



LIVING WITH WATER



The Dutch approach on development of a long-term Water Policy for Integrated Water Management & Climate Adaptation

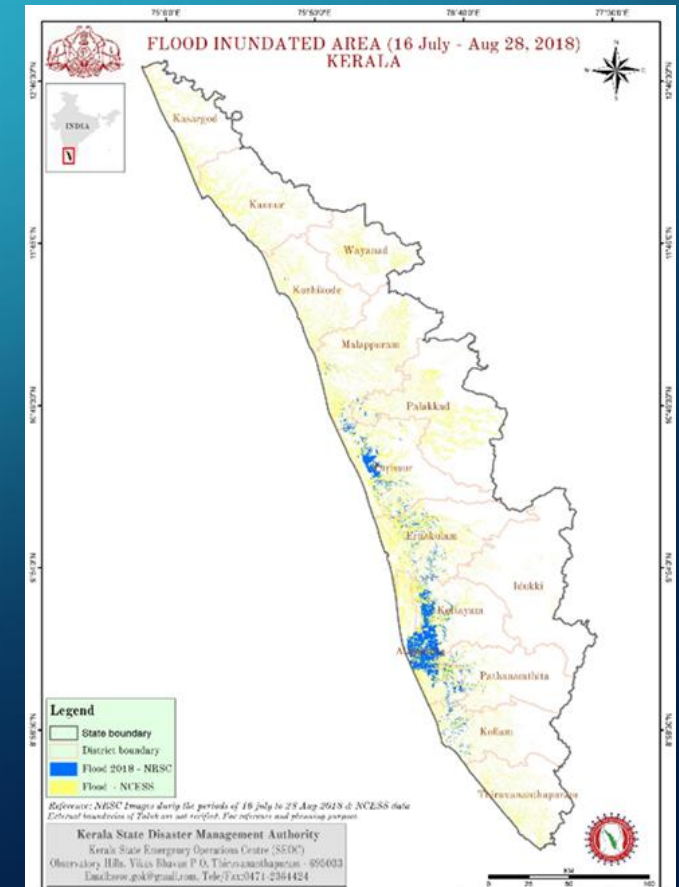
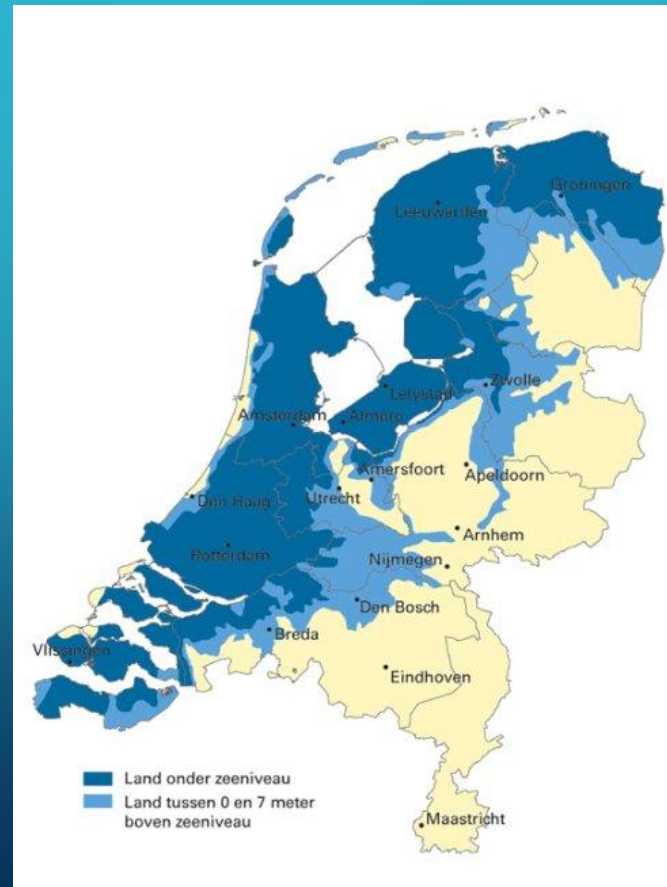
Vision 2031 – Trivandrum, Kerala

16 February 2026

Paul van Meel – Senior Strategic Advisor IWRM

A COUNTRY BELOW SEA LEVEL

- 26% of the Netherlands lies below **mean** sea level
- 60% of population at flood risk
- Water safety as a collective public good – Water Boards first democratic institutions in The Netherlands

