Can business risk help us get flows?

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WWF-International
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- 6 -17% increase in water consumption
- 7 -155% pasture land
- 6 - 59% crop land

Contents lists available at SciVerse ScienceDirect

Global Environmental Change

journal homepage: www.elsevier.com/locate/gloenvcha

Dams on the Mekong River: Lost fish protein and the implications for land and water resources

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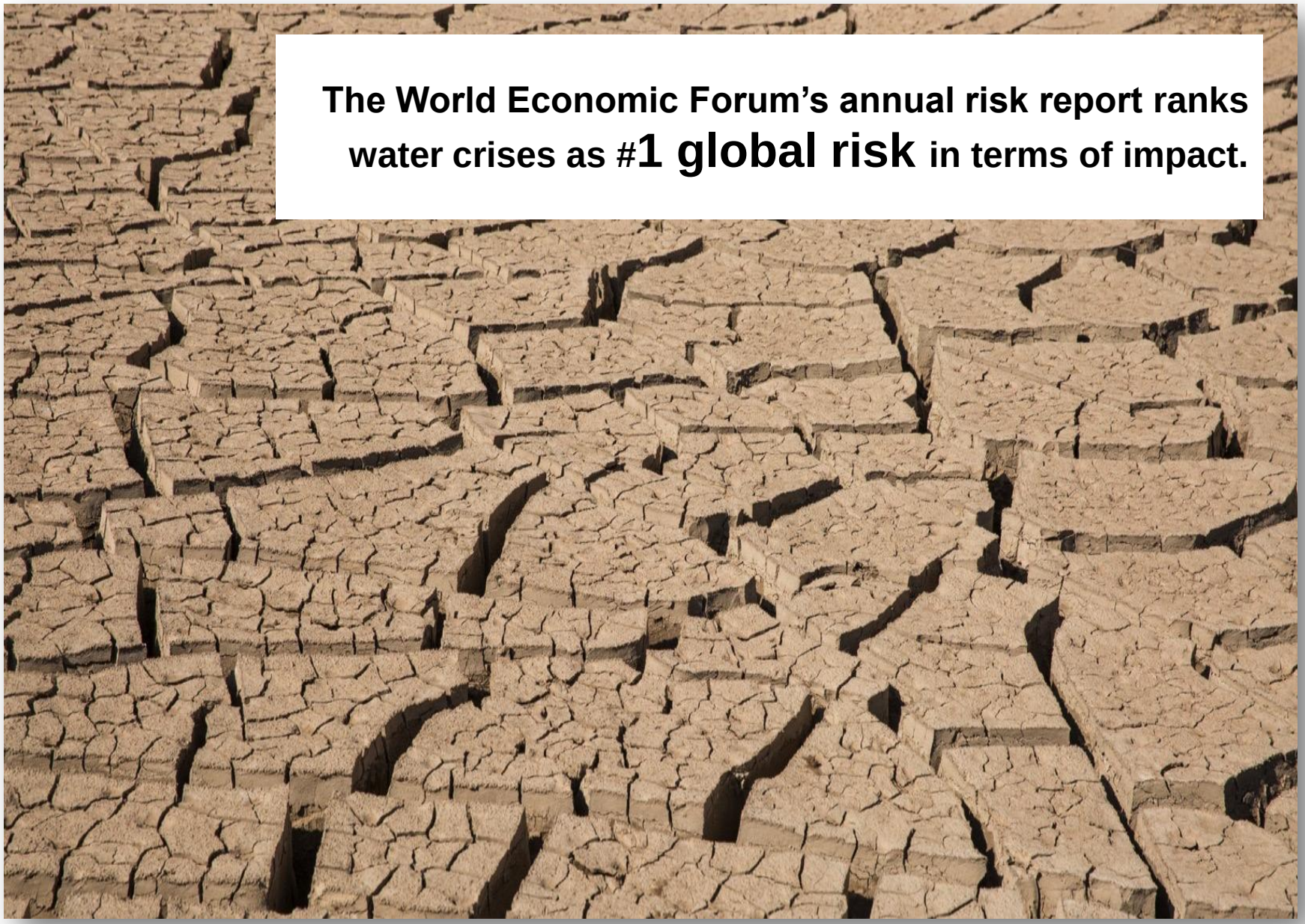

The World Economic Forum's annual risk report ranks water crises as #1 global risk in terms of impact.

Low flows and the bottom line?

- Stalling of planned power plants
- Heavy opposition by other water users
- Inflation in food and commodity prices
- Expected adjustments of water allocation/regulation
- Insurance and Finance costs and concerns

Supply chain scrutiny

- NGO questions and awareness
- Reputations in question
- Investor warnings
- Stewardship claims challenged
- Dependence and risk recognised

