Developing long-term views on water-related issues in the Netherlands, Vietnam and Myanmar

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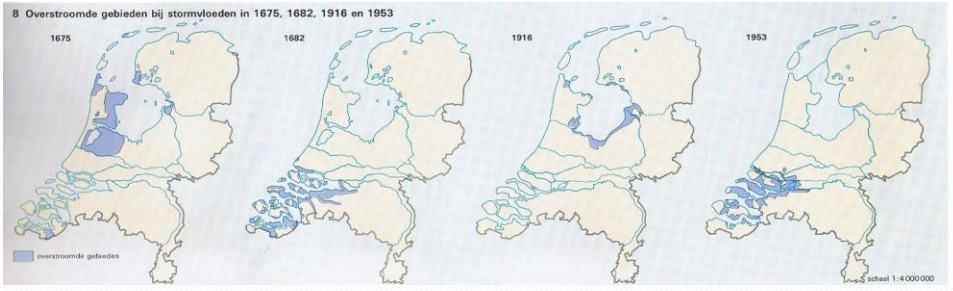
Content

- Netherlands Delta Plan 2.0
- Central message: apply ideas not solutions
- Mekong Delta Plan
- Myanmar IWRM Plan
- Final word

Main recent flood events NL



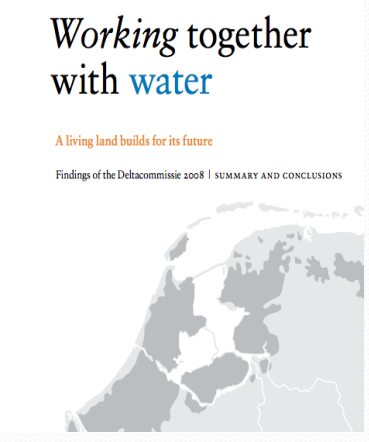
1675 1682 1916 1953

Lorentz Comittee: Closure Zuiderzee

Delta Committee 1.0: Delta Works

3

Delta Committee 2.0 report (2008)



Twelve recommendations for the future
The Delta Committee has developed an integrated vision for the future extending to 2100, and formulated 12 recommendations for the short and medium term.

Scientific basis
The Delta Committee sought scientific advice on a number of aspects, from a group of national and international experts.

The mission is urgent
The Netherlands must accelerate its efforts because the climate is changing rapidly and the economic, societal and physical stakes are high.

Developing the Delta Programme

- Two goals, three values
  - Safe now and in the future [2050-2100]
  - Fresh water supply guaranteed also in dry periods
  - Solidarity, flexibility, sustainability
- For the people, profit and planet
- Not as an answer to a disaster, but to be sure that our choices are optimal
- Annual update to parliament

Delta programme

and 5 key decisions, 2014

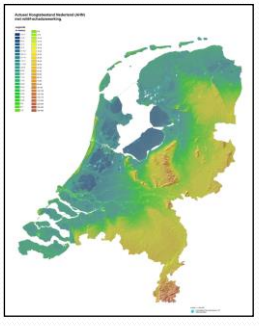
- 3 national programmes:
  - Safety standards + program
  - Urban and spatial restructuring
  - Freshwater strategy +measures
- 6 regional programmes

Delta Programme Commissioner

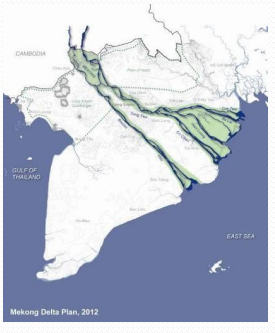
Apply ideas not solutions

- The Netherlands is famous for the Delta works, Room for the River and the Sand Engine
- Are these solutions transferable?