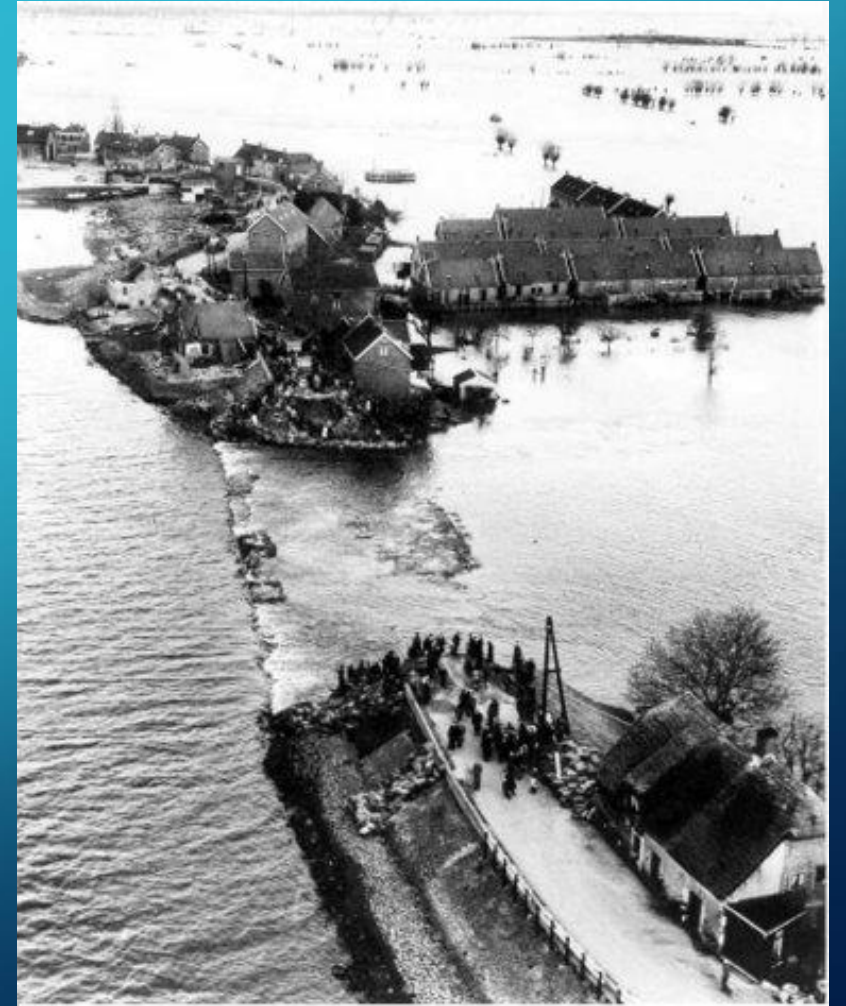


1953 FLOOD: A DEMOCRATIC TURNING POINT

- North Sea flood killed 1,836 people
- 2018 Kerala Flood 483 casualties
- National shock created political consensus
- Long-term vision water governance



Kerala 2018



Netherlands 1953

THE DELTA PLAN (1958–1997)

