

Mekong Delta Plan



Mekong Delta Plan



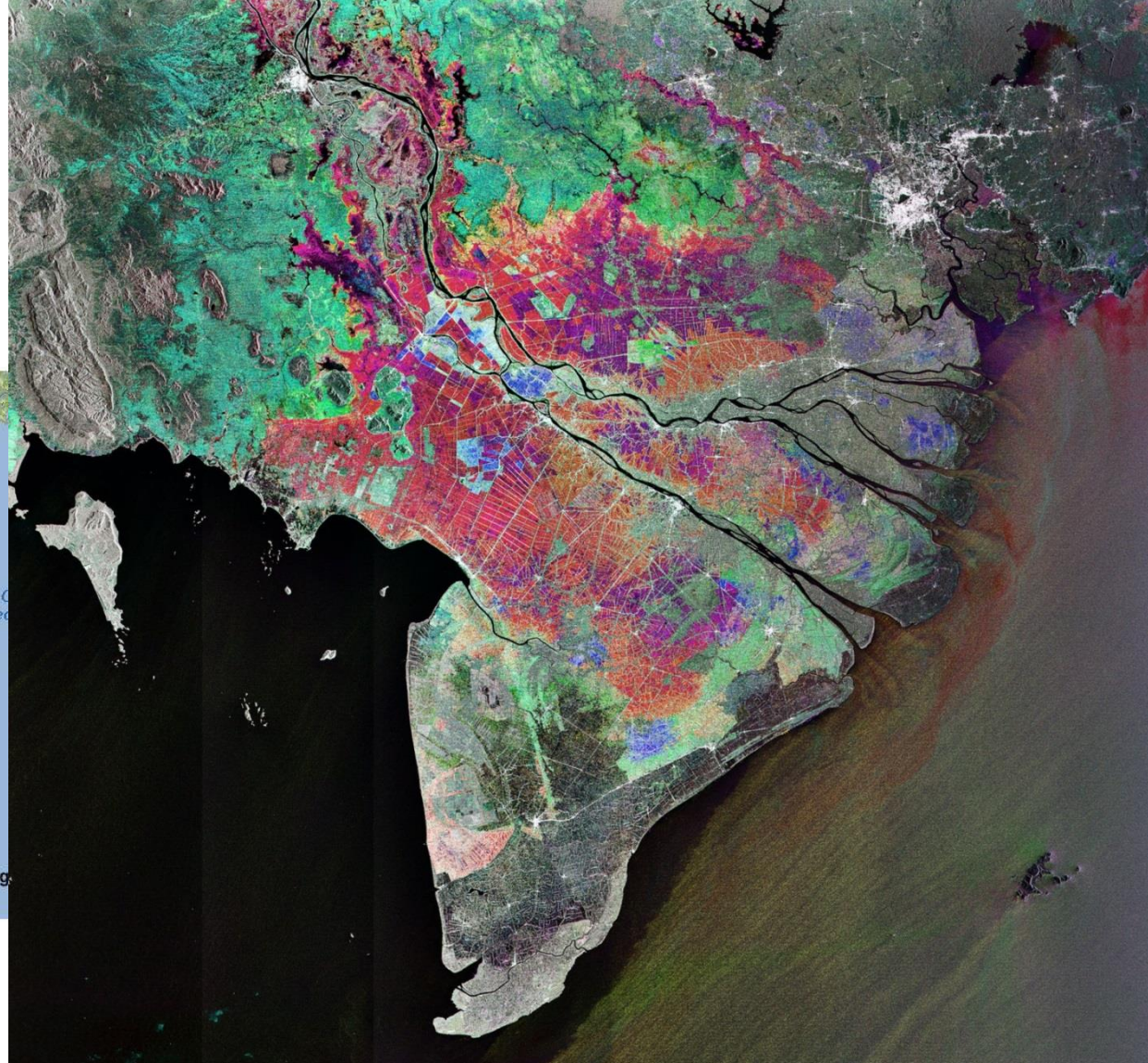
Michel Tonneijck
Royal HaskoningDHV

*Long-term vision and strategy
for a safe, prosperous and sustainable delta*

Delft, 4 June 2015
Adaptive Delta Management



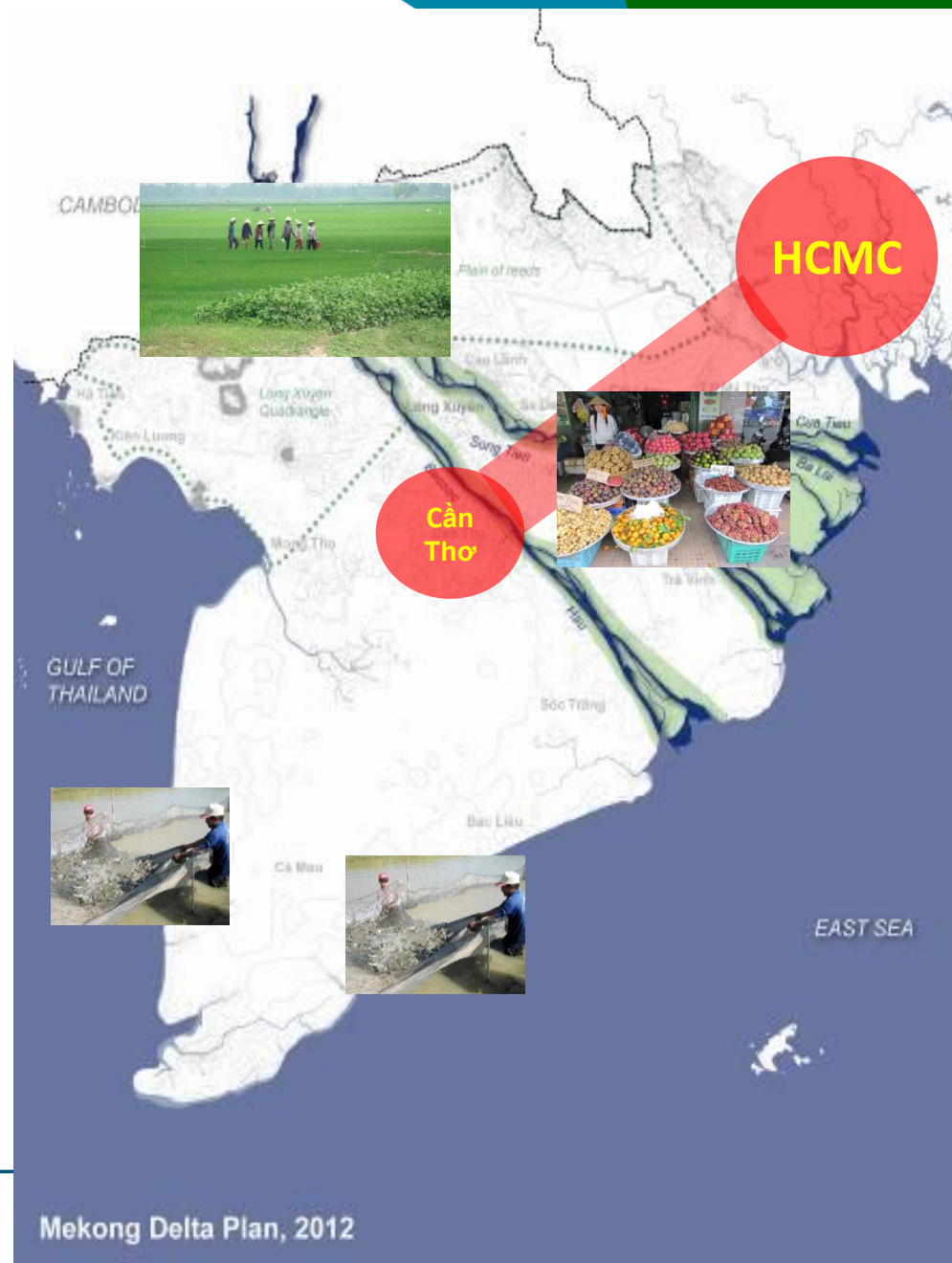
Mekongdelta in Vietnam



Mekongdelta in Vietnam

- 40,000 km² in Vietnam
- 17 million people
- GNP ± 20 billion US\$
- agriculture (rice, fruit, vegetables, fish, shrimps)
- little industry
- top three of rice exporters (16 million tonnes, 50% of VN)
- urbanisation axis HCMC – Cần Thơ
- nett emigration

