2030 Water Resources Group

Water Stewardship Strategies

The 2030 Water Resources Group Approach

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Overview of 2030 Water Resources Group

2030 WRG is a public-private-civil society initiative that works with governments for sustainable water resources management

2030 WRG Value Drivers

Multi-Stakeholder Interests

- Blending of **public, private & community** interests
- Convening platforms at **state, national and international** levels

Multi-Disciplinary Focus

- **Agricultural, urban & industrial** uses
- Holistic approach of **water-energy-food-ecology nexus**

Global- Local Connect

- **Global best practices** and local knowledge for **national/ state partnerships**

Analytical Foundation

- Analytics of **risk** and/or **cost-benefit**

Goal:

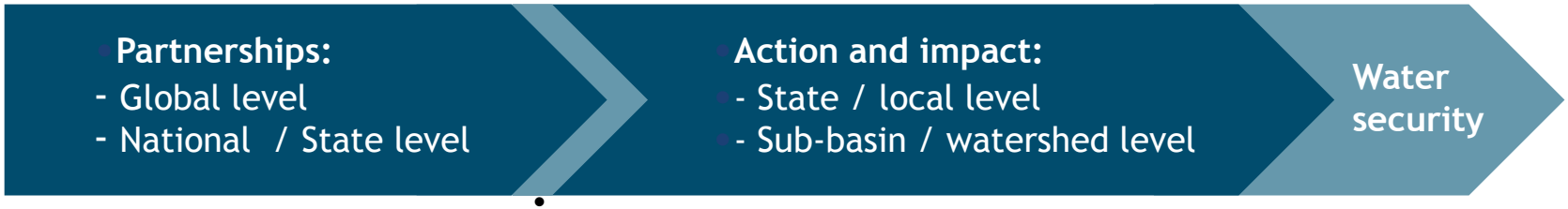
WATER SECURITY FOR ENVIRONMENTAL, SOCIAL & ECONOMIC GROWTH AT NATIONAL / STATE LEVEL

2030 WRG is a unique multi-stakeholder initiative

- Which helps governments accelerate reforms
- To ensure **sustainable water resource management**
- For long term development and economic growth of their country
- While respecting social access and environment.

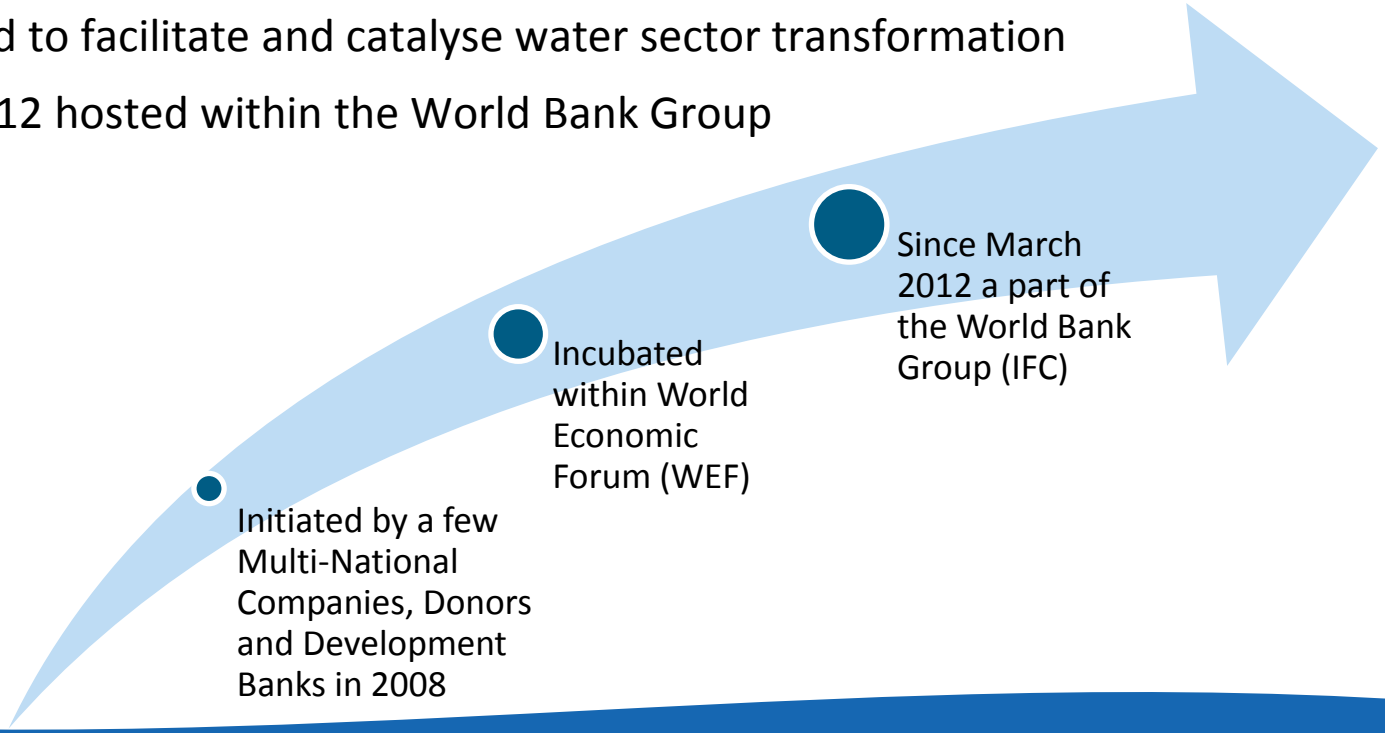
What makes 2030 WRG unique?