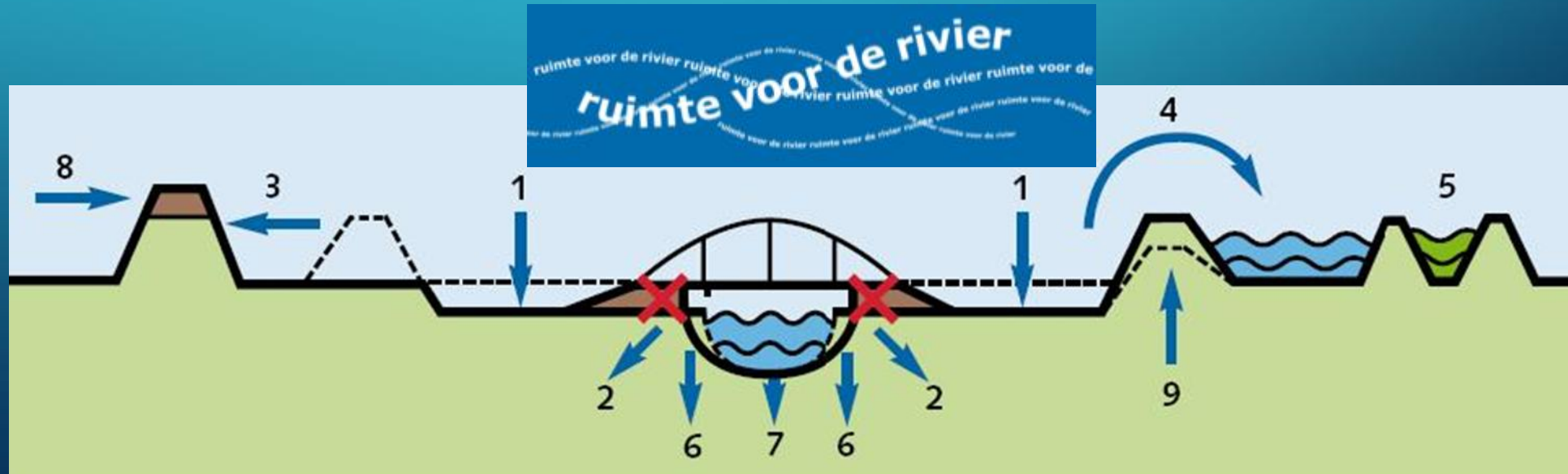
- **Massive engineering programme**
- **Dams, dikes, storm surge barriers**
- **Safety standards codified in law: Delta Act 1958 including Delta Fund**



LIMITS OF ENGINEERING

- River floods in 1993 & 1995
- Climate uncertainty increases risk
- Need for new approaches

“Room for the River”





ROOM FOR THE RIVER

- Rivers given more space
- Dike relocation & floodplains
- Safety combined with ecology

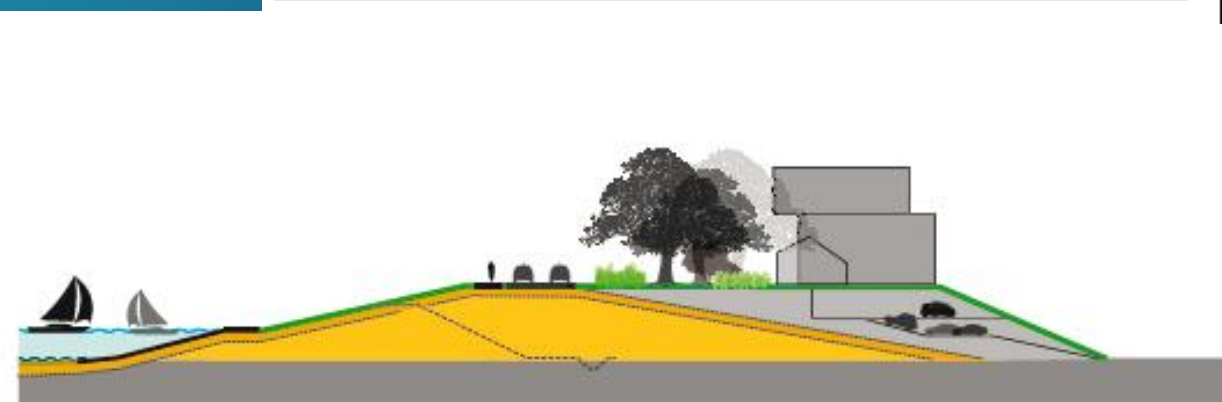
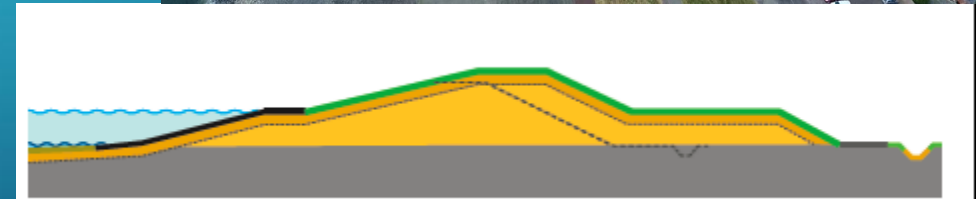


MULTI-LAYER SAFETY & GOVERNANCE

- Three layers of safety:
 - Flood defences
 - Water-aware spatial planning
 - Emergency management
- Clear roles, strong coordination

