

Freshwater Ecosystem Conservation in Development: Do We Need a Radical Agenda?

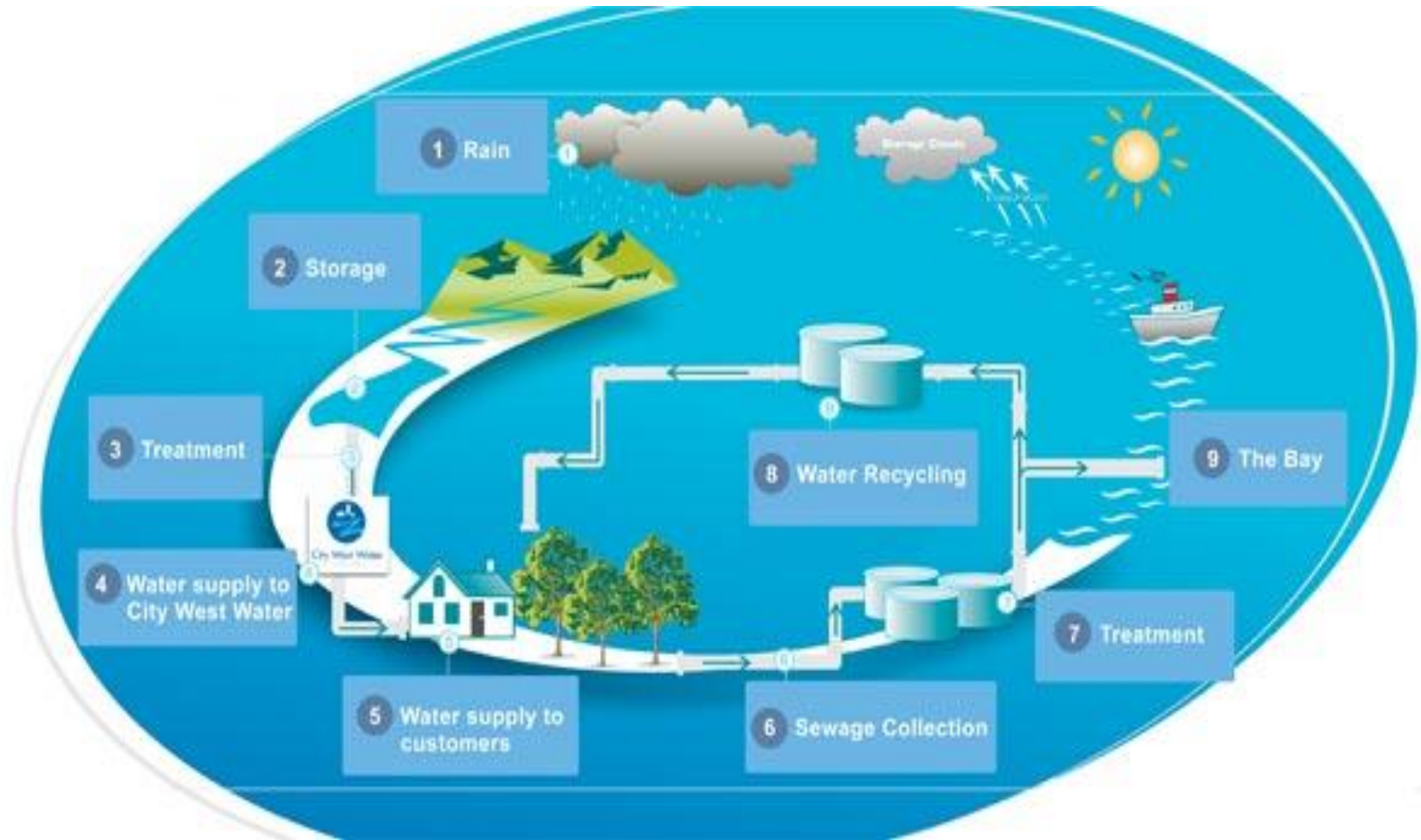