- Neutrally positioned, facilitator and catalyzer of transformation processes
- Operating on request of governments
- With support and involvement of the private sector as key player
- Use of hydro-economic models to describe costs, benefits and risks
- Convening power, can establish a resourceful multi-stakeholder platform for collective action

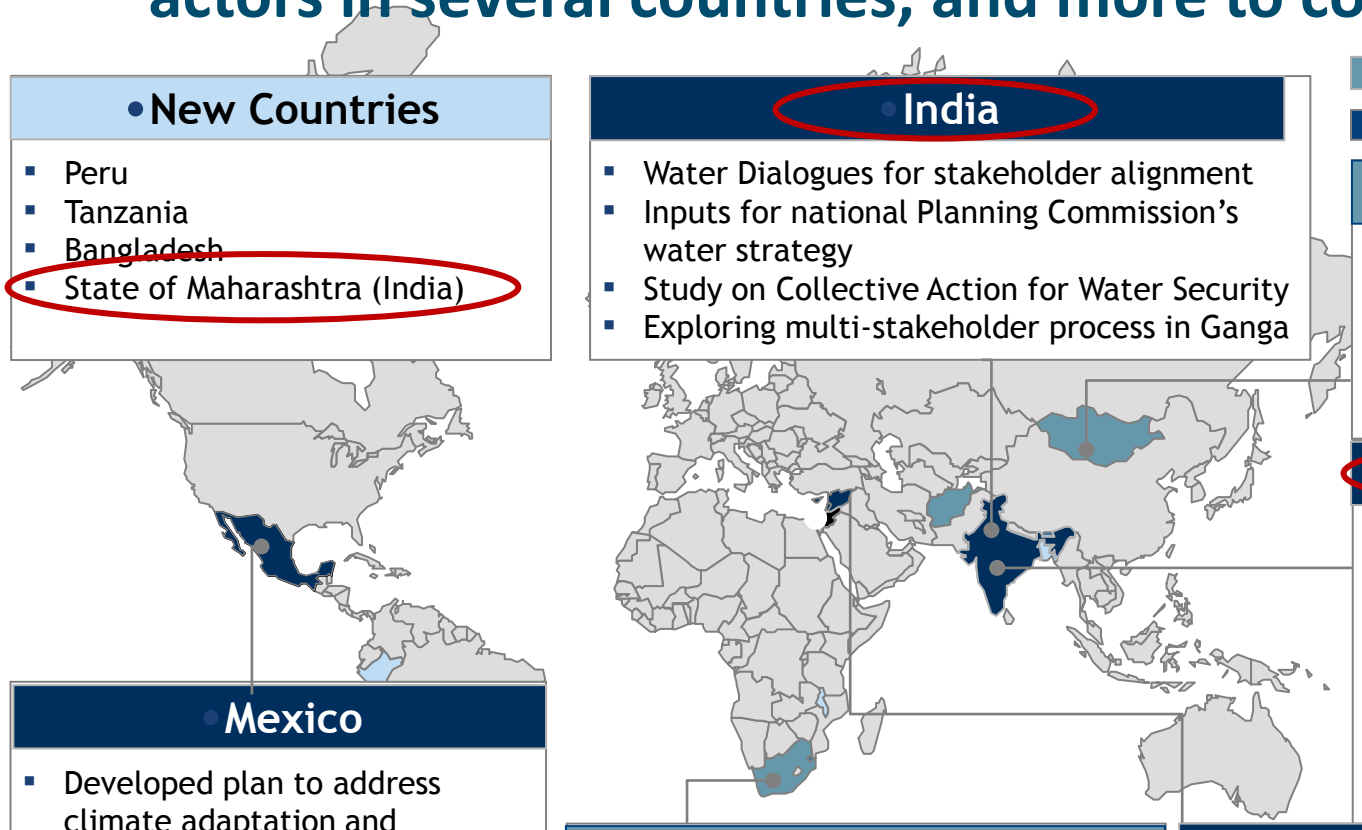


Development of 2030 WRG globally in past 6 years

- Initiated in 2008 and incubated within the World Economic Forum
- From a loose stakeholder association with limited governance
- To a well structured and neutrally positioned multi-stakeholder platform
- With skills and experiences gained across the globe
- Equipped to facilitate and catalyse water sector transformation
- Since 2012 hosted within the World Bank Group



The 2030 WRG is working with governments and other actors in several countries, and more to come



Proof Point Countries

Countries started in 2011

New Countries

- Peru
- Tanzania
- Bangladesh
- State of Maharashtra (India)

India

- Water Dialogues for stakeholder alignment
- Inputs for national Planning Commission's water strategy
- Study on Collective Action for Water Security
- Exploring multi-stakeholder process in Ganga

Mongolia

- Initial scoping workshop with Govt of Mongolia completed in June 2011
