

Disasters Avoided

RELYING ON FLOOD STRUCTURES

Flood and drought risk can increase

- Flood structures provide many otherwise unattainable benefits for dealing with floods and droughts, notably by controlling some hazard aspects.
- Relying solely on these structures neglects needed behaviour changes, linked to the Disasters Avoided model factor of “the right mindset”.
- Then, vulnerability can increase, augmenting long-term disaster risk.

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The storm surge barrier in Rotterdam, the Netherlands (photo: Ilan Kelman).



Flood structures separate people from the water and dampen out extremes. Infrastructure, communities, and businesses near these structures are often in a floodplain, yet people tend to become used to the lack of flood and drought variations. Flood structures are large, solid, visible, and tangible – seemingly able to offer unassailable “protection”. Major advantages can emerge, such as electricity generation, water storage, and recreational areas. They can also create a false sense of security. When few extremes occur, awareness, preparedness, and coping with floods and droughts can lapse. Eventually, a large flood or drought can occur and produce damage far greater than experienced by people who are used to regular, smaller-scale floods and droughts. The structures change the hazard and so change expectations of the hazard. Without the right disasters avoided mindset to lead to the right behaviour, people can become more vulnerable and the risk of a disaster occurring can increase.

Sources:

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