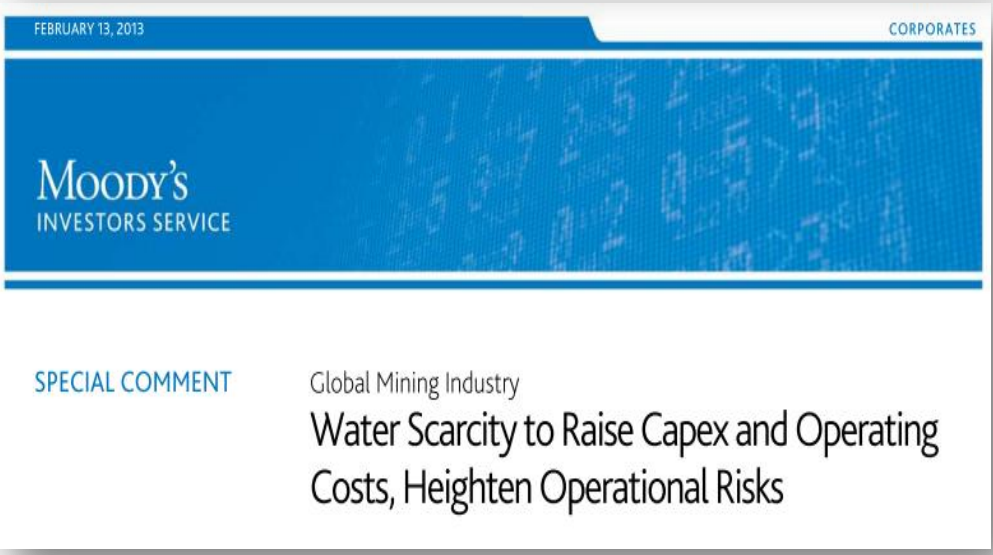
Stranded assets (drying and drowning)

- Value at Risk
- Investor warnings
- Shareholder concerns
- Higher costs to secure water
- Legacy of bad interventions

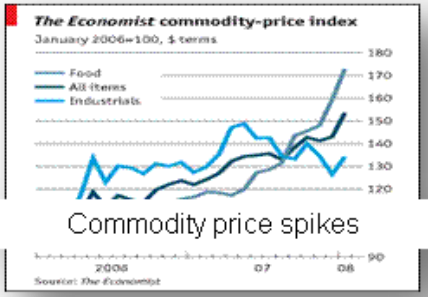
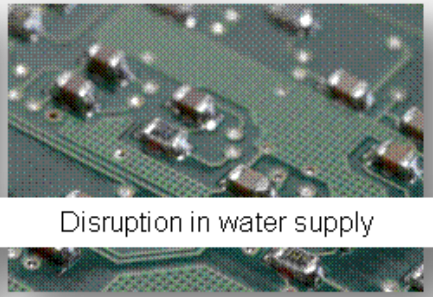
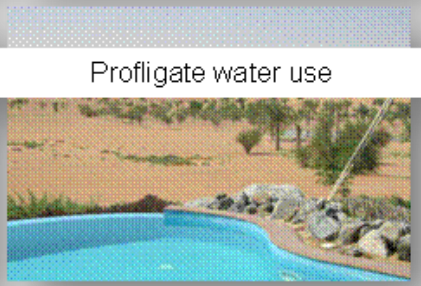
Investors

Investors also know how damaging inaction, inappropriate action or delaying interventions on water-related issues can be... The global economy will favour businesses that take a pro-active approach to water stewardship.

Eurizon Capital



Matrix of water-related risks

Point of impact: / Type of risk:	Supply chain	Production process	Product use
Physical	 Commodity price spikes	 Disruption in water supply	 Scarcity limiting sales
Regulatory (+ litigation)	 Water quality standards constraining power generation	 Court settlement to scale back operations	 Insecure water rights
Reputation	 Multinationals' suppliers singled out for violations	 Competition with social uses	 Profligate water use

Investors

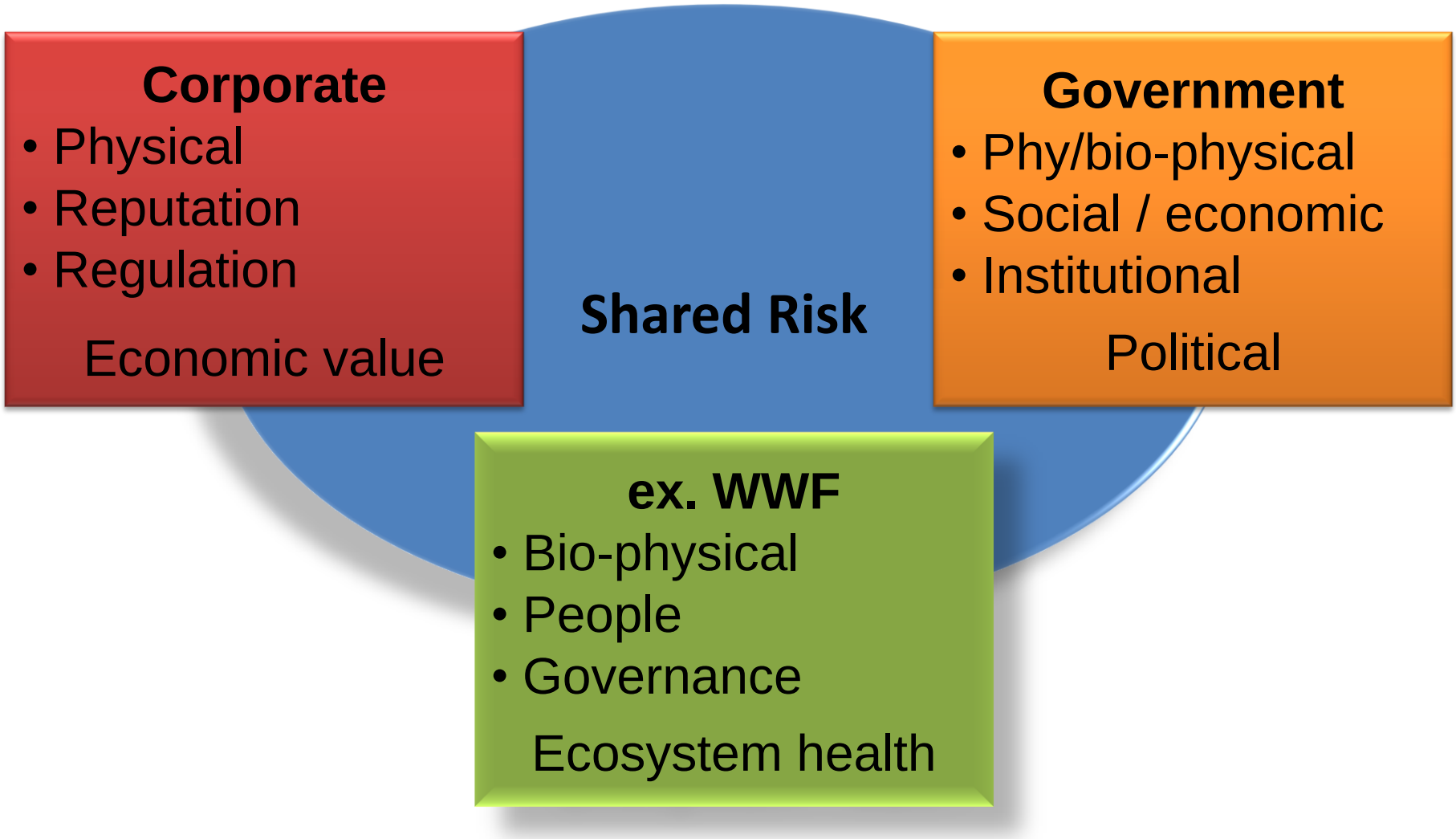
70% - one or more water-related risk could substantively affect their business