- Declaration of Partnership signed in March 2012

State of Karnataka

- Work with Water Resources Dept, Urban Dev Dept, Dept of Commerce and Industry
- Analysis to design pilot projects in agriculture
- Analysis on urban and industrial issues
- Multi-stakeholder process

Mexico

- Developed plan to address climate adaptation and increased variability
- Support Conagua with developing and implementing key aspects of its 2030 Water Vision
- Help Conagua develop tools for designing economic incentives
- Stakeholder Platform prepared

South Africa

- Declaration of Partnership at WEF Africa Summit 2011 (May)
- Partnership formalized and presented at COP 17 (Dec 2011)
- Partnership has presented concrete proposals

Jordan

- WRG Analysis completed
- Government has used this analysis to revise their national water strategy
- Intergovernmental Advisory Committee established
- Action Plan is being developed

2030 WRG's ACT Process

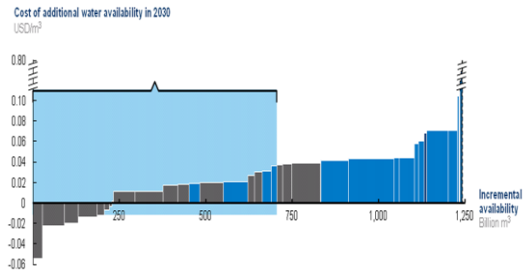
Analysis-Convening-Transformation

- Step-wise Approach

• Step 1

Analysis

to support better decisions



- Comprehensive fact base with broad agreement
- Cost, Benefit or Risk analysis depending on countries needs

• Step 2

Convening

public-private-civil society stakeholders

- Multi-stakeholder dialogue to help government shape and take forward priority programs, plans and actions

