



Ministerie van Infrastructuur en Milieu

Towards Mitigating Loss Caused by Megadisasters

Risk reduction based on prevention, preparedness & cooperation: Experiences from the Netherlands

WCDRR – Sendai

Koos Wieriks

27 april 2015

7万本の松原からたった一本、
津波に耐えた一本松。
私たちに希望を与えてくれた
一本松は、もはや自立が出来ませんが、
復興の象徴として新しい形で残していきたいのです。
みなさんの協力をお願いします。

岩手県陸前高田市長 戸羽 太

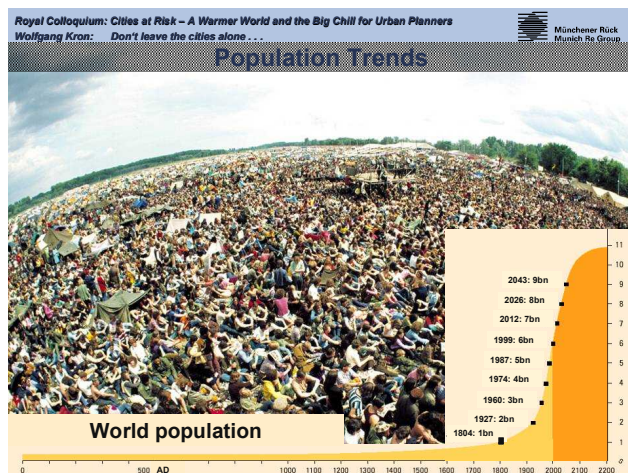
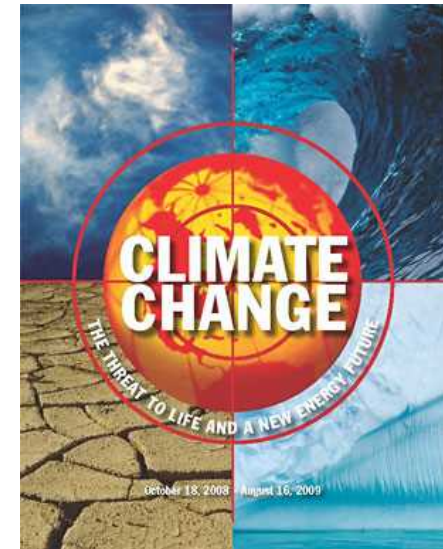
被災した陸前高田市街地（国土地理院提供）



Megadisasters:

Natural hazards PLUS

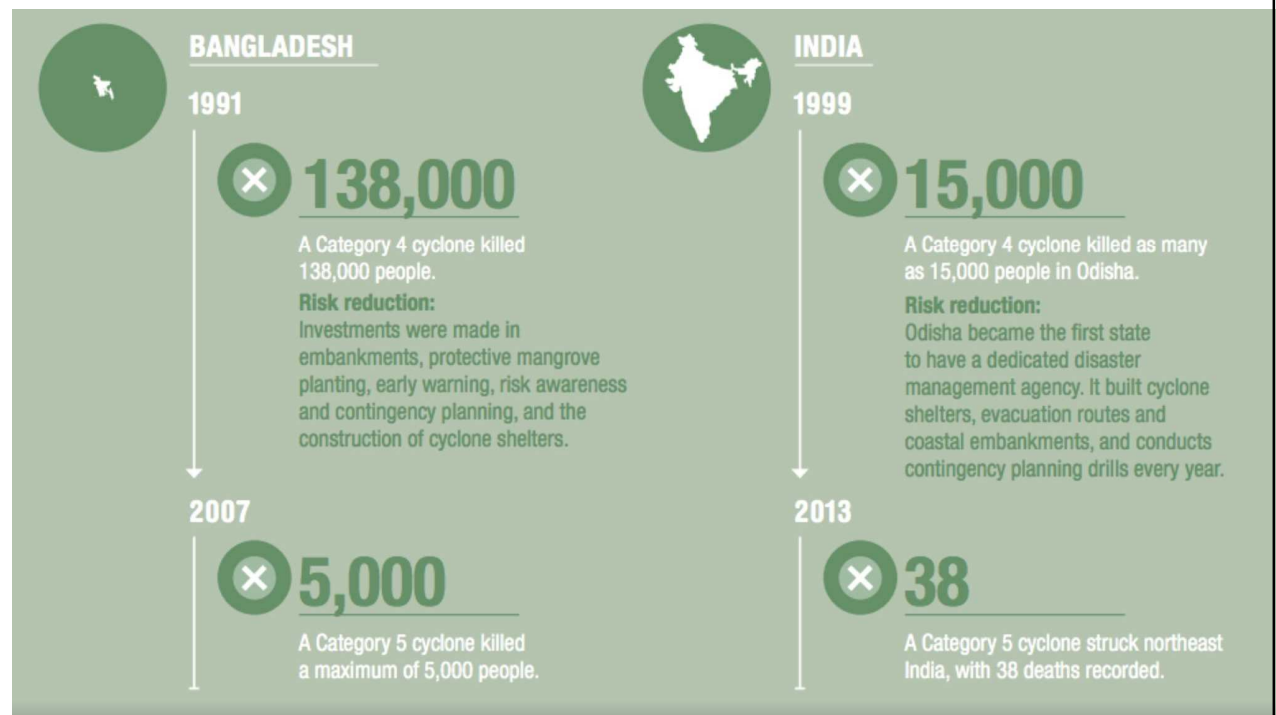
- Population growth
- Urbanisation
- Climate change,
- Inadequate land & water management