Delta countries The Netherlands, Vietnam Mekong and Myanmar (similar size # people and # km^2)



Rhine-Meuse delta



Mekong Delta

Ayeyarwady delta

Similarities and differences

- Netherlands: low flooding probability, high economic value, similar # of people at high risk
- Mekong Delta: high flooding probability, as yet low economic value, similar # of people at high risk
- Myanmar IWRM for the delta: high flooding probability, as yet low economic value, similar # of people at high risk

Economic value stage is very different

- Stages in socio-economic development
  - Hunter/gatherer
  - Agriculture
  - Industry
  - Services
- Each stage can afford a level of protection/development

Apply ideas, not solutions

- Analyse the situation
  - Coincidence of storm surge and river discharge
  - Coincidence of precipitation
  - Storage volume in the lower reaches
- and formulate the aims
  - Flood safety
  - Fresh water (limit salt intrusion)
  - Facilitate shipping
  - Nature conservancy

The up- and down-stream situation

- The Dutch delta and the Mekong delta are downstream of the river Rhine and the river Mekong:
  - The upstream countries for the Rhine and the mekong need to come to a joint solution for downstream impacts
  - The Irrawady is totally under control of Myanmar: unique situation with great potential

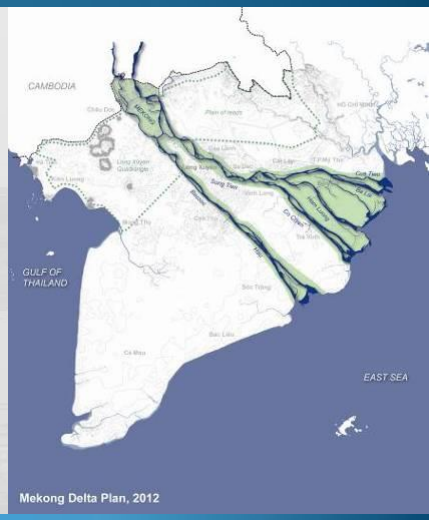
Mekong Delta Plan

Towards a prosperous and sustainable future for the Delta

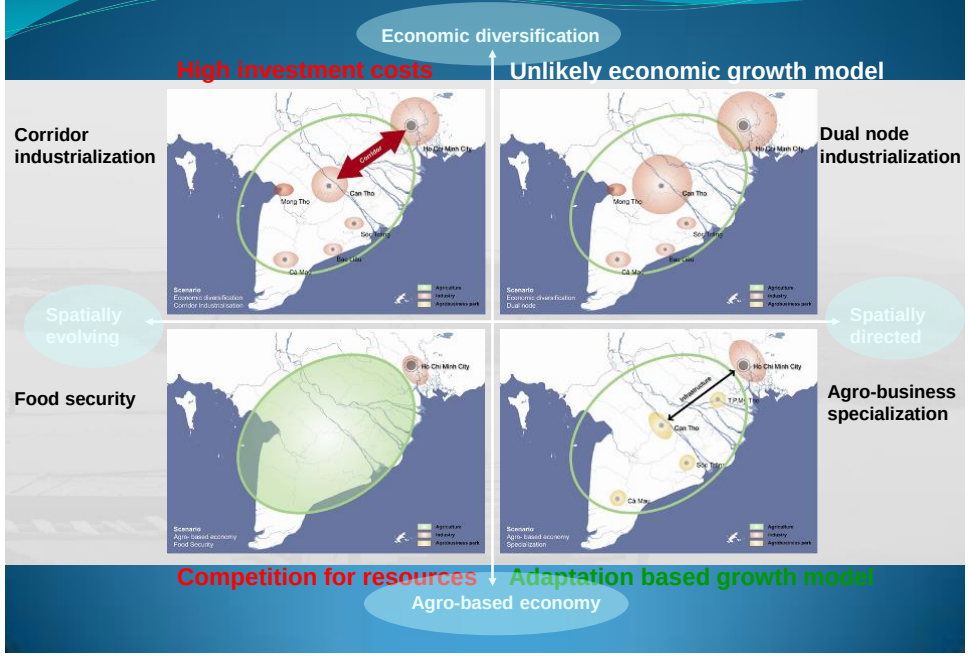
The Road to 2100 in

Policy Recommendations and Short Term Actions

A Long Term Development Strategy
A Climate Adaptation Strategy



What will the future of the delta look like ?