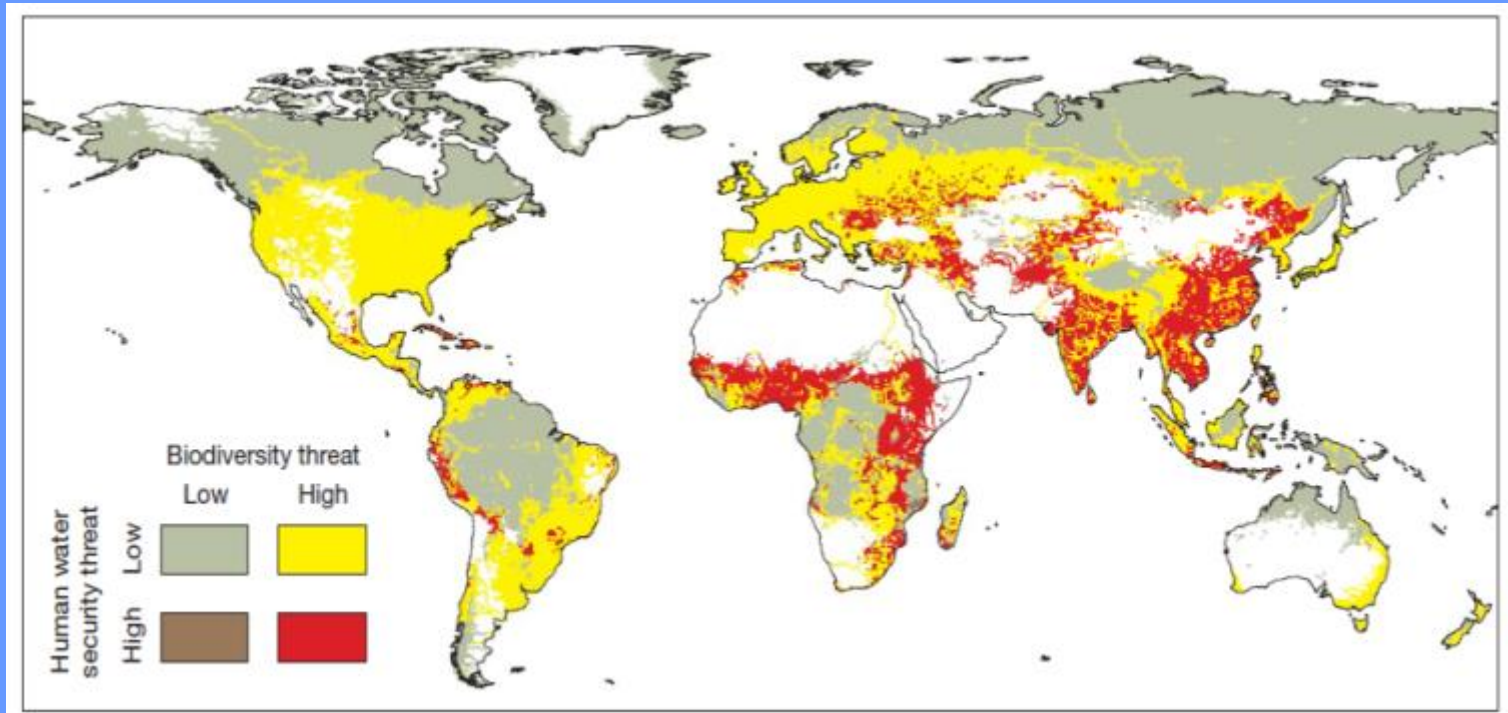
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Water Service Delivery