-
- elevation MSL +0,80 m
 - river discharge
 - average 15,000 m³/s
 - 1/50 per yr 55,000 m³/s (2000)
 - flat : from MSL+ 4.50 m to sea
 - rain : 2000 mm/yr
-



Transition in the Mekong Delta

1. Period of tremendous agricultural growth since American War
2. Stagnant economic growth, service sector lags far behind
3. Increasing vulnerability of the system:
 - untenable agriculture and fish farming practice
 - delta system: loss of water retention area, salinisation, high rate groundwater extraction
 - upstream dams and irrigation schemes
 - urbanisation in valuable region for fruit culture
 - climate change: sea level rise, longer drought periods



Assignment for Delta Plan

- Veerman and his Delta Commission
- NL Min. Infrastructure and Environment
- VN Agriculture and Rural Development
Natural Resources and Environment
group of selected experts
- consortium HaskoningDHV,
Rebel, Deltares WUR
- intensive preparation process in Vietnam
- limited implementation process
- initial focus on climate change implications for water
management



 Koninkrijk der Nederlanden



Strategic Partnership Arrangement

between

The Government of the Socialist Republic of Viet Nam

and

The Government of the Netherlands

on

Climate Change Adaptation and Water Management



Dutch recipe for Mekong?

What and who is leading?

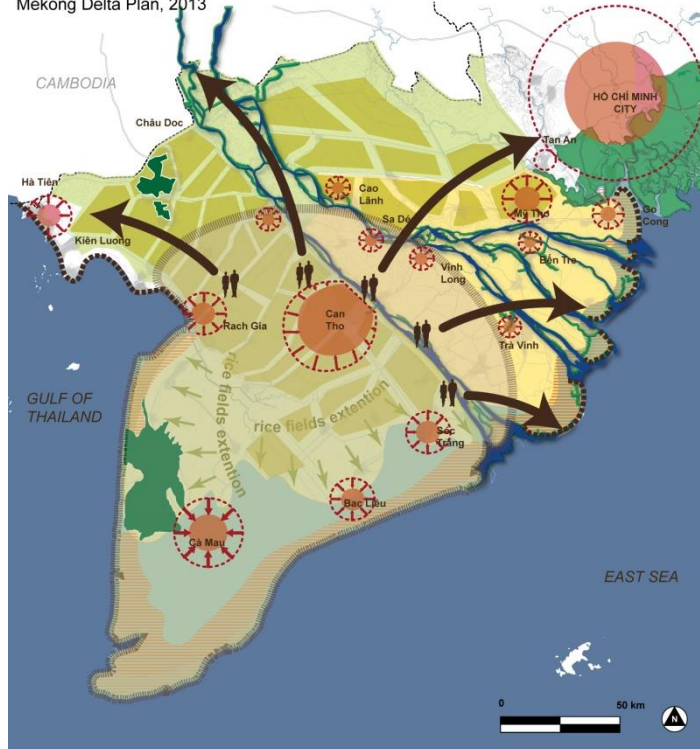
- Vietnam ⇔ Netherlands, donors (WB, ADB ...)
- *governance* ⇔ contents
- civil engineering ⇔ agriculture
- major interventions ⇔ adaptation
- climate ⇔ economy c.q land use



