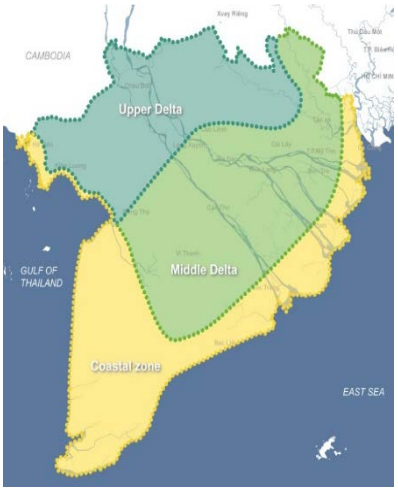
The Mekong Delta Plan

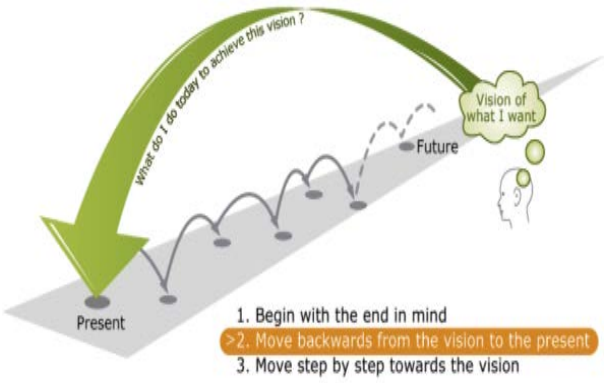
As two low-lying delta countries, the Netherlands and Vietnam are long-standing partners in the field of water cooperation. The Mekong Delta Plan addresses challenges at the heart of this cooperation. It aims to develop a long-term vision towards a safe, prosperous and sustainable delta. It furthermore elaborates scenarios, strategies, policy recommendations and possible solutions. The Mekong Delta ranks amongst the top 5 deltas in the world most likely to be severely affected by climate change. Moreover, the delta sinks. This could have far-stretching consequences for the Delta, which hosts 17 million inhabitants and produces 55% of Vietnam's rice (3.2 bln $ rice export – 3.4 bln $ aquaculture). In this two-pager the Embassy of the Kingdom of the Netherlands highlights the recent activities, lessons, recommendations and possible next steps for the Netherlands – Vietnam water cooperation program.

The Mekong Delta Plan (MDP)

The MDP reflects the long-standing Dutch experience in water-management. Climate change and water security are urgent challenges in the Netherlands. They are addressed by developing a delta approach to find technical and governance solutions. The Dutch experience was applied in the Mekong Delta and resulted in the MDP. This long term, strategic framework takes minimum and maximum climate change scenarios as a basis. It serves to revise existing and develop new master plans. However, the MDP does not only identify geographical challenges. Socio-economic developments, such as urbanisation and industrialisation, determine to a large extent the ever-increasing pressure on the delta's land and water resources. If not balanced, these developments prevent the region from realizing its comparative advantage and full competitive potential. Therefore, MDP incorporates an multi-sectoral, comprehensive approach to the Mekong Delta. Within the Delta, three hydrological zones can be distinguished. Each has their own challenges and needs to adapt land and water use. The upper delta has to adapt to seasonal fluvial floods while enhancing the water retention capacity. The middle delta has adapt to dry season water shortages, including fresh water supply shortages. This leads people to extract groundwater, causing land subsidence. In the coastal area, sea level rise causes salinity intrusion. Agriculture has to adapt to brackish water. Farmers switch from rice to shrimp production.



Hydrological Zones; Upper, Middle and Coastal Delta



Methods

In order to determine what action needs to be taken when, the MDP planners used 'back casting'. This means they took the year 2100 and estimated the geographical situation in that year, based on the continuation of current trends. They then reasoned back in time to the current day as to see what changes need to be made now, in 5 years and in 10 years. Combining this approach with the various scenarios, the planners concluded that development based on the natural resource abundance of the Delta, offers the best chance for a long-term sustainable Delta.

Scenarios

The MDP describes four scenarios. Two are based on the continuation of existing economic and agricultural policy. Two other scenarios include a redirection to an economically more efficient use of natural resources.

- **Corridor Industrialisation Scenario**: continue with unplanned industrial and urban sprawl occupying fertile agricultural lands in between HCMC and Can Tho.
- **Food-Production Scenario**: continue with small-holder rice farming.
- **Agro-Business Industrialisation** Scenario: build commercial value chains with processing of agricultural commodities to add value. For instance fruit, vegetables, shrimp and fish. Combine the abundant natural resources with high-tech developments.
- **Dual Node Industrialisation Scenario**: plan concentrated industrial nodes adjacent to HCMC and to Can Tho.

Given the comparative advantages of the Mekong Delta, the **MDP considers the Agro-Business Industrialisation Scenario as the preferred one.**

Measures and recommendations

Given the trends and preferred scenario, the MDP planners identified "no regret" and "priority" measures that can be taken in the short-to midterm (2050). These enable the adaptation of sustainable land and water use to the current climate change, upstream dam building and land subsidence. These selected measures also have the flexibility to permit differential socio-economic developments of the Delta in the mid- to long-term.

Four possible development scenarios with key drivers of policy implementation and economic diversification

The main recommended measures are:

- Control the flooding in the upper Delta by Agricultural land-use planning and modernization of flood based agricultural production system.
- Reinforce and upgrade the flood protection system and enhance the spatial urban planning for water retention.
- Shift radically from groundwater supply to supply from surface water (to prevent land subsidence).
- Adopt poly-culture based systems aligned with mangrove regeneration in the outer coastline.
- Reinforce the coastal defense by revamping dykes to keep up with sea level rise.
- Put in place political and financial mechanisms to effectively coordinate and integrate the planning across sectors.

Next steps:

The MDP formed the basis for the Integrated Climate Resilience and Sustainable Livelihood project. This project is funded with a 310 million USD loan from the World Bank and a grant of GEF. A major component is the construction of infrastructure to create the context for improved livelihoods.

The MDP also formed the basis for the Prime Minister's Resolution 120 on the Sustainable Development of the Mekong Delta. The Resolution assigns a number of tasks to various Ministries, among which the elaboration of an Integrated Masterplan, a comprehensive Agricultural Transformation Program and a regional coordination mechanism.

Development Partners (Australia, Germany, France, IUCN and others) are actively implementing the recommendations of the MDP.

The **Dutch water sector** is developing solutions that are tailored to the different needs of partners worldwide. Dutch specialized water institutes and private firms offer state-of-the-art technology to improve modelling, forecasting, integrated planning and technology innovation. Their strengths lie in developing integrated technical solutions, circular process management as well as workable governance arrangements. The **Embassy in Hanoi and the Consulate General in HCMC** support HCMC to resolve the flooding and land subsidence challenges. Dutch experts provide strategic advice to support decision making and capacity development. The Embassy and Consulate can provide information about the Dutch water sector and act as a liaison for the Vietnamese and Netherlands' business community.

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