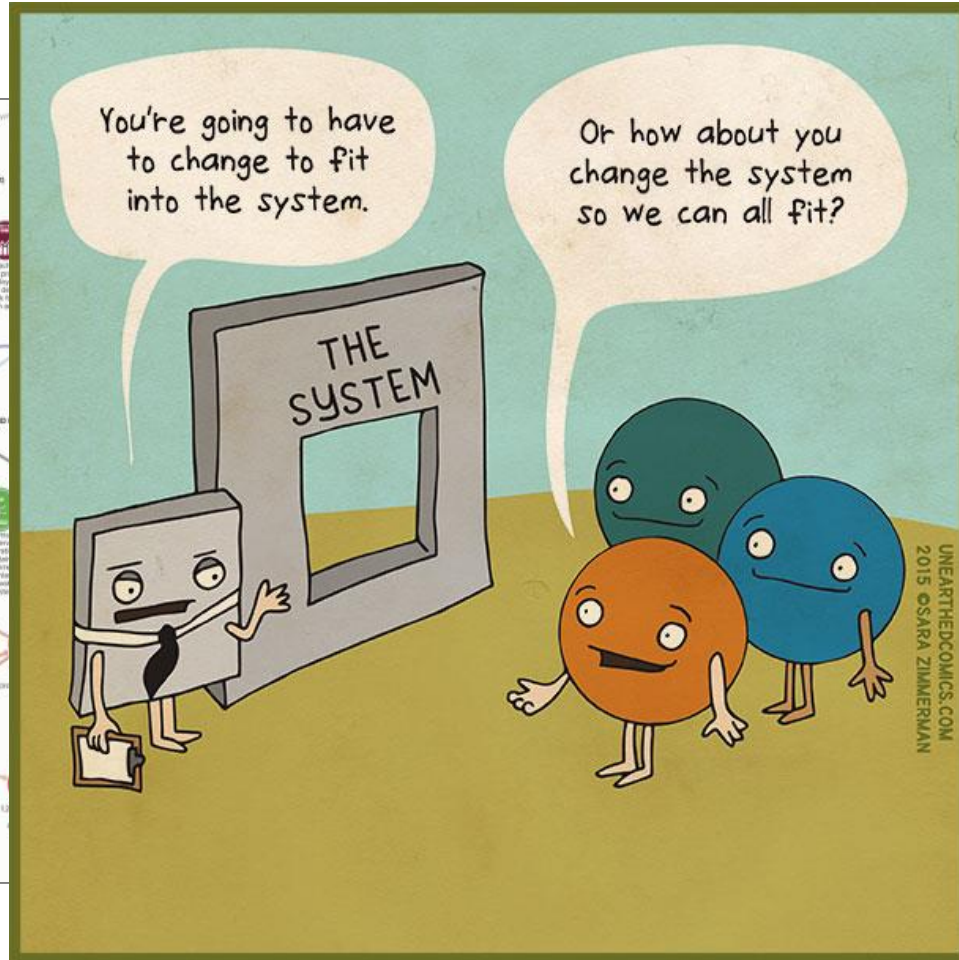
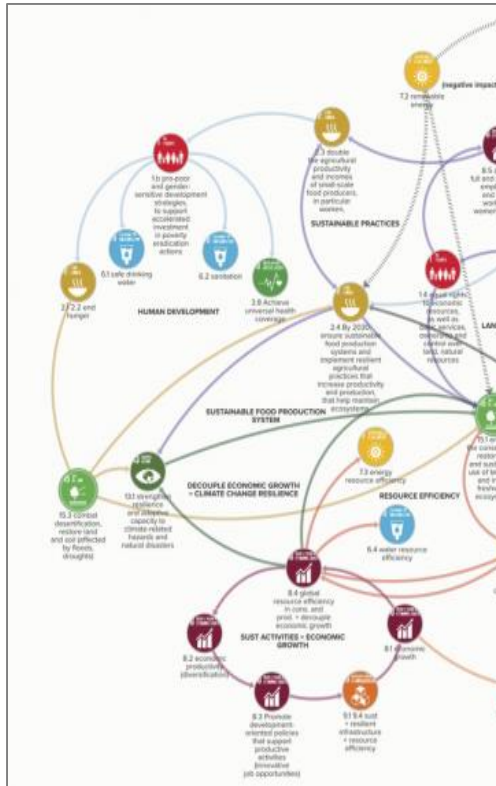




80% of population face threats to water security because of ecosystem conversion & degradation (Vörösmarty et al., 2010).