unintended scenarios

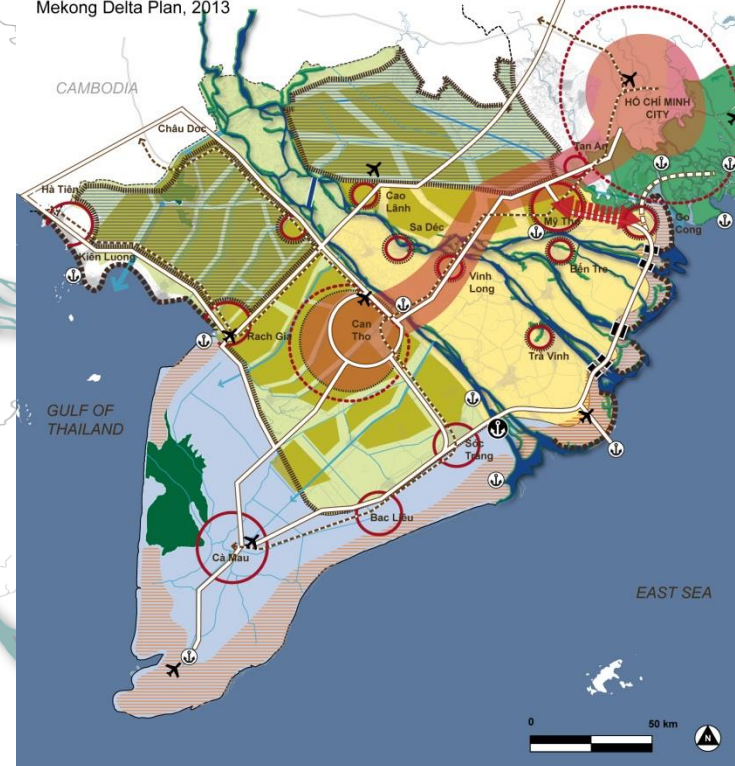
Scenario 1 | Food Security 2050

Mekong Delta Plan, 2013



Scenario 3 | Industrial corridor