Two thirds of risks expected to impact both direct operations (65%) and supply chains (62%) in next five years.

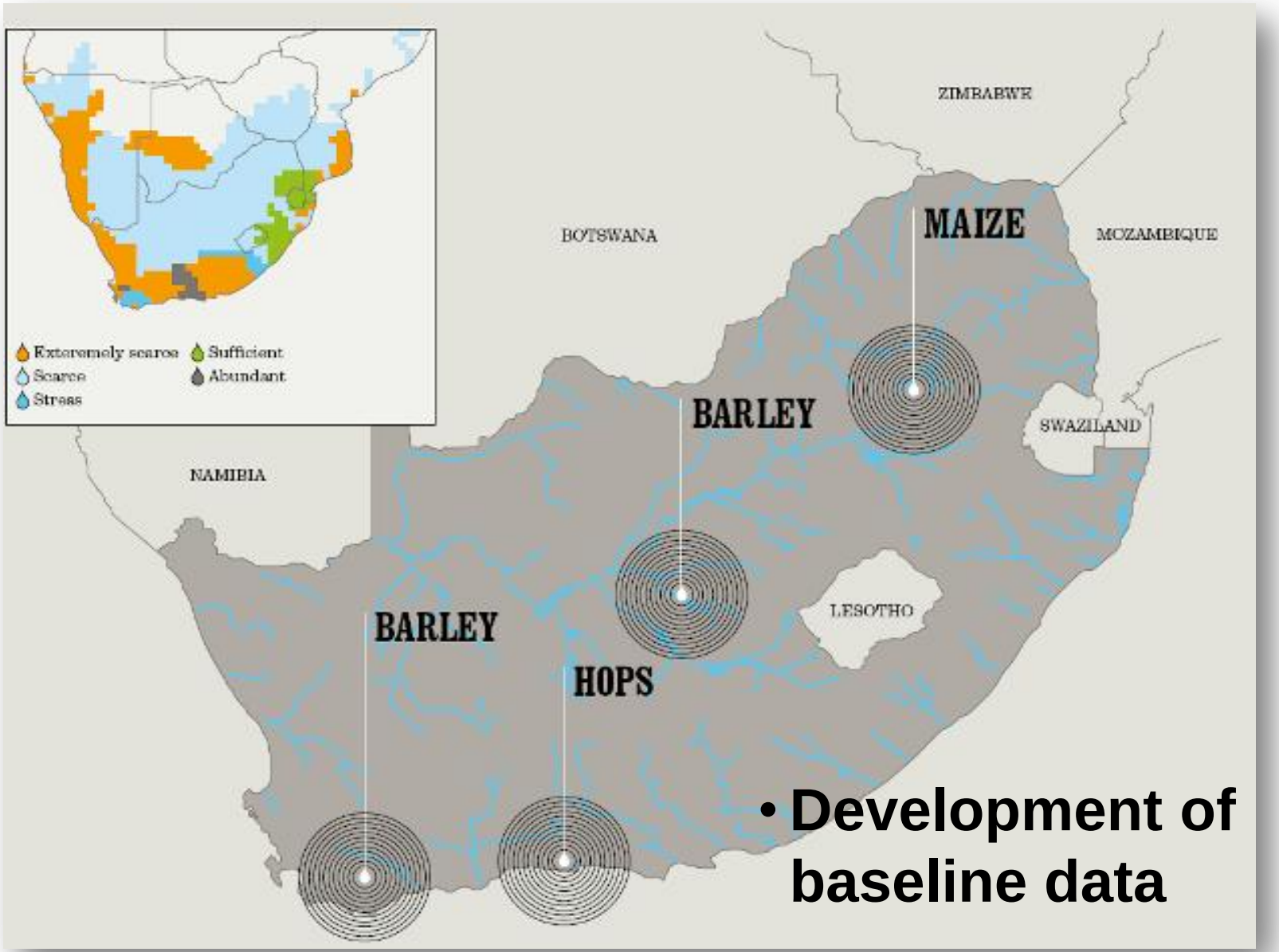
Only 6% of have targets or goals for community engagement, 4% for supply chain, 3% for watershed management, 1% for transparency, and NO respondents set goals around public policy


Larson
First pants,
THEN
your shoes

Neighboring up?