⇒ high demand and potential for nature-based solutions

Radicalism – Change the System



Opendevelopmentmekong.net

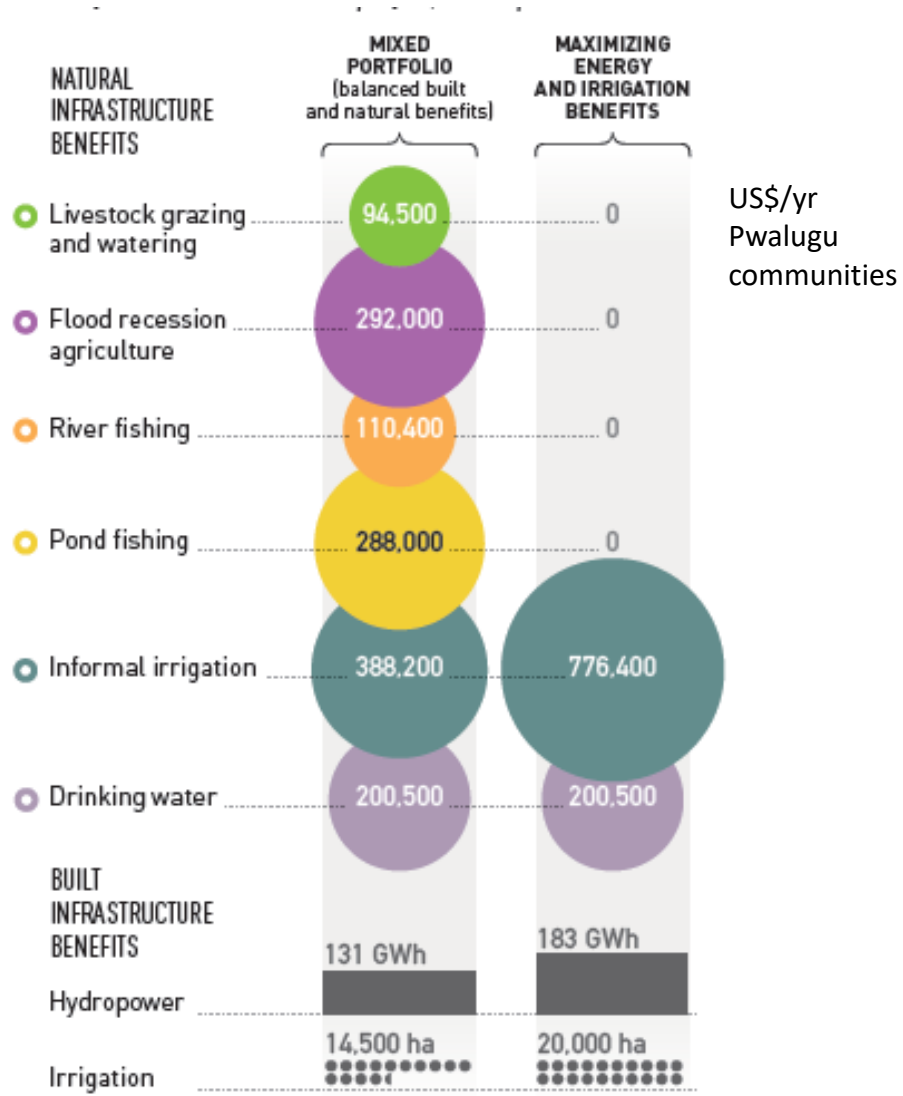
affecting the
 nature of something;
 tradition,
 progressive