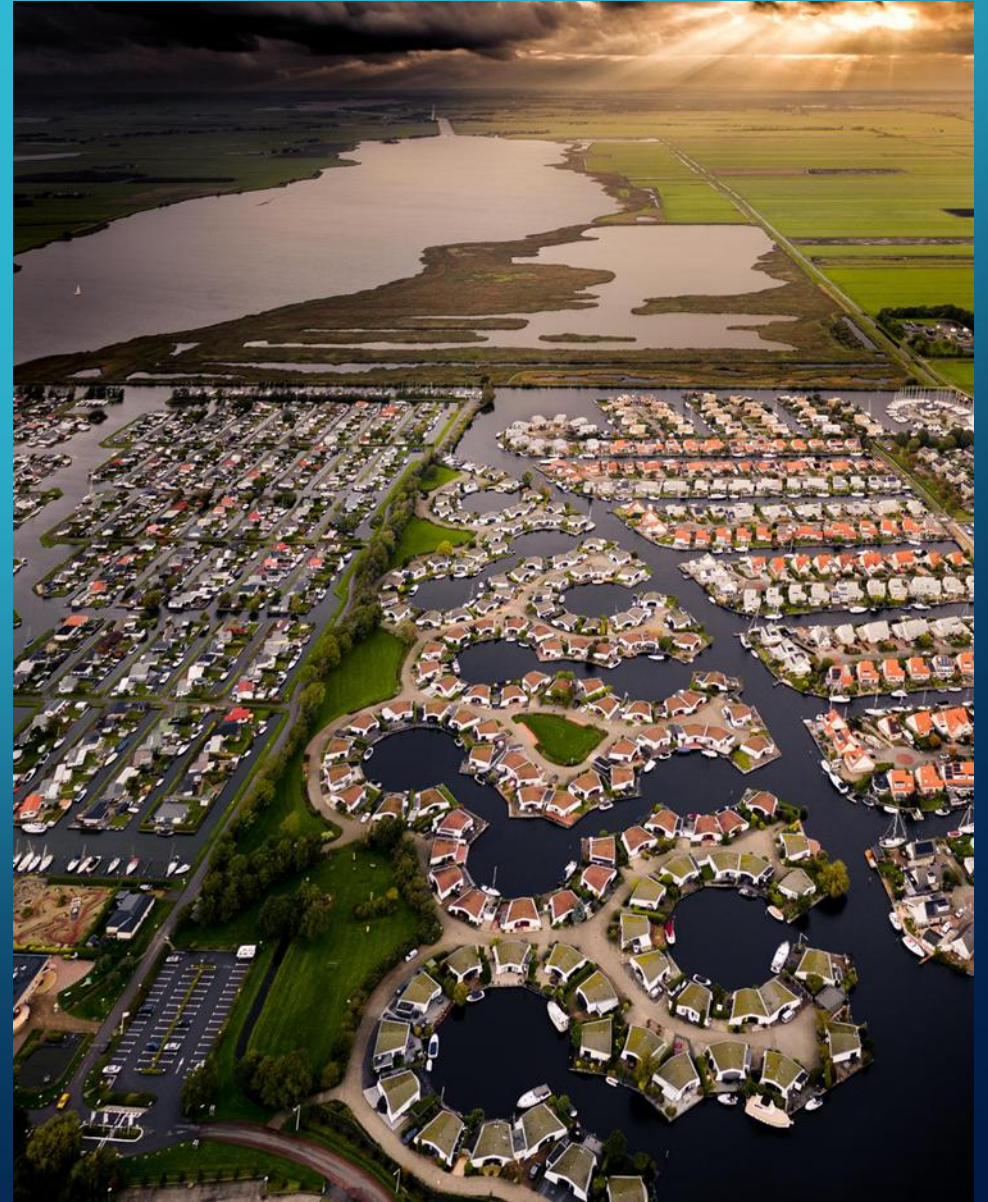


Sea-coast Kuttanad



SPATIAL ADAPTATION IN PRACTICE

- Cities designed as water systems
- Green-blue infrastructure
- Climate-resilient neighbourhoods