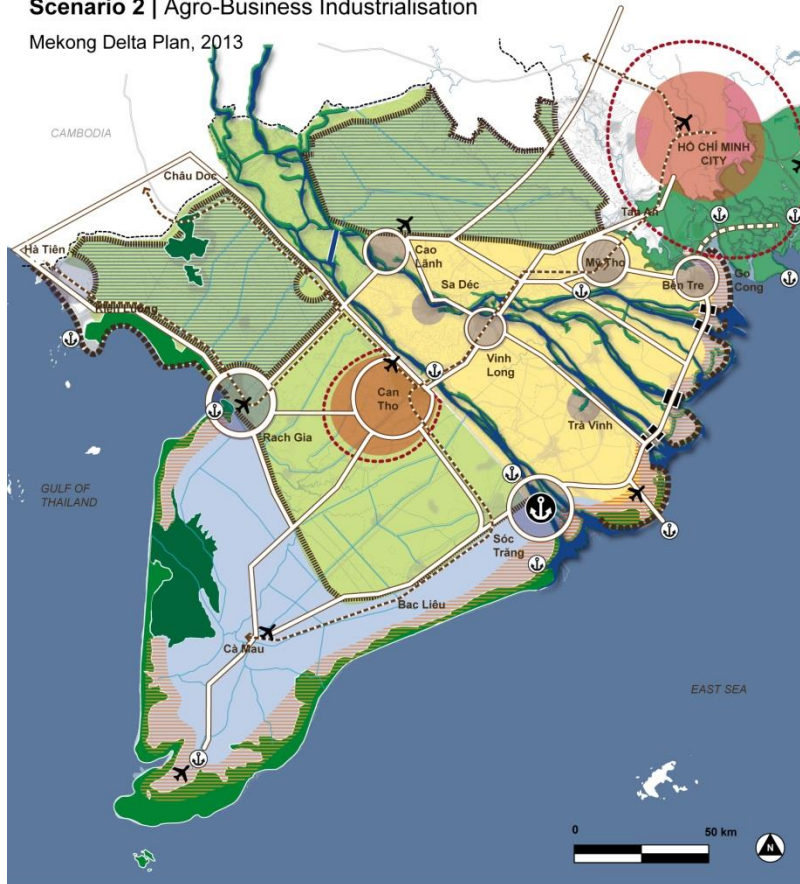
Mekong Delta Plan, 2013



favourable scenarios

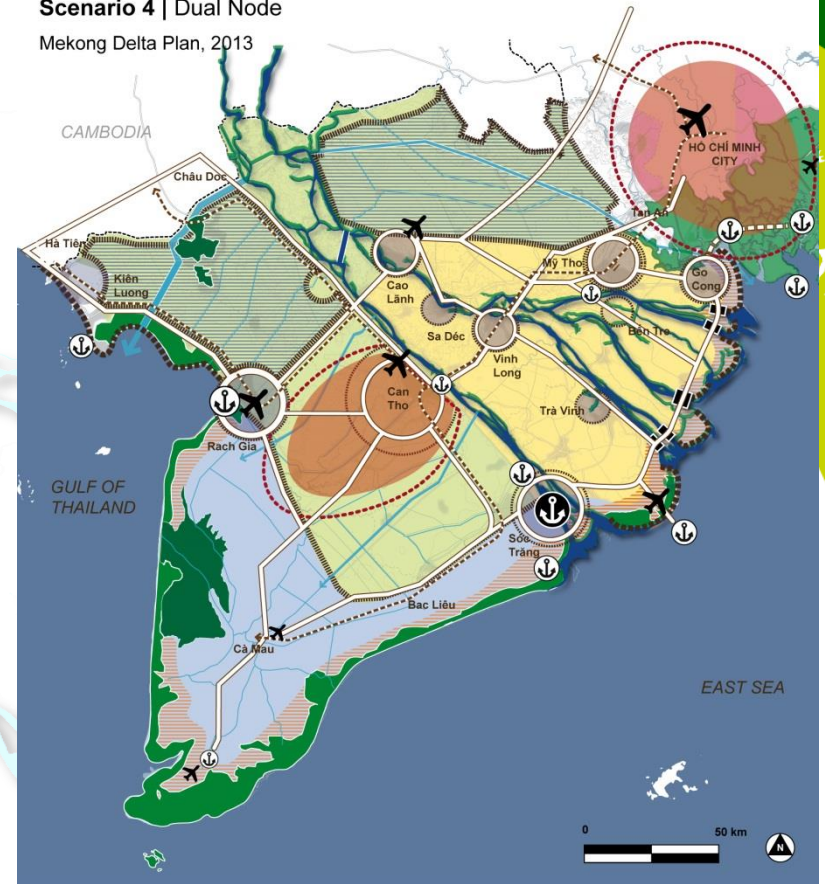
Scenario 2 | Agro-Business Industrialisation