Preferred scenario: Agro-business for sustainable economic development

- Development based on comparative advantage Mekong Delta:
  - Builds on the unique natural resources
  - Enables land use adaptation to climate change
  - Modernisation through agro specialisation for national economy
  - Enables a sustainable economic growth:
    - Employment in high-value agro-food industries and services
    - Moving up the value chain - from food availability to food quality
    - Rise of export value – > global demand
    - Creates spin-offs for related industries



Agency NL / Partners for Water

Recommendations for an Adaptive Approach

Regional Division based on main impacts and integrated solutions

Control Seasonal Flooding → Upper Delta

Provide Fresh Water in dry season → Middle Delta

Coastal Area

See next slide

Coastal Area — Salinization and Coastal Flooding

Dual Zone Management

Go for Brackish Economy

Now - 2050

From shrimp farming to sustainable aquaculture including mangrove restoration

30% - 80% production loss

Water Management

Alternative fresh water supply

Now -2050

Local rain harvesting and storage
Surface water supply
Sewage treatment

2050 – 2100

Fresh water shortage
Saline agriculture

Coastal Defense

Better Protection

Now -2050

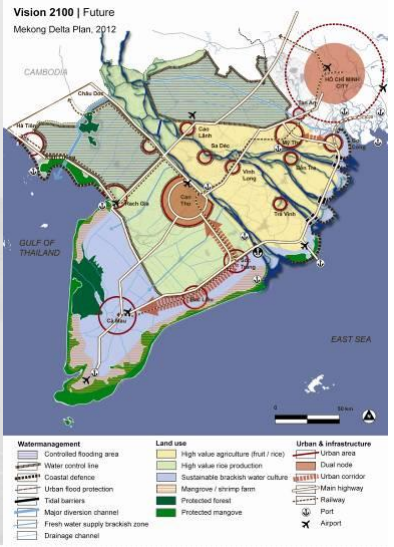
Upgrade existing sea dikes
Restore mangroves
Unlink road and dike system

2050 – 2100

Closed Sea Defense, except Bassac

Towards a prosperous and sustainable future Delta

Joint reporting delivered and presented in 2013



Possible vision for Myanmar taking advantage of the regional strengths

5 main activities under the MoU signed in 2013

1. IWRM data collection project and information activities
2. Capacity building (universities and training facilities)
3. Knowledge transfer and advice by High Level Expert Team
4. Strategic study on implementation of IWRM in Myanmar
5. Identification of possibilities for concrete projects "no regret"

Knowledge transfer and advice by NL Expert Team in collaboration with Myanmar expert Team

Strategic study on Integrated Water Resources Management in Myanmar

- Goal: to deliver building blocks as a basis for formulating a national IWRM strategy
- Formulating IWRM strategy itself is not part of the study - decision making process is responsibility of Myanmar government
- Developing concrete projects
- Execution by IWRM Study Team
- **Strategic advice by the combined Myanmar and NL Expert Team IWRM**

Strategic advice by the High Level Expert Teams IWRM

Water Management in Myanmar: From VISION to action

Vision of the High Level Team on IWRM in Myanmar:

- Optimizing what you have
- Taking a broad view in the analysis of the problems
- Focus on education, capacity building and training

Strategic advice by the High Level Expert Team IWRM (2)

Water Management in Myanmar: From vision to ACTION:
6 projects for 'learning by doing':

1. Integrated Meiktila Lake Area Development (Mandalay Region)
2. Bagan Multi-Purpose Pilot River Beautification (Mandalay Region)
3. Pan Hlaing Control Sluice cum Navigation Lock (Yangon Region)
4. Feasibility Study Mandalay-Bagan navigability improvement
5. Sittaung-Bago Canal Integrated Water System Analysis
6. Capacity Building

Water Management in Myanmar: From vision to Action

- *Project example 'learning by doing': Integrated Meiktila Lake Area Development*

Water Management in Myanmar: From vision to Action

Project example 'learning by doing': Pan Hlaing Control Sluice cum Navigation Lock (Yangon Region)

Next steps

- Completion of the IWRM Strategic study
- Preparing Myanmar IWRM strategy for National Water Resources Committee
- Further development of the 'Learning by doing' projects

Final words

- Collect data
- Build expertise
- Generate ideas, do not jump to solutions

- Let us work together !!