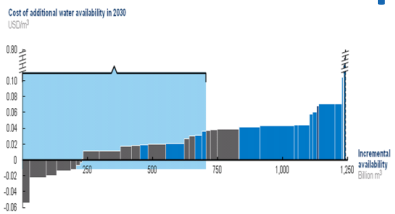
• Result

Transformation

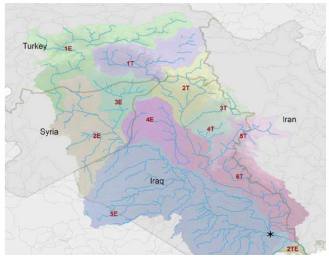
to higher performance and sustainability

- Concrete proposals to ensure lasting change on the ground
- Can be Programs, Plans, but also PPP-proposals

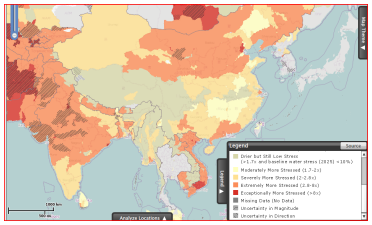
Hydro-economic analysis can help stakeholders prioritize actions



- **From an economic cost perspective**
  - Projections of future demand of water
  - Cost to country for not having enough water
  - Marginal cost-curve analysis to prioritize interventions



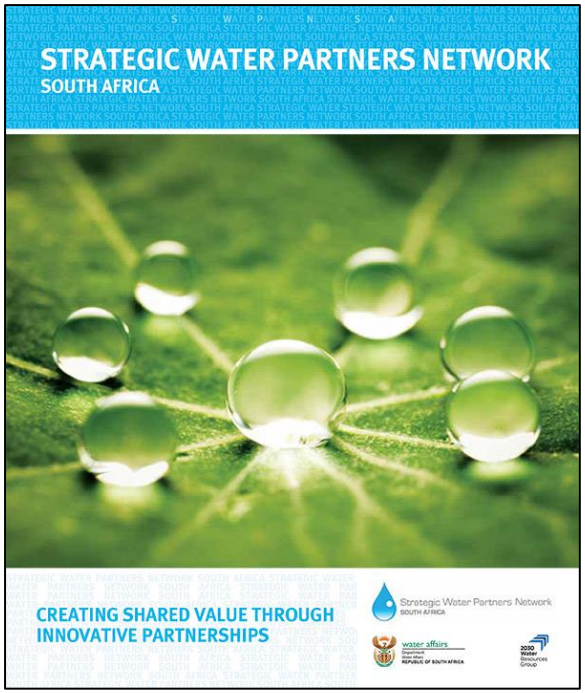
- **From a benefit perspective**
  - Quantifying economic, social and environmental benefits of different uses of water
  - Making scenarios for different allocation of water between different sectors, and thereby creating different benefits as a result