What are companies doing?

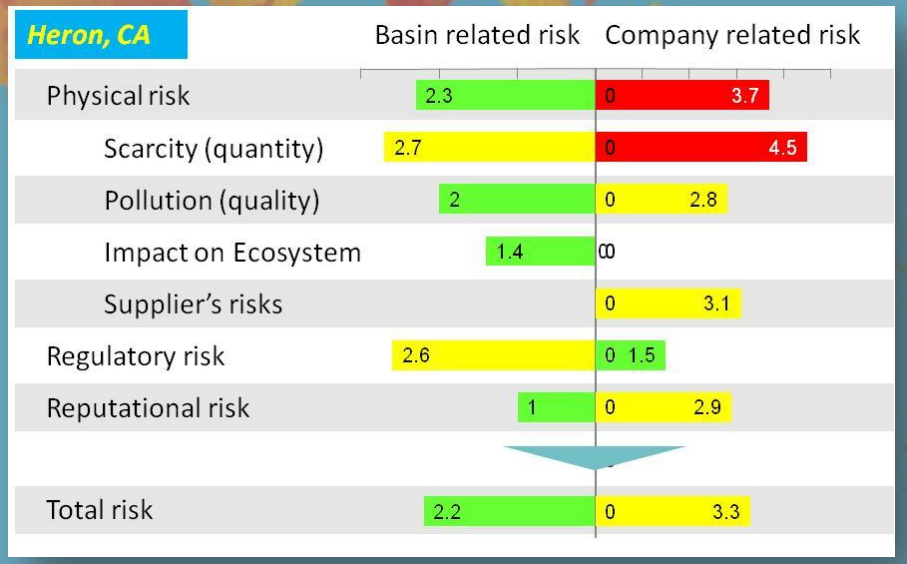


- **Development of baseline data**

What are companies doing?

