Mekong Delta Plan

Towards a prosperous, sustainable and safe future for the Mekong Delta

Joint project (2011-2013) under:

The Vietnam – Netherlands
Strategic Partnership Arrangement (SPA) on
Climate Change Adaptation & Water Management

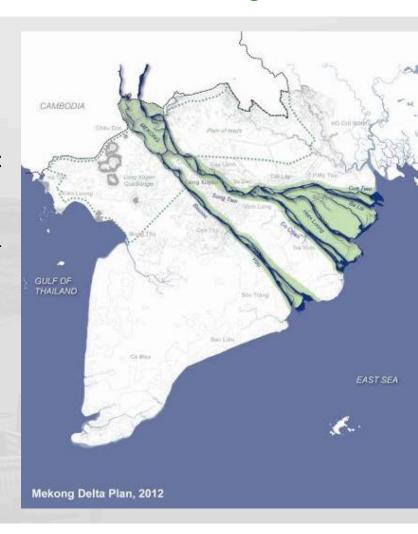
Supervision by VN - NL Intergovernmental Steering Committee, chaired by Prime Ministers of VN and NL

Preliminary Findings

Version 0.2

Martijn van de Groep Chief Technical Advisor for the Mekong Delta Plan

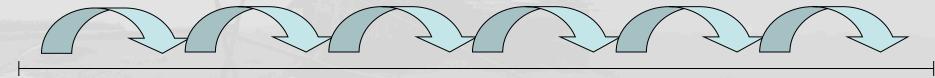
Deltas2013 Vietnam, Ho Chi Minh City, 21 May 2013



What is the Mekong Delta Plan?

THE MEKONG DELTA PLAN AIMS TO DEVELOP A LONG-TERM VISION (100YR) FOR A PROSPEROUS, SUSTAINABLE AND SAFE DELTA.

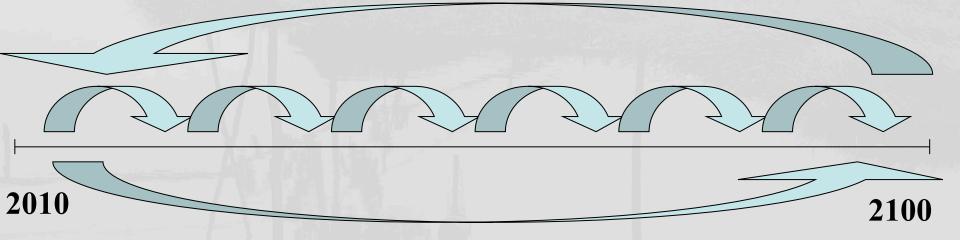
Instead of regular 5-10 year planning (with outlook towards 2020-2030)



2010 1) Develop 4 plausible long term scenarios and a strategic vision

2100

- 2) Back-casting to present time, to see what specific action should be taken first to start strategically working towards that vision
- 3) Subsequently work within regular master planning system incl. review of existing master plans



How does the Mekong Delta Plan fit in the VN planning system?

THE STRATEGIC LONG-TERM VISION CAN SUPPORT VIETNAMESE GOVERNMENT IN DEVELOPING AND REVIEWING ITS SOCIO-ECONOMIC DEVELOPMENT PLANNING, SPATIAL PLANNING AND SECTORAL MASTER PLANNING FOR THE MEKONG DELTA

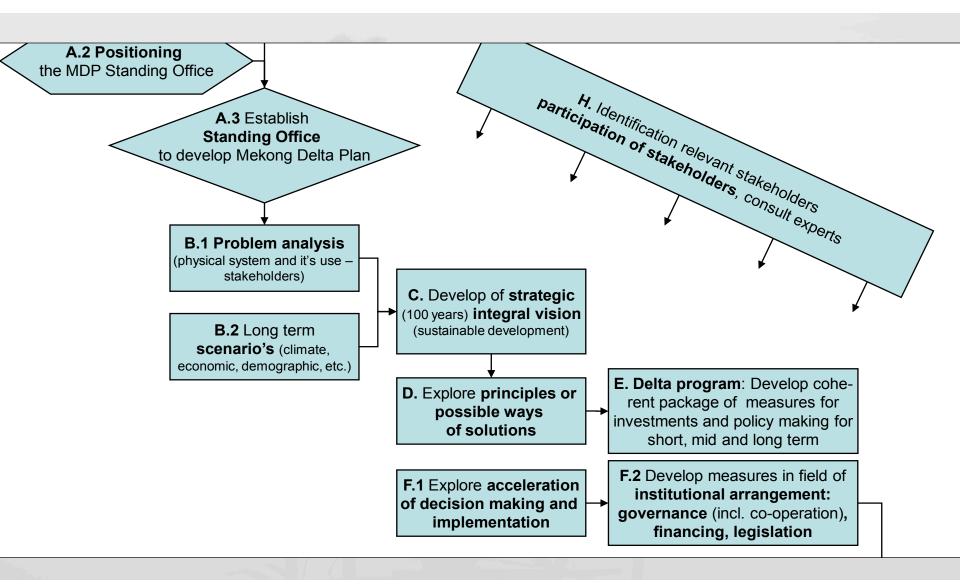


This (integrated) approach requires active participatory involvement of:

- National government:
 MoNRE, MARD, MoT, MoC, MPI
- Provincial government:13 Mekong Delta provinces
- Municipal governments:
 HCMC and Can Tho
- Universities and research institutes
- Major stakeholders:IFI's, bilateral donors, NGO's, ...
- South-West Steering Committee

^{*} CSED: Comprehensive Social & Economic Planning System

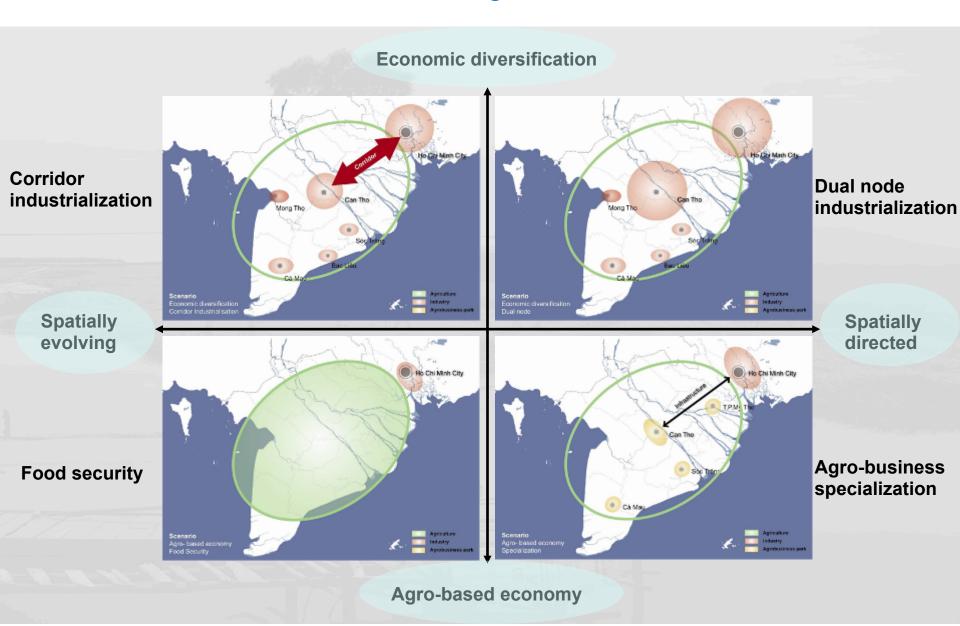
Mekong Delta Plan development - process steps



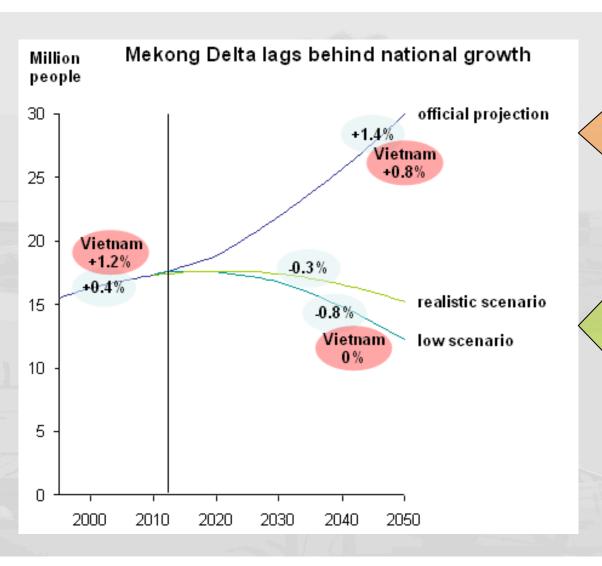
Climate Change scenarios

Impact	Moderate scenarios		High Scenario	
	2050	2100	2050	2100
Sea Level Rise	20-30cm	30-50cm	40-60 cm	100-200 cm
Temperature	+1°C	+2°C	+2°C	+4°C
Dry season flow of Mekong	-5%	-15%	-20%	-50%
Wet Season flow	No change	+10%	0 - +10%	+20 - +50%
Salinity intrusion	Slight increase	Moderate increase	Moderate increase	Dramatic increase
Extreme rainfall events	No change	Moderate increase	Moderate increase	Rapid increase of number and severity
Typhoons	No change	Moderate increase in severity	No change	Increase in frequency and severity

What will the future of the Mekong delta look like?