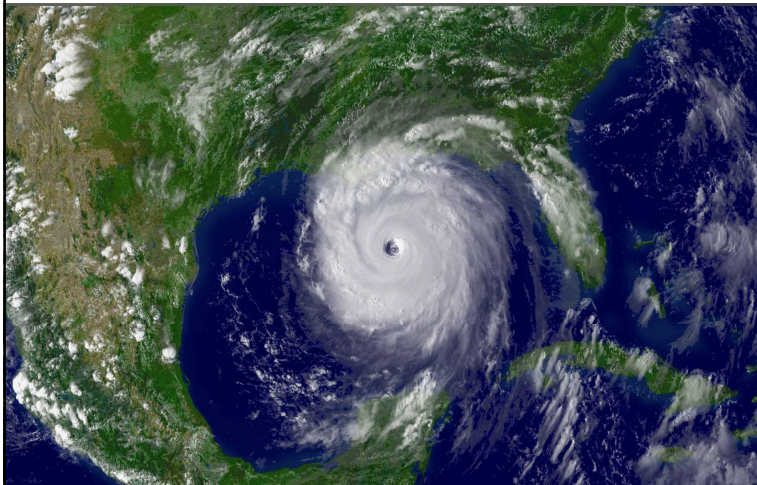
Prevention pays, but is only part of the chain

- Prevention
- Preparedness
- Respons
- Recovery
- Reconstruction
- Rehabilitation





Zero Risk doesn't exist



Southeast Asia Tsunami 2004
Hurricane Katrina 2005
Hurricane Sandy 2012
Typhoon Haiyan 2013
Tohoku Tsunami 2011





The Netherlands' new adaptive water policy

Wake up call Katrina

Delta Act

Delta Program

Delta Fund

Delta Decisions



Delta Programme
in the Netherlands



3 layer approach

Prevention (dams, dikes)

Living with water (resilience, spatial planning)

What if it happens (early warning, evacuation, build back better)





Dutch activities abroad:

Multilateral, bilateral cooperation

Dutch Surge Support Facility (DSS):

Helps international humanitarian organizations in technical assistance by offering expertise in the area of (urban) water supply and sanitation and water management.

The Dutch Risk Reduction Team (DRR Team) :

Unlocks Dutch water and delta expertise to foreign governments in need of preventing a water related disaster or countries who suffered already from one and are interested in long term approaches to prevent such disasters from happening again..

Delta Coalition



6 Important lessons

The Netherlands

+ High Level Expert and Leaders Panel for Water and Disaster





Climate shifts and other global changes are already impacting water-related disasters

Be prepared for more extreme events and even higher impacts of disasters.

Even the most developed countries are vulnerable to water-related hazards

Population growth, poverty, land shortages, urbanization, poor maintenance of drainage infrastructure increase vulnerability flood hazards and droughts

Message 1



Disaster Risk Reduction, Water Resources Management and Climate Adaptation should no longer be treated as separate topics

- *The divisions between climate adaptation, water resources management, and disaster response seem potentially dangerous, exacerbating risks to communities, economies, and the environment*
- *An integrated approach increases synergetic effects, leads to more effective solutions and gives a more solid base for financing*

• **Message 2**



Use new data and tools; optimize risk awareness and emergency planning

- *Vulnerability analysis is an essential tool in water-related disaster management*
- *Improve quantity and quality of data, including public health effects and secondary economic consequences*
- *Greater consistency in reporting + documenting of water-related disasters, and better understanding of impacts are crucial to establish baselines, set priorities, track trends and assess the effectiveness (costs and benefits) of any proposed response.*

Message 3



Risk reduction, preparation and prevention pay off in terms of reduced loss of life, avoided damage, and long-term economic growth and stability

- *Shift Disaster Management from Reaction to Prevention*
- *Developing measures to prevent disasters from happening or measures to increase the resilience*

Message 4



Integrate risk prevention & long-term planning; create opportunities for synergies with planned investments, incl. plans for adaptation to climate change.

- *Change focus from “mitigating the impacts” of disasters to*
 - *a broader focus on prevention, mitigation, preparedness, and vulnerability reduction,*
 - *the recognition that disaster risk management is surrounded by many uncertainties and should therefore be an iterative or continuous, on-going effort requiring experimentation and learning*
 - *an integration and mainstreaming into sustainable development policies, planning and programming at all levels*
- *Use preventive action is an opportunity for (economic) development*

Message 5:



Uncertainties are no excuse for inaction: be flexible and adaptive

- *Look forward, be flexible, adapt measures and implementation to actual developments*
 - *Short term actions should be linked to long term goals,*
 - *Try to inter-link different investment agendas*
 - *Use the post-2015 framework for disaster risk reduction to develop a framework that builds on preventive action and that promotes flexible implementation of measures.*
- **Message 6**



Conclusion

- stay alert, look forward, be prepared
- Look at the whole risk chain
- cooperate, use experiences from other countries
- exchange of basic information on policies, strategies
- create clever coalitions for bilateral / regional / multilateral cooperation ?
- Build back better.
- Invest in resiliency, accent on cities