Mekong Delta Plan, 2013

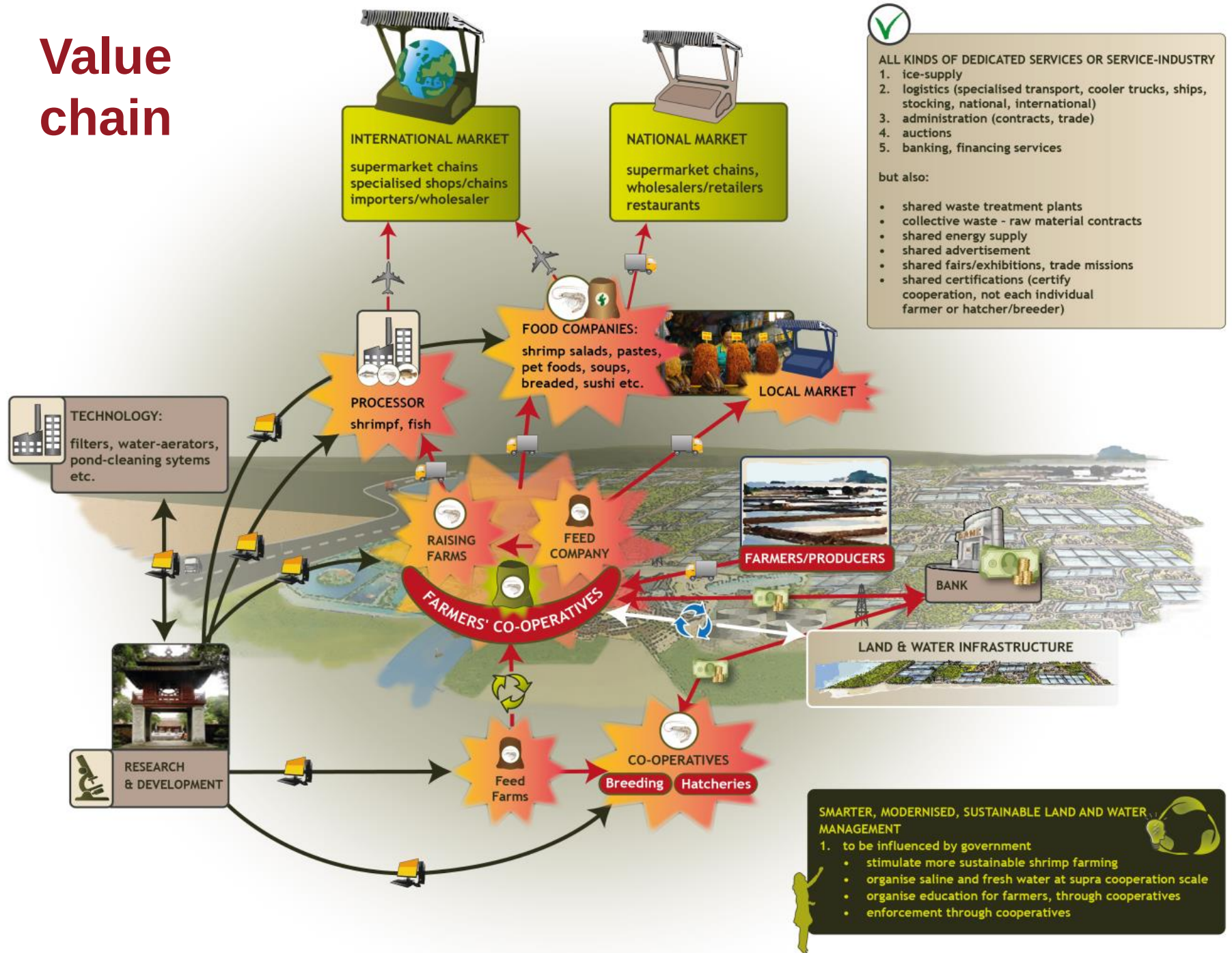


Scenario 4 | Dual Node

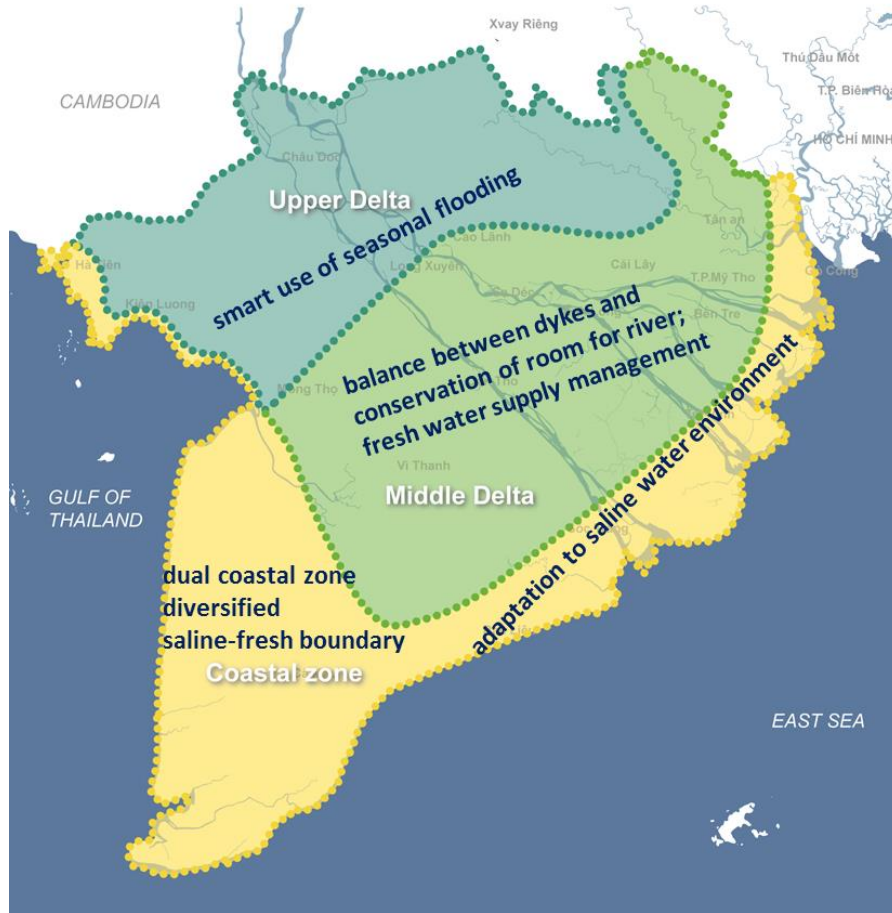
Mekong Delta Plan, 2013



Value chain



Most important recommendations



denk over de grenzen

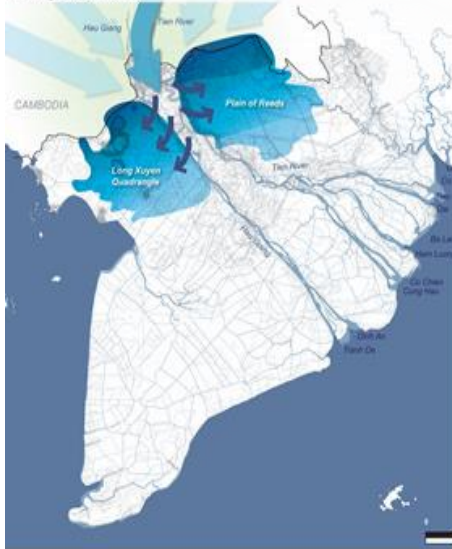
- van ministeries
- van provincies
- van waterbouw
- van Vietnam
- van tijd en tijdgebonden beleid



the upper delta

controlled flooding

Upper Delta | Controlled Flooding
Mekong Delta Plan, 2013



Vision 2100 | Major Flood Diversion
Mekong Delta Plan, 2013



the middle delta

*balance between dyking and room for river
strategies for fresh water supply*

Vision 2100 | Fresh water supply possibilities
Mekong Delta Plan, 2013



Vision 2100 | Localised Urban Flood Protection
Mekong Delta Plan, 2013