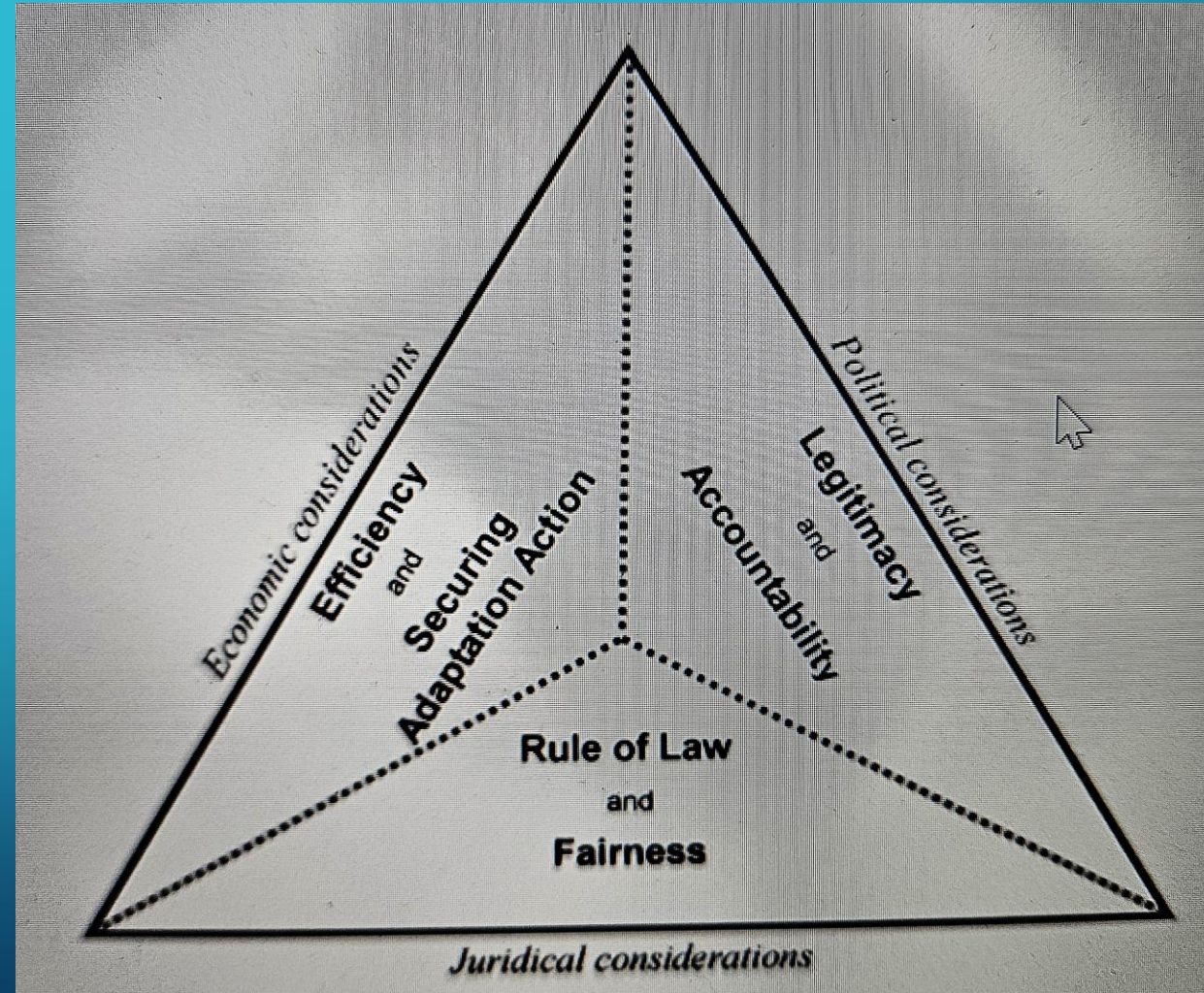
A UNIQUE FINANCIAL INNOVATION

- Delta Fund established
- Dedicated long-term financing
- Insulated from day-to-day politics
- €29 billion secured to 2050
- Needs exceed current funding
- Co-financing with regions

Delta Fund: Major Evolution Milestones		
1953	North Sea Flood	Disaster response; first Delta Committee established to overhaul flood safety.
2012	Delta Act Enacted	Official birth of the Delta Fund as a separate, protected national budget line.
2024	New Delta Scenarios	Four "possible futures" published to guide post-2050 long-term planning.
2026	Second 6-Year Review	Current phase: Assessing if current protection standards must be accelerated.
2050	Statutory Goal	Deadline for the Netherlands to be fully "water-robust and climate-resilient."