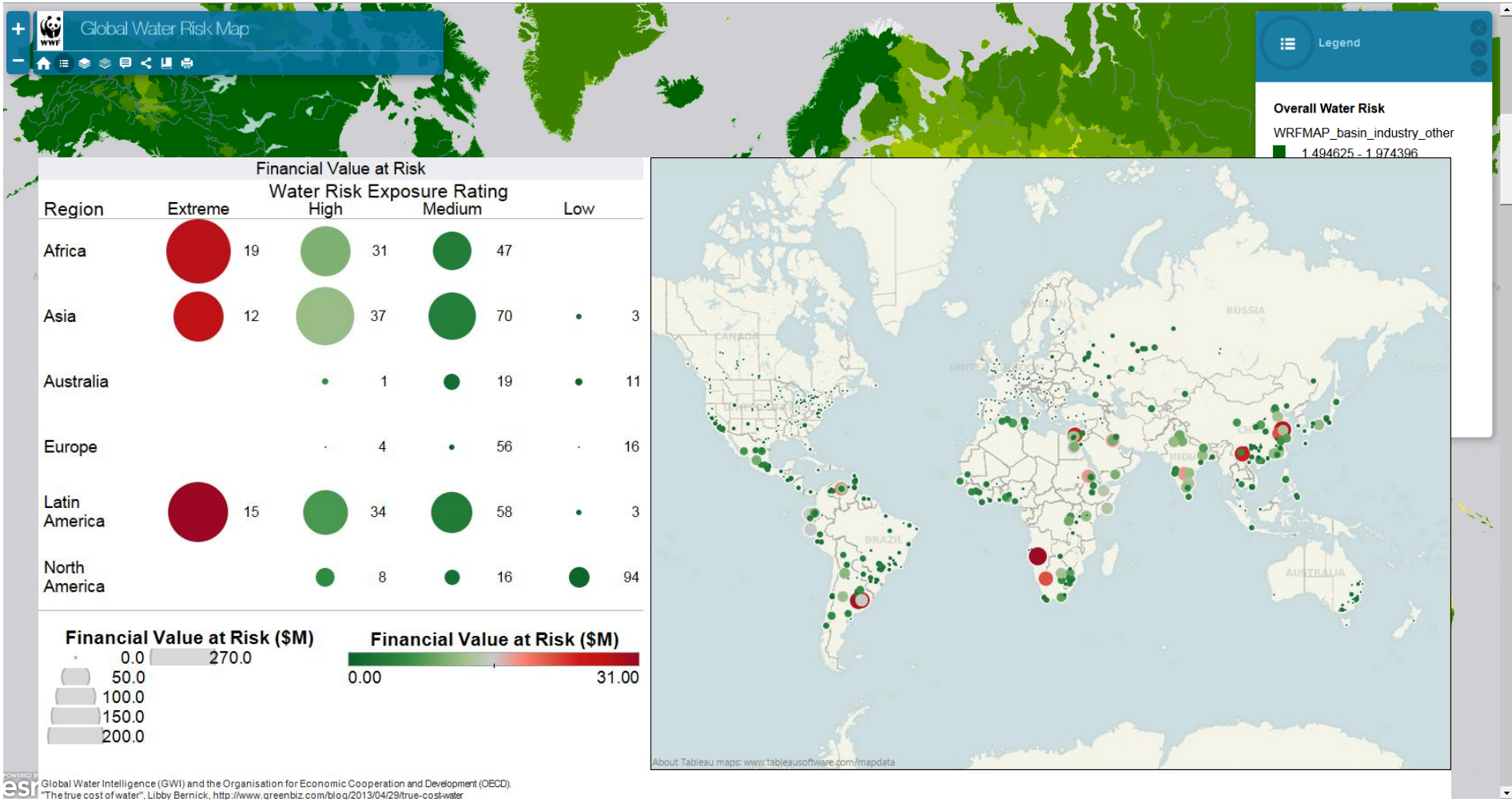
The Water Risk Filter

Assessing exposure to water related risks, covering all industries and all countries in the world



www.waterriskfilter.org

Risk to value at Risk

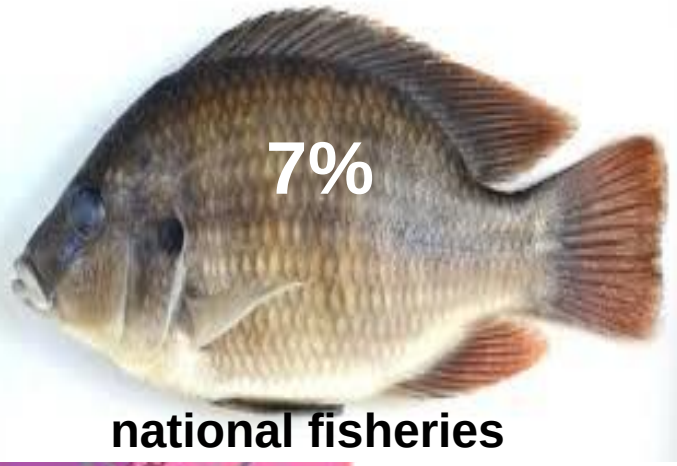


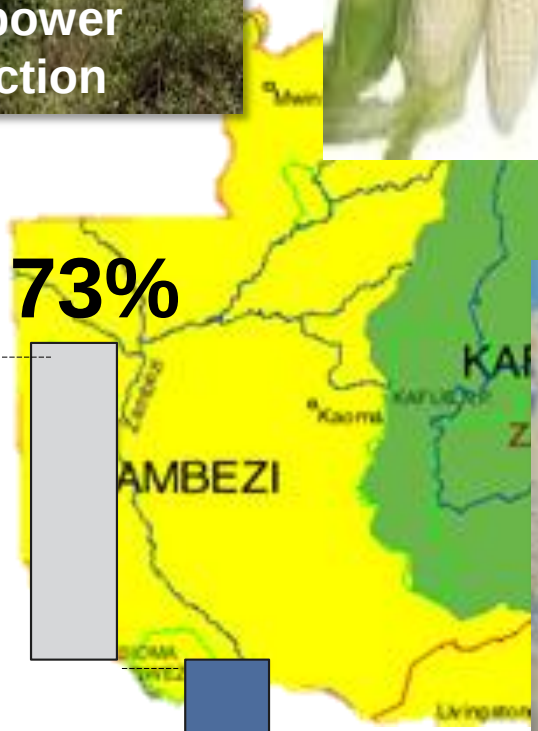
Drive risk awareness among global companies

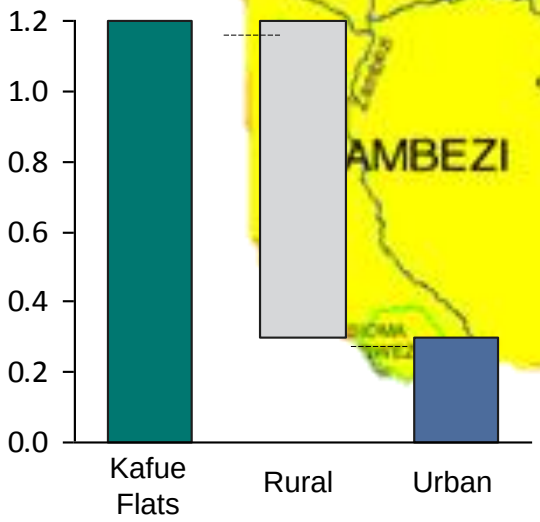
Highlight water's role in basin economies


WWF . Better Earth . Better Business.
Connection to flows?