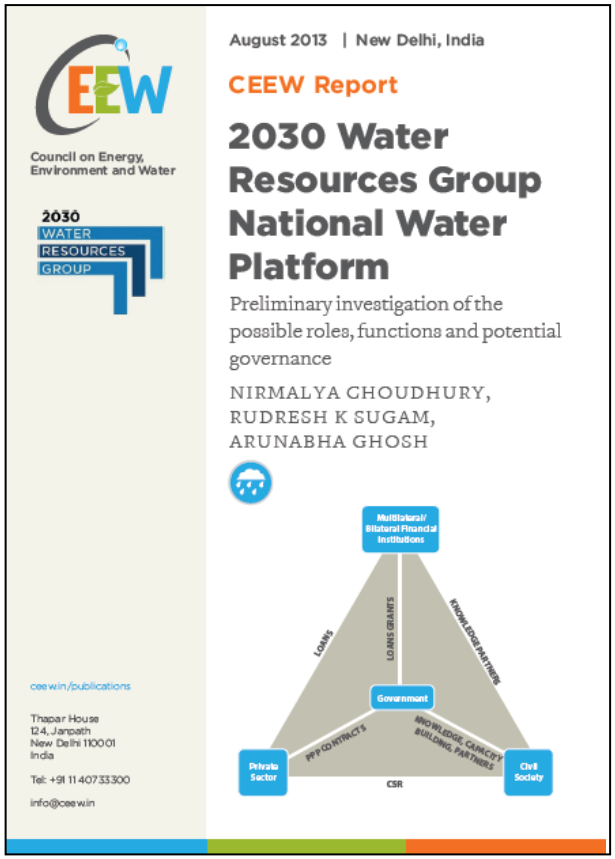


- **From a risk perspective**
  - Determine which geographic areas , economic sectors and social groups are most at risk due to water scarcity, flooding, water pollution, and poor water governance. Today and with scenarios for the future
  - Quantify the consequences**.**

Each type of analysis can be performed at different scales and with different spatial resolution

Multi-stakeholder platforms in different countries





Established in:

- South Africa
- Maharashtra
- Mongolia
- Tanzania

Being developed in:

- Karnataka
- Peru
- Mexico
- Kenya

Being explored in:

- India, national level
- Bangladesh
- Lebanon

2030 WRG India – activities at national level

Unlocking a multi-stakeholder process

A) Study on Collective Action (CEEW)

- Description of collective action
- Theoretic framework with success- and failure factors from literature
- Analyses of case studies
- Recommendations: how **trigger**, **facilitate** and **sustain** *successful* collective action between more than two multi-stakeholder groups?

B) CEO Water Dialogue

Purpose: build shared thought leadership on water transformation

Activities: about 2 water dialogues annually (informal diner setting)

- April-August 2014 – Framework study on collective action (CEEW)
- August 2014 – Seminar on water risk and water stewardship (OECD, FICCI, ADB, 2030 WRG)
- End 2014 – Launch of Public-Private-Community Dialogue at WEF India (incl. CEO Water Dialogue)
- 2015 – Continued Public-Private-Community Dialogue process

Government of Karnataka and 2030 WRG Partnership

Building on partnership, next step is multi-stakeholder dialogue on key water issues

Previous and Proposed Future Engagement

A Analysis → **C Convening** → **T Transformation**

2011-2014	2014-2015	2015-2017
MoU with Government of Karnataka • **Phase I: Agriculture** – McKinsey • **Phase II: Urban and Industrial** - Deloitte	Establishment of a **multi-stakeholder process for engagement** **Potential Workstreams:** 1. **TBC by Multi-stakeholder Process :** Water action plans for urban/ industrial/ agri clusters 2. **Agricultural Water Use Efficiency (WUE) :** Private Sector Participation in Canal Command Areas 3. **Wastewater Reuse:** Urban and Industrial Sectors	Partnerships for joint **public-private-civil society action,** potentially including**:** • **PPPs** for Agricultural WUE in command areas through: 1. MIS/ mechanization 2. Extension support 3. Inputs 4. Access to finance • **PPPs** for wastewater for urban-industrial use

2030 WRG - Maharashtra Agri-Water Partnership

Initiated early 2014 in cooperation with State govt. – Dept. of Agriculture (chair person)

- **Aim:** to facilitate GoM to attain 4% annual GDP growth in agricultural sector, under the **assumption** of using same or less amount of water, through **PPCP** solutions.
- **Scope:** initial focus on rain fed areas, watershed development and minor irrigation works
- **Members:** government agencies, private sector companies, civil society organisation, farmers representation, financial institutions
- **Phase-wise process:**

Phase 1

- Informal multi-stakeholder Sounding Board to guide and steer the partnership
- Preparatory hydro-eco analysis: water gap in agricultural sector, water footprint of existing initiatives, roadmap with recommendations to close water gap
- Work streams for collaborative actions & systemic transformation in agri-sector

Phase 2

- Widening the scope & participation to address water security across all sectors
- Formalising partnership through MoU with GoM

