

# A call for action and cooperation

## Towards an Alliance of Deltas

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Competing claims on land and resources, subsidence in urban areas and climate change are the most serious issues in coastal zones. It is evident from experience that a sectoral approach is inadequate to address these issues. Innovation across sectors and multifunctional use of land and resources is required. From a technical and macro economic perspective most of the issues can be solved. A major barrier is the development and implementation of solutions across the sectors, not only in government, but also in industry.

I would like to illustrate this with three examples. One, fresh water for industrial and human use is often harvested from groundwater resources, causing subsidence in mega cities such as Bangkok and Jakarta. Major parts are now at or below sea level. As a result, storm surges, typhoons and hurricanes will cause an increasing amount of damage and loss of life in such mega-cities. Macro-economically it will pay to invest in alternative water production schemes, such as conservation, underground storage and desalination. Solar energy can be an attractive energy source to make this happen. But, how to develop a business case for such investments? Some countries are experimenting in this field. We need more attention for successful examples and we need mechanisms to multiply them at international scale.

A second example is food production and habitation in flood prone areas. Interesting concepts are coming up such as floating agriculture and floating urban development. Brackish agriculture is another opportunity. Sharing technical and institutional experience will greatly stimulate such developments and will help to make such solutions more cost effective.

The third example is the double challenge to develop low lying areas in a way that is both climate neutral (no greenhouse gas emissions) and climate proof. Energy, water and food production are separate sectors each with their own rationale. Now that the pressure on space and resources is reaching the limits of sustainability, it pays to develop solutions across these sectors. Food residues, solid waste and waste water are excellent energy sources. Water can be used to store and to transport energy. Heat pumps using water as a medium can be used to heat as well as to cool houses, offices and factories. Where water and energy meet many new solutions can be found.

All three examples illustrate that major resource efficiency gains can be found by linking issues and looking across sectors. Such linkages appear to be difficult as in many cases there is a technical, economic and institutional lock-in within the specific sector. Business cases can only be developed when the investing parties can also become the beneficiary parties. This requires institutional change. Existing power structures are very often a barrier for the institutional change that is required to implement cost effective solutions.

Specific initiatives and efforts to remove such barriers and exchange the knowledge and experience gained at international scale will surely help in the diffusion of innovative cost effective solutions. Fortunately there is a growing number of initiatives in this field. In practise climate change can be seen as an important driver for the development of such initiatives, even when it is not the most pressing issue. However, climate change does provide the inspiration for a long term and international perspective on solutions to shorter term problems. It helps to look beyond traditional boundaries and institutions.

In major parts of the world it is not climate change, but rapid urban development and overexploitation of delta resources such as water, soils and natural resources that cause the most acute problems.

Climate proofing requires taking a longer term and a geographically wider perspective. Experience shows that taking climate change and sea level rise on board in early planning phases generates more robust and more sustainable solutions, with more beneficiaries and benefits than in the case of sectoral short term oriented solutions.

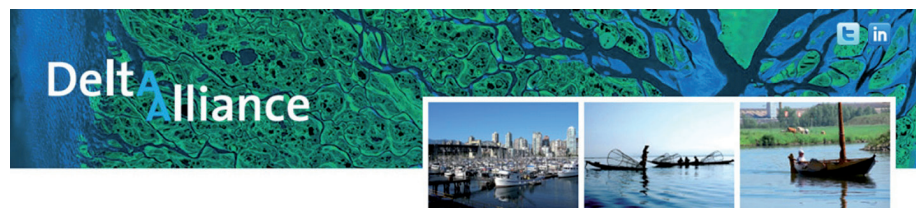
In this article I want to make a plea for the development of an Alliance of Deltas. An Alliance that works as a common interest group, to raise international awareness and generate support for effective solutions. It will help to multiply effective solutions and it provides a common ground for countries and their experts in addressing the issue.

Fortunately, two early initiatives in this direction can already be identified. One is the C-40, the group of Delta Cities cooperating under the umbrella of the Clinton Climate Initiative. The second is the Estuary Alliance launched in Shanghai in June 2010, by the World Wide Fund for Nature (WWF). It promotes the conservation and use of natural habitat for estuarine management and coastal protection. The International Delta Alliance, was launched at the Rotterdam Conference: “Delta’s in Times of Climate Change” (September 29 - October 1, 2010.) The Delta Alliance is focussed on the international cooperation among scientists/experts, practitioners and policy makers. It addresses full delta management, including water, food, urban management and development and natural habitat conservation and development.

In this contribution I call on all those involved to reinforce and broaden the mentioned early initiatives towards a truly international effort in promoting and sharing Delta Knowledge and Experience. Specific actions to be included are:

- The development of major international exchange programs,
- The organisation of bi-annual international delta conferences including all low lying countries of the world, international cooperation and funding programme’s on climate, sea level rise and delta planning.

I suggest that all governments of low lying countries and all relevant multilateral organisations join efforts in the support of the mentioned initiatives towards a truly international Alliance of Deltas.



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#### Welcome to the Delta Alliance website

##### For the resilience of deltas worldwide

Delta Alliance is an international knowledge-driven network organization with the mission of improving the resilience of the world's deltas. With increasing pressure from population growth, industrialization and a changing climate, it is more important than ever that these valuable and vulnerable locations increase their resilience to changing conditions. Delta Alliance brings people together who live and work in deltas. They can benefit from each other's experience and expertise and as such contribute to an increased resilience of their delta region.

Delta Alliance has ten network wings where activities are focused: California Bay (USA), Cillwung and Mahakam (Indonesia), Mekong (Vietnam), Rhine-Meuse (the Netherlands), Nile (Egypt), Pantanal (Brazil), Ganges-Brahmaputra (Bangladesh), Mississippi (USA), Yangtze (China) and Parana (Argentina). Additional network wings will soon be included in Delta Alliance to further benefit from the wealth of information available in these deltas.

[www.deltaalliance.org](http://www.deltaalliance.org)