



PREVENTION, PREPAREDNESS AND POLICY: BETTER WATER ARCHITECTURE FOR DISASTER RISK REDUCTION

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Water Architecture and Positioning

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› 100 to 200 million victims / year

› Value of assets at risk to rise x 3

› Water infrastructure and management key in reducing risks



› Water storage and infrastructure vital against drought and flooding effects



We can reduce the impacts of disasters through Prevention, Preparedness and Policy



Anticipate the situation !

- › Higher preparedness
- › Improved resilience
- › Switching from reactivity to proactivity



The global water architecture needs focus on prevention and preparedness



Investing in prevention

- › Saves homes
 - › Saves lives and well-being
 - › Makes economic sense
- 1 \$ pre-disaster invested = 10 \$ post-disaster spent

 **Disaster Risk Reduction must become an integral part of community and city planning**

INCREASING RESILIENCE TO CLIMATE VARIABILITY AND CHANGE: THE ROLE OF INFRASTRUCTURE AND GOVERNANCE IN THE CONTEXT OF ADAPTATION



BACKGROUND

Freshwater systems and the way they will develop in the future depend on climatic-related factors such as precipitation, temperature and evaporative demands, as well as on non-climatic ones. Given the uncertainties related to climate change and variability and the lack of data to predict them with certainty within given time frames, non-climatic factors have become more relevant than ever. These include management, governance and policy issues; land use considerations; infrastructure (reservoirs, groundwater storage and/or recovery); technology and innovations as well as diversification of water resources through water reuse and desalination, for example.

Reservoirs have become an integral part of our basic infrastructure by offering indispensable benefits like irrigation, hydropower, domestic and industrial water supply,

flood control, drought mitigation, navigation, fish farming and recreation. Construction of new reservoirs has often been controversial during the last decades due to the fact that social and environmental impacts have sometimes not had the due consideration. However, limited and skewed distribution of water over time and space to meet the increasing number of uses and users at the national, regional and global levels has made the world realize that more reservoirs are needed if development is to be promoted and if basic human needs are to be met. Global dynamics in terms of water, energy including electricity trade, food and climate securities have reasserted the importance of the roles of reservoirs in national development. This has triggered massive investments on construction and modernization of multiple projects at the national and global levels, especially in countries like Turkey, China and India.

WWC – ANEAS – CONAGUA Program

Infrastructure = Opportunities for creating resilience and climate change adaptation

- › Producing and delivering multiple purpose (hydropower, irrigation and flood and drought regulation)
- › Key role of Governance



Preparedness to extreme events needs

1. **Information**
2. **Economic instruments**
3. **Collective responsibility**
4. **International cooperation**
5. **Market**



The World Water Council calls for an increased commitment to preparedness and prevention



**WWC invites HELP
to the 8th World Water Forum
Brasilia, Brazil
18-23 March 2018**



Failure to prepare and prevent water disasters will result in rise of vulnerability

Disaster Risk Reduction will be reached via

- ✓ **Prevention**
- ✓ **Preparedness**
- ✓ **Policy**