bringing social
 high revolutionary
 changing value
 fundamental ways

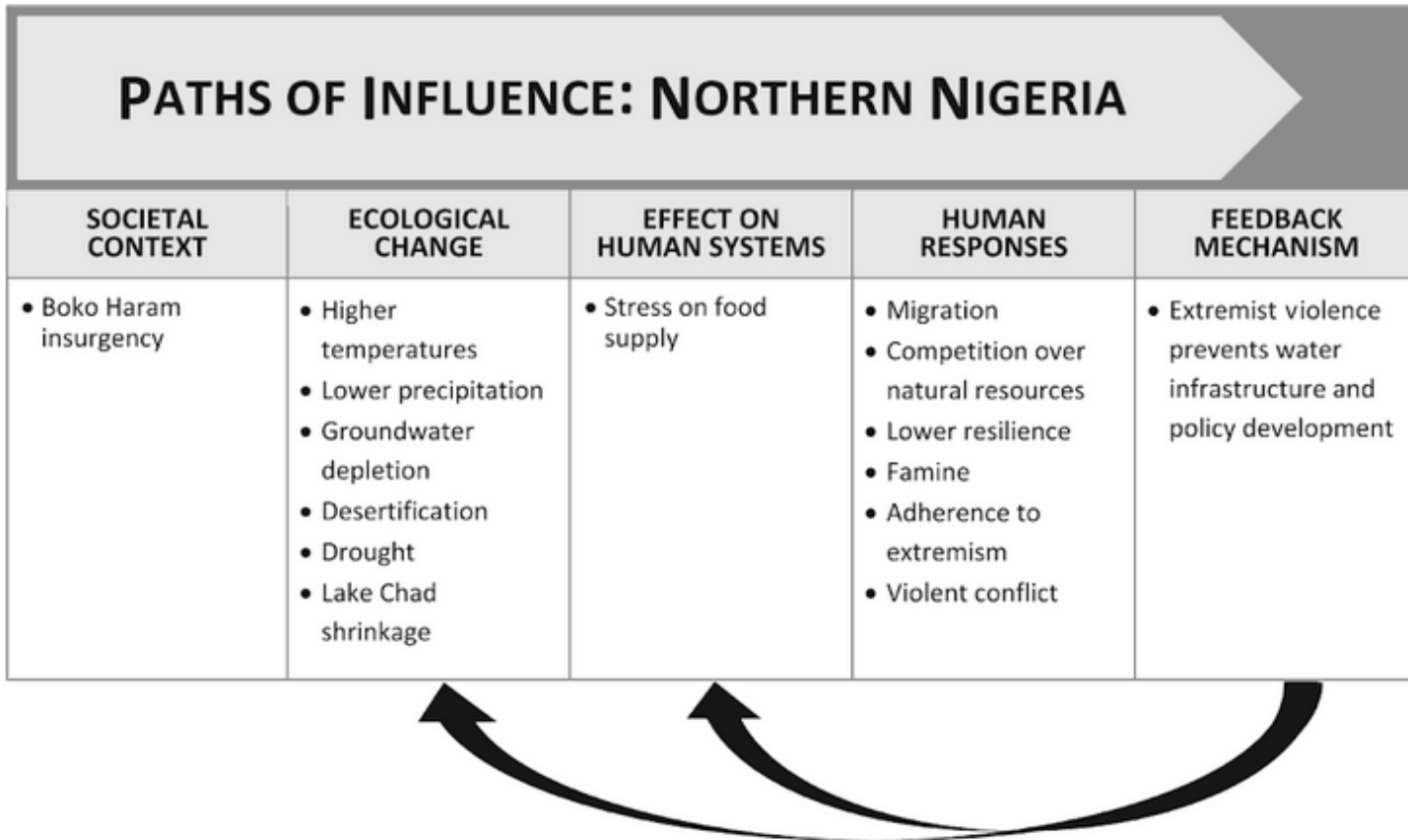
Why a Fundamental Rethink is Needed

Invest in	For	Source
Inland fisheries	60 million jobs in developing countries	De Graaf et al (2015)
Wastewater treatment	ROI of \$5.50 per \$	WWDR (2017)
Wetlands	Tourism expenditures of \$925 per year	Ramsar (2016)
Wetlands	Damage cost avoided from floods – eg. \$1907 ha ⁻¹ yr ⁻¹ Sri Lanka; \$33,000 ha ⁻¹ yr ⁻¹ USA	Coates & Smith (2012)
Watershed restoration	50% increase in farm income 20-90% increase in household food security 50% reduction in risk of crop failure	Gebregziabher et al. (2016)

Natural Infrastructure: for Equality?



Peace & Security: Lake Chad



Source: King M. 2017. Water stress, instability and violent extremism in Nigeria. Water, Security and US Foreign Policy, Taylor Francis, London.

What Will Drive Radical Change?

Transformative Alliances

- Science, policy, practice
- Entrepreneurs, investment
- Scaling, acceleration

Reframing

- NBS
- Natural infrastructure
- Green bonds

Governance

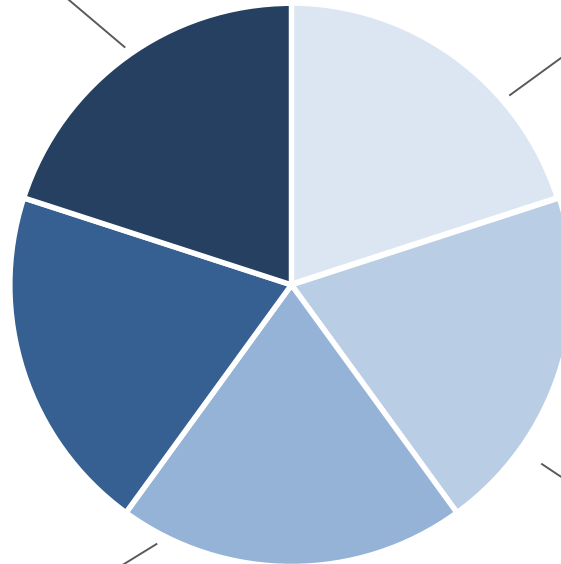
- Policies for systems
- Spatial planning
- Rule of law

Experimentation

- Demonstration
- Joint action
- Learning

Evidence

- Demand for more data
- Trade offs
- NBS optioneering



Transformative Alliance - Tanzania

- Farmers
- WUAs
- Local govt
- RBO
- National govt
- Entrepreneur
- Facilitators



Conclusions

- Dare we radically reform freshwater ecosystem conservation in development?
- Are there lessons and evidence from today's seminar?
 - Cases
 - Data
 - Catalysts for systems change
 - Transformative alliances