LESSONS FOR DELTA REGIONS

- Institutions outlast projects
- Water guides spatial planning
- Adaptation is political
- Democracy enabler climate resilience



KERALA AND THE NETHERLANDS

COMPARABLE CHALLENGES AND APPROACHES

Kerala:

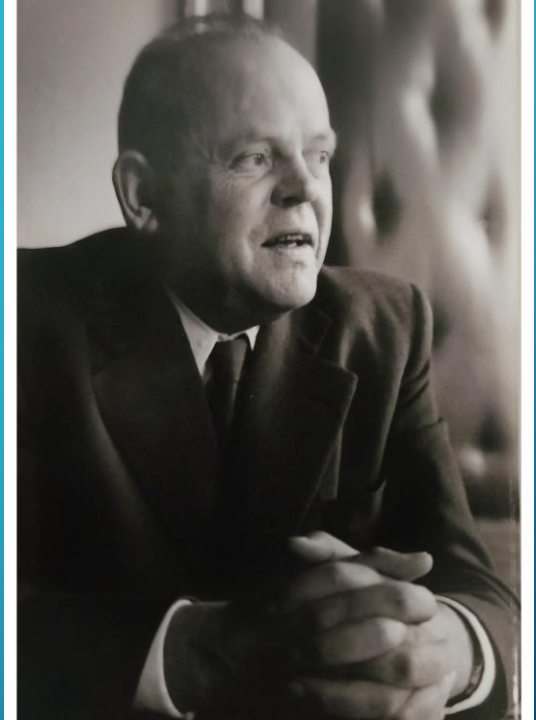
- **Statewide Integrated River Basin Management Framework** for all intra-state rivers (approved mid-2025)
- **Draft State Water Policy 2025**

Suggestion:

- 1. From disaster response to prevention**
- 2. Integrating Water Management with Spatial Planning**
- 3. Investments based on Risk**
- 4. Stable and protected funding**



Tranquillity in the Kuttanad back-waters



Sunset at the Dutch sea-coast

**Democracy's
strength lies in
planning beyond
one generation
'Ambition with Realism''**





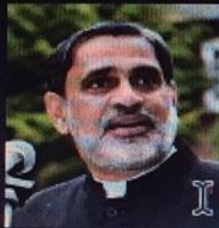
KERALA - THE NETHERLANDS



WHAT WE CAN LEARN FROM THE DUTCH

REBUILDING KERALA POST 2018 FLOODS

venu rajamony and Rakesh N.M.



Over centuries, the Dutch have been finding ways to control high waters in their country. A low-lying area with 26% of the country below sea levels, their vulnerability to floods and the experience of past disasters have prompted them to develop one of the most advanced and sophisticated flood risk and water management systems in the world. From engineering feats like the Delta Works to projects like 'Building with Nature', the lessons to be learnt from the Netherlands are many. For a Kerala recovering from the 2018 floods, these are lessons in rebuilding.

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DC Books

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Reference



E-book available



₹ 199

WHAT WE CAN



LEARN FROM



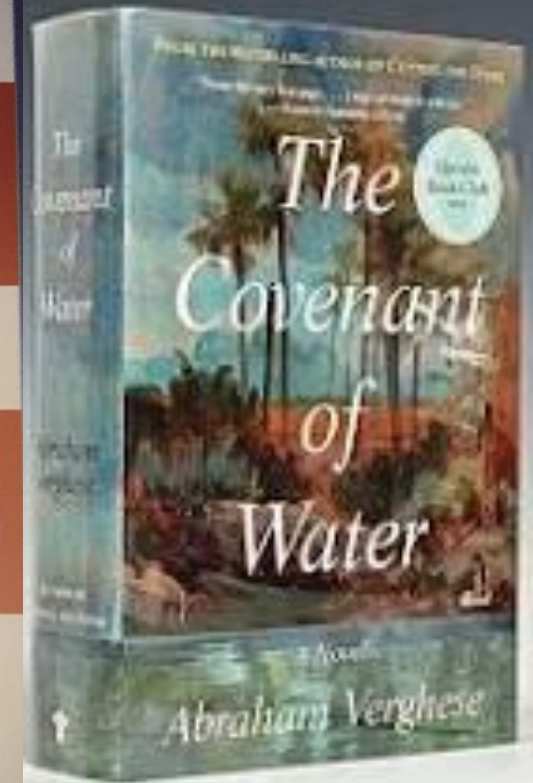
THE DUTCH

REBUILDING KERALA POST 2018 FLOODS

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THANK YOU