Upper Delta | Primary and secondary dyke system
Mekong Delta Plan, 2013



Vision 2100 | Ensuring flow and sediment partition between
Hau and Tien river
Mekong Delta Plan, 2103

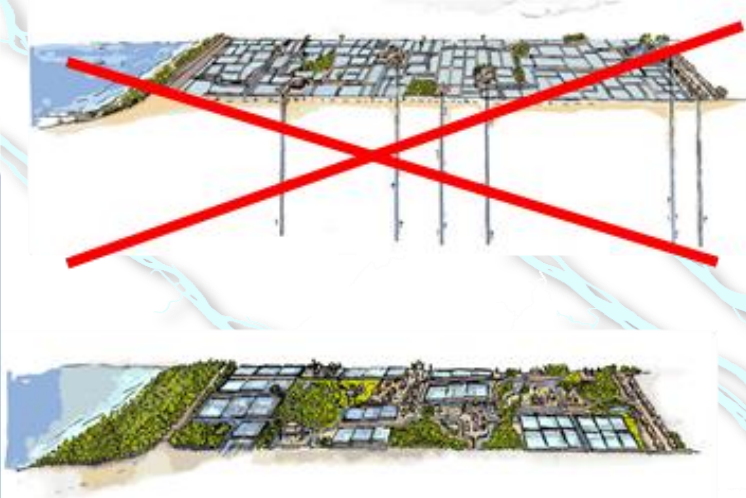
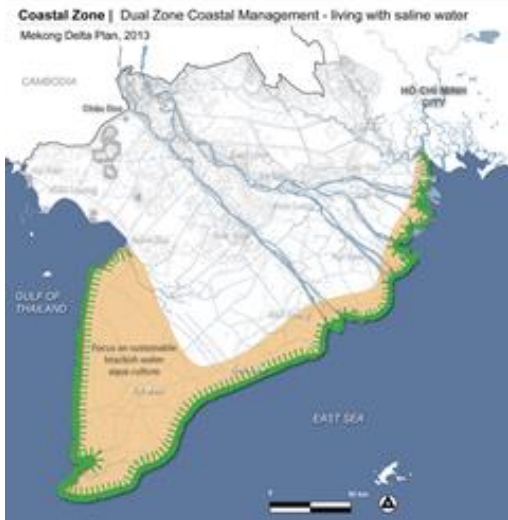


coastal zone

use the inevitable salinisation

integrate coastal defence and aquaculture

respect the sea level rise



Mekong Delta Plan

filling in the regional substrategies



Netherlands

Worldbank

framework
for international
project
financing



December 2013





xin cảm ơn

thank you

Propositions

- In the current debate adaptive delta management seems an ambition that excludes large scale infrastructure projects.
- Prosperity is easier to achieve in a safe and stable delta, rather than in a dynamic delta with changing conditions.