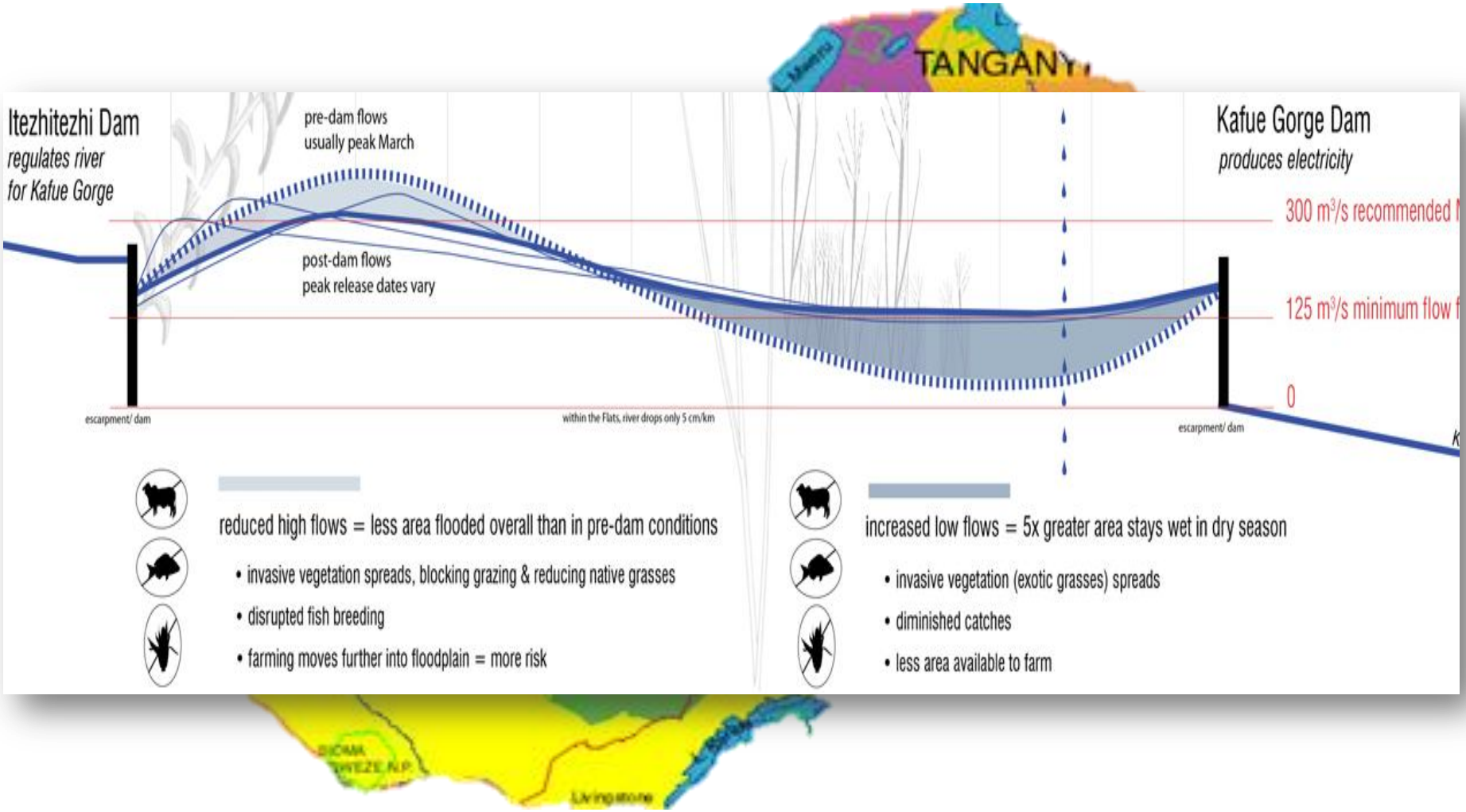
Kafue Flats – Economic Engine for Zambia



