RGI-128 Geo-risk

Geo-information, risk management and spatial planning.

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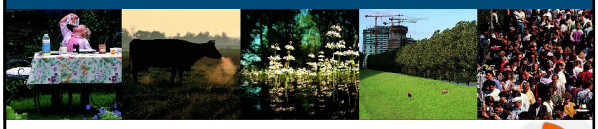
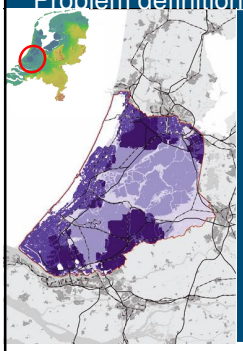


Problem definition



- Deep polders near the sea or major rivers are extra vulnerable.
- In the light of flooding, these areas may need special attention in spatial planning.
- Flooding from the sea or major rivers is hardly an issue in spatial planning practices.
- Geo-information related to flood risks is hardly used in planning practices.

Project objective

- Objective: to develop insight into the use of geo-information in spatial planning practices related to safety risks as a basis for recommendations and suggestions for the further development and use of geo-information for spatial planning.

Research questions

1. How are safety risks considered in spatial planning practices?
2. What is the use and function of geo-information in these practices?
3. How can the further development and application of geo-information in planning practices be improved?

Project Approach

- Work packages
  - 1. Conceptual framework or theoretical perspective
  - 2. Case spatial planning and hazardous installations
  - 3. Case spatial planning and flood risk management
  - 4. Communication and knowledge management
  - 5. Project management

Case flood management

- Flood risks are hardly an issue because:
  - Spatial developments are regarded as legitimate because most areas are protected through water defences. It is expected that the water defences will resist high water levels;
  - We are not responsible for additional measures. Flood prevention is the task of the water managers;
  - It is not yet formally compulsory to consider flooding from the sea or rivers;
  - Geo-information about flood risk was hardly used in the planning process.

Recommendations (1)

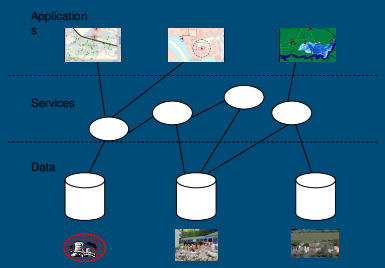
- If we want to increase the use of geo-risk-information in spatial planning, we have to change actual planning practices.
- From hazard reduction to integrated risk management.
- Risk ≈ $\frac{\text{Multi-hazards (v,c) x Vulnerability (h, c)}}{\text{Coping capacity (v, h)}}$

Recommentations (2)

- Based on an integrated risk assessment, higher level governments should identify high risk areas and provide lower level governments with additional guidelines for development.
- The consideration of flood risk as a compulsory element in the water assessment (watertoets) on all governmental levels.

Recommentations (3)

- Integrated risk management asks for an integrated geo-data infrastructure.
- Data and services used in spatial planning and crisis preparation & response need to be linked.



Questions and suggestions?

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