Expected high population growth realistic?



30 million people
High land use pressures
Competition for jobs

15 million people
Lower land use pressures
Sustainable economic growth
possible

Most likable scenario: Agro-business specialization

In view of predicted climatic change impacts and existing challenges, the agro-industry based specialisation scenario is considered to offer the best perspectives for the Mekong delta.

It fits and utilises the typical natural features of the delta (low lands, fertile soils, waterways) thus providing an excellent basis for future sustainable economic growth and spatial arrangements.

An agro-industry based specialization also best fits the demographic, economic and hydrological structure of the delta, which markedly differs from neighbouring regions and the country as a whole.





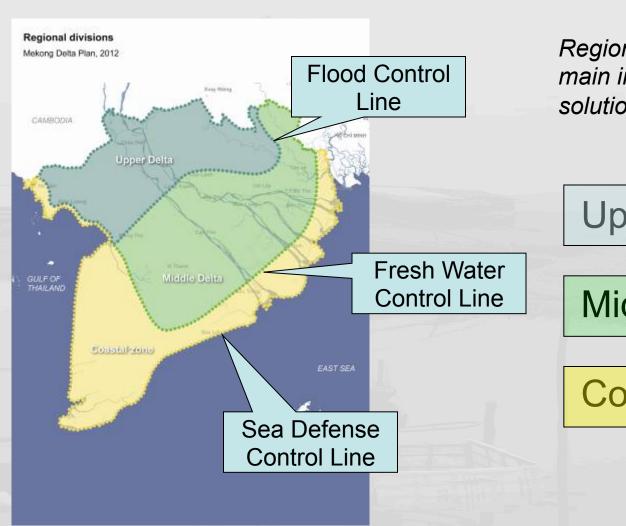


Exploring principles and possible solutions



- Adaptive delta management
- Explore 'no-regret' and priority measures
- Identify 'tipping points'
- Avoid overinvestment

Regional recommendations



Regional division based on main impacts and integrated solutions

Upper Delta

Middle Delta

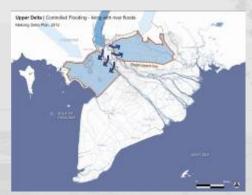
Coastal Area

Upper Delta

Seasonal Flooding

Controlled Flooding

Reduce downstream flooding risk



Now - 2050

Reinstate retention areas
Reconsider triple rice growing
Land use planning
Diversification of crops/fish

Urban Flood Protection

Increase Safety and Sanitation



Now - 2050

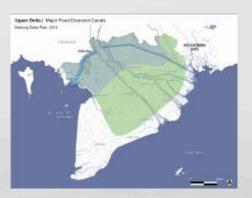
Flood & Inundation protection (Ring dikes)

2050 -2100

Urban Polders
Pumped drainage

Diversion Canals

Limit downstream investments



Now

Space reservation
Research and Planning

2050 - 2100

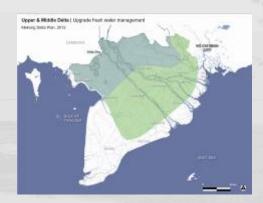
Construction of additional discharge capacity

Middle Delta

Fresh water in dry season

Water Management

Fresh Water Supply



Now - 2050

Upgrade existing systems

2050 -2100

Polders Pumped drainage

Bassac Link Canal

Assure fresh water West Delta



Now

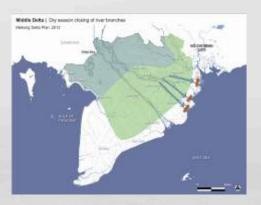
Monitor
Research and planning

2050 - 2100

Secure flow division
Bassac-Mekong through
construction of Link Canal

Closing River Branches

Assure fresh water East Delta



Now

Research and planning

2050 - 2100

Construction of Tidal Barriers

Coastal Area

Salinization and Coastal Flooding

Dual Zone Management

Go for Brackish Economy



Now - 2050

From shrimp farming to sustainable aquaculture including mangrove restoration

Water Management

Alternative fresh water supply



Now -2050

Mitigate groundwater usage
Local rain harvesting & storage
Surface water supply

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, safe and sustainable future Mekong Delta

Agro-business specialization as a strategic long-term development path:

- for socio-economic and spatial development
- to respond to climate change

Planning:

- MDP V1.0 in June 2013
- Develop Delta Program
- Develop Institutional Arrangements
- Stakeholder Consultation (national and provincial level) in Mekong Delta
- MDP V2.0 in October 2013 (final version)
- Submit MDP to VN-NL Intergovernmental Steering Committee in November 2013
- Present MDP at Mekong Delta Economic
 Cooperation forum in December 2013