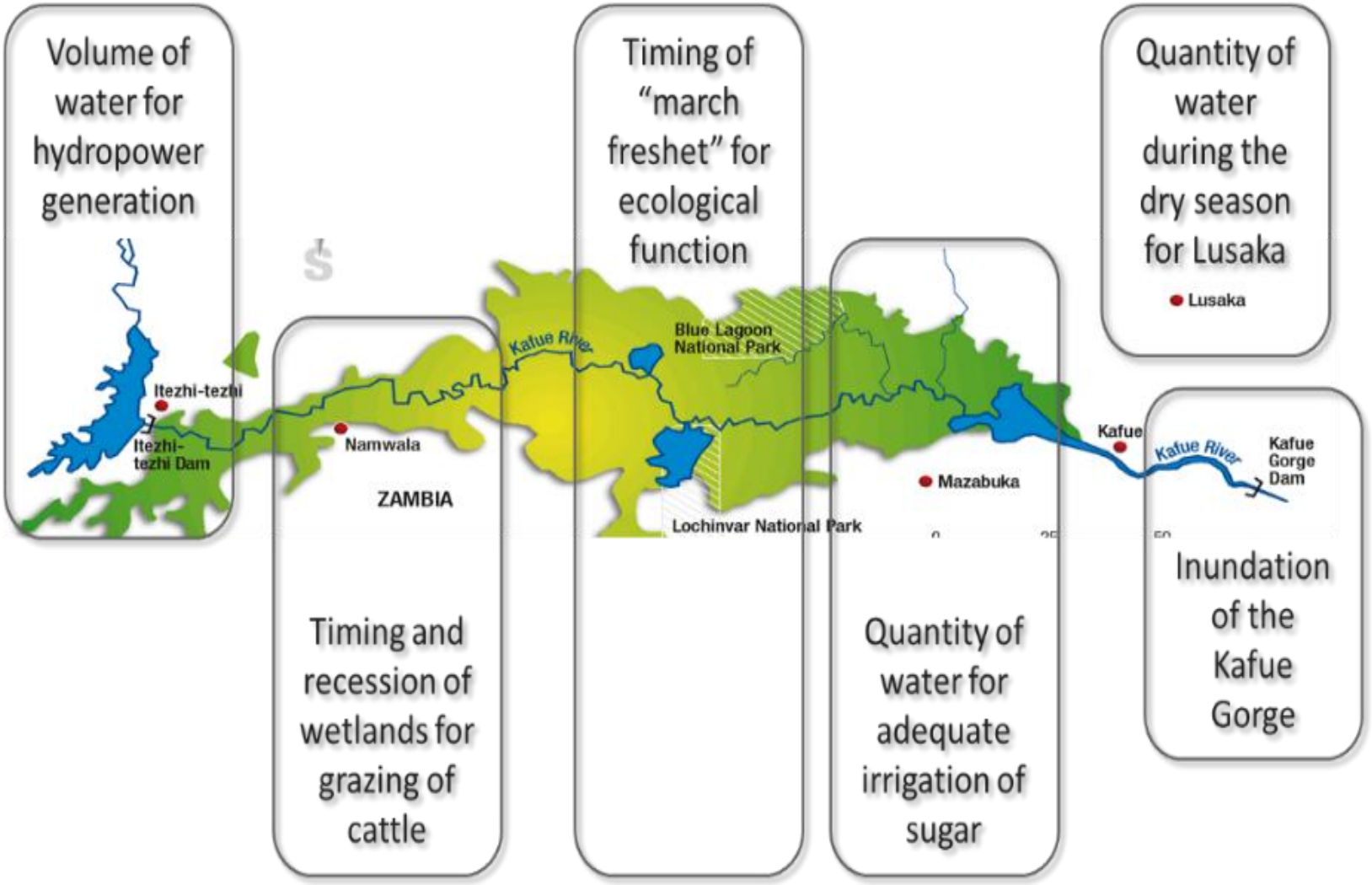




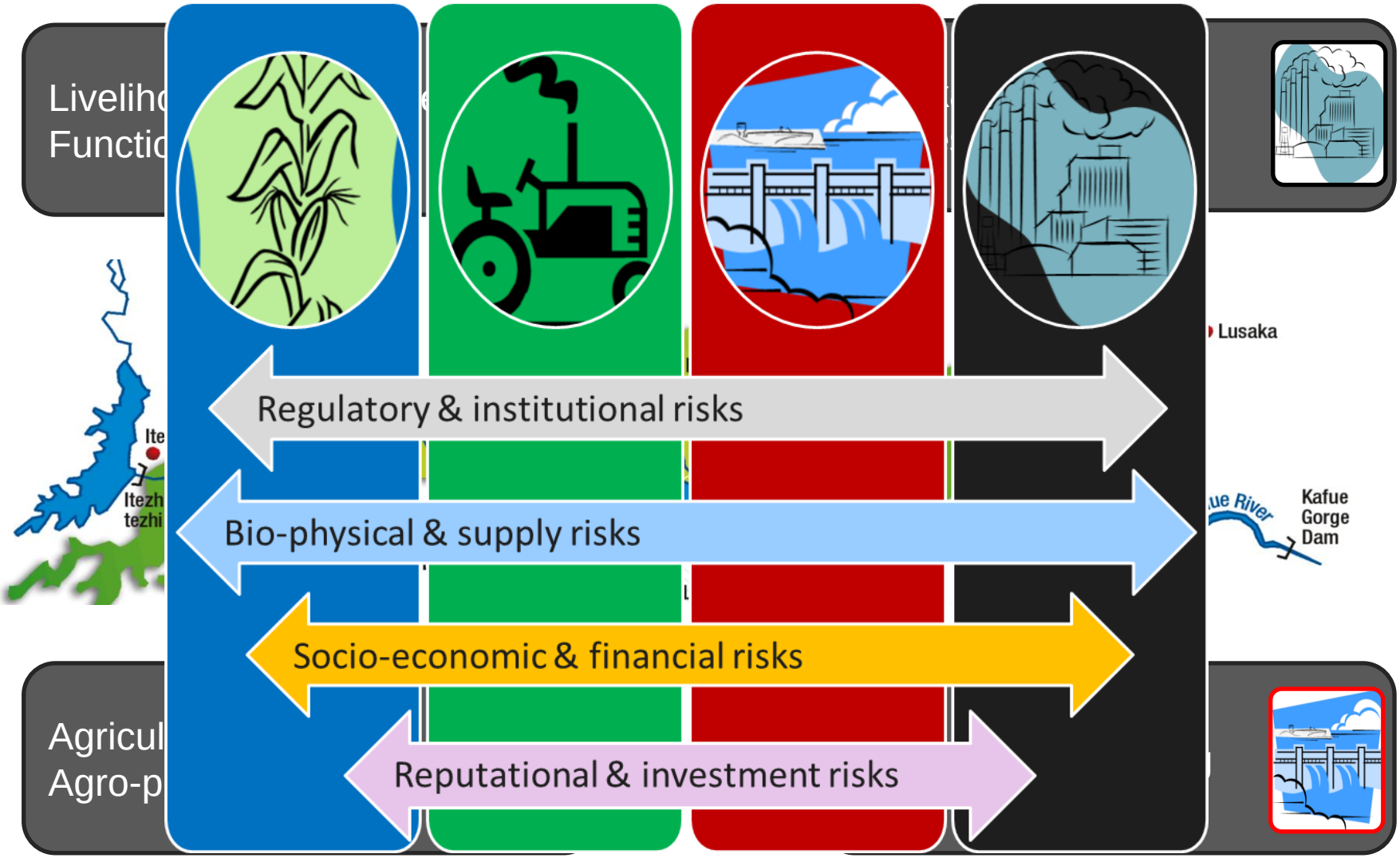
Zambezi River, Zambia



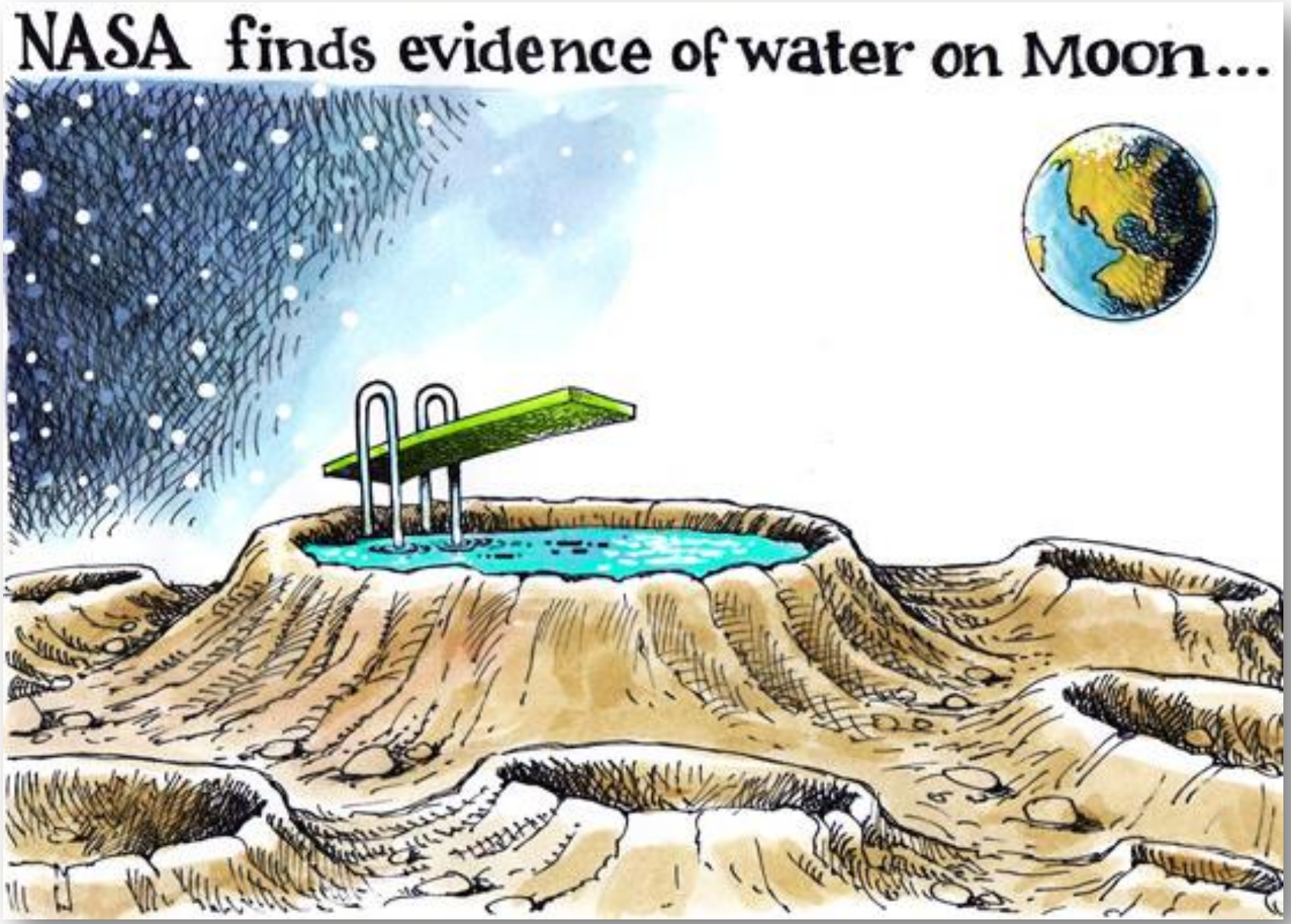
Geographic Risks along the Kafue



Key Risk Narratives




WATER FUTURES PARTNERSHIP
Beyond 2012
WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD
Innovative Water Partnerships
Experiences, Lessons Learned and Proposed Way Forward
PRI Principles for Responsible Investment
PRI-COORDINATED ENGAGEMENT ON WATER RISKS IN AGRICULTURAL SUPPLY CHAINS
INVESTOR GUIDANCE DOCUMENT
IN COLLABORATION WITH:
World Wildlife Fund (WWF), PwC Germany and the PRI investor steering committee on water risks
ICMM
International Council on Mining & Metals
nBrief
Water stewardship framework
WWF
BRIEF
2013
WATER STEWARDSHIP
Perspectives on business risks and responses to water challenges
vironment and Climate Change
ril 2014
New York, March 2013
STRATEGIC WATER PARTNERS NETWORK
SOUTH AFRICA
Closing the water gap by 2030


NASA finds evidence of water on Moon...

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http://wwf.panda.org/ws