voornaam	tussenvoegsel	Achternaam	Organisatie
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Florine		Gongriep	Ministerie van Infrastructuur en Milieu
Barbera		Swart	Ministerie van Infrastructuur en Milieu
Robbert		Morree	Ministerie van Infrastructuur en Milieu
Sandra		Schoof	Ministerie van Infrastructuur en Milieu
Martien		Beek	Ministerie van Infrastructuur en Milieu
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Jan		Kruisjshoop	Rijkswaterstaat
Pieter		Bloemen	Staf Deltacommissaris
Jos		Timmermans	TUDelft
Han		Meyer	TUDelft
Tiedo		Vellinga	TUDelft
Martine		Rutten	TUDelft
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