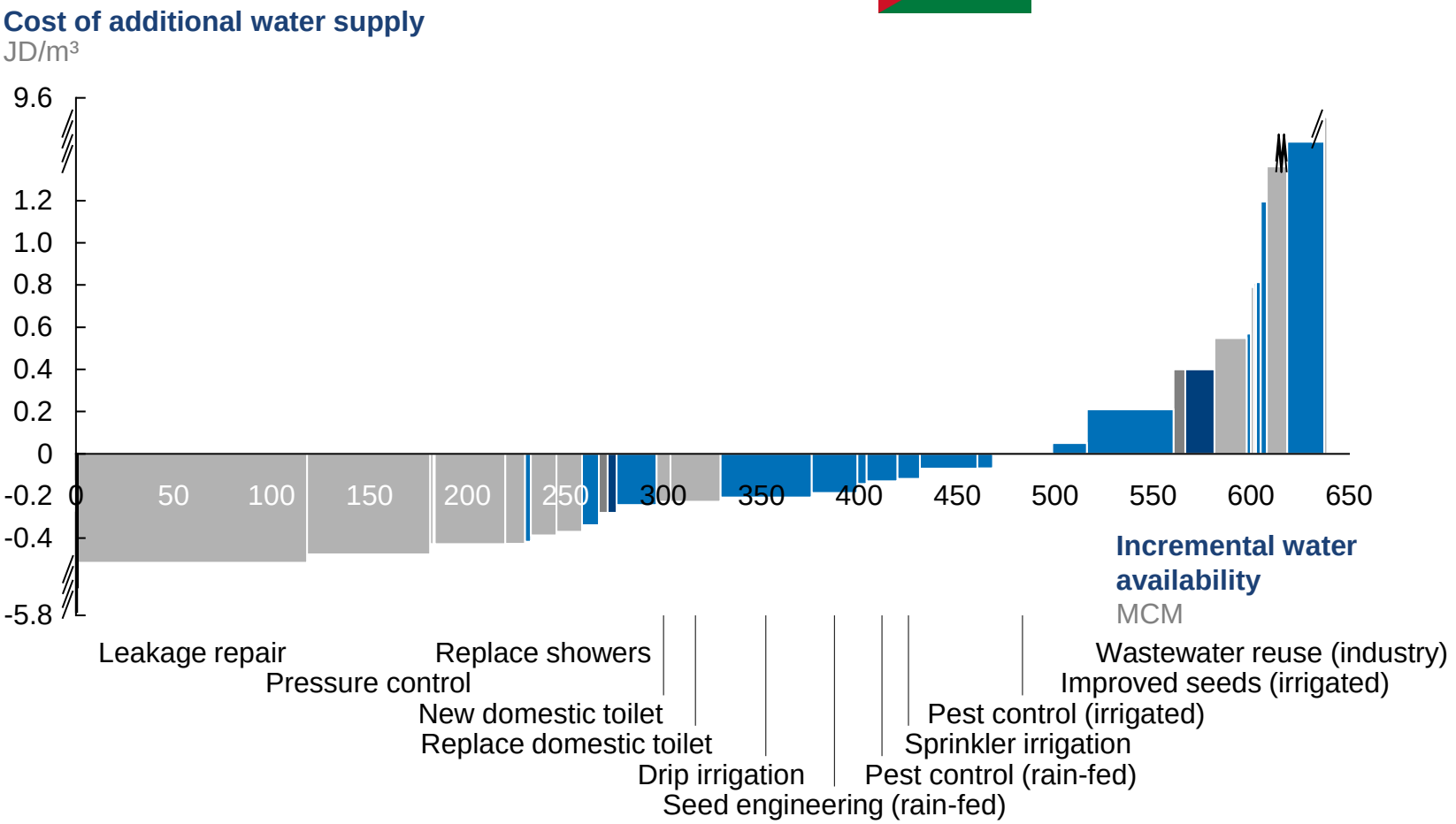
Thank you

- www.2030wrg.org
- www.waterscarcitysolutions.org

- Anders Berntell, ABerntell@ifc.org

From a cost perspective: the water cost curve provides a structure to enlist all technical levers to fill the water gap in a like-for-like fashion (McKinsey)

BAU[1] cost curve of potential demand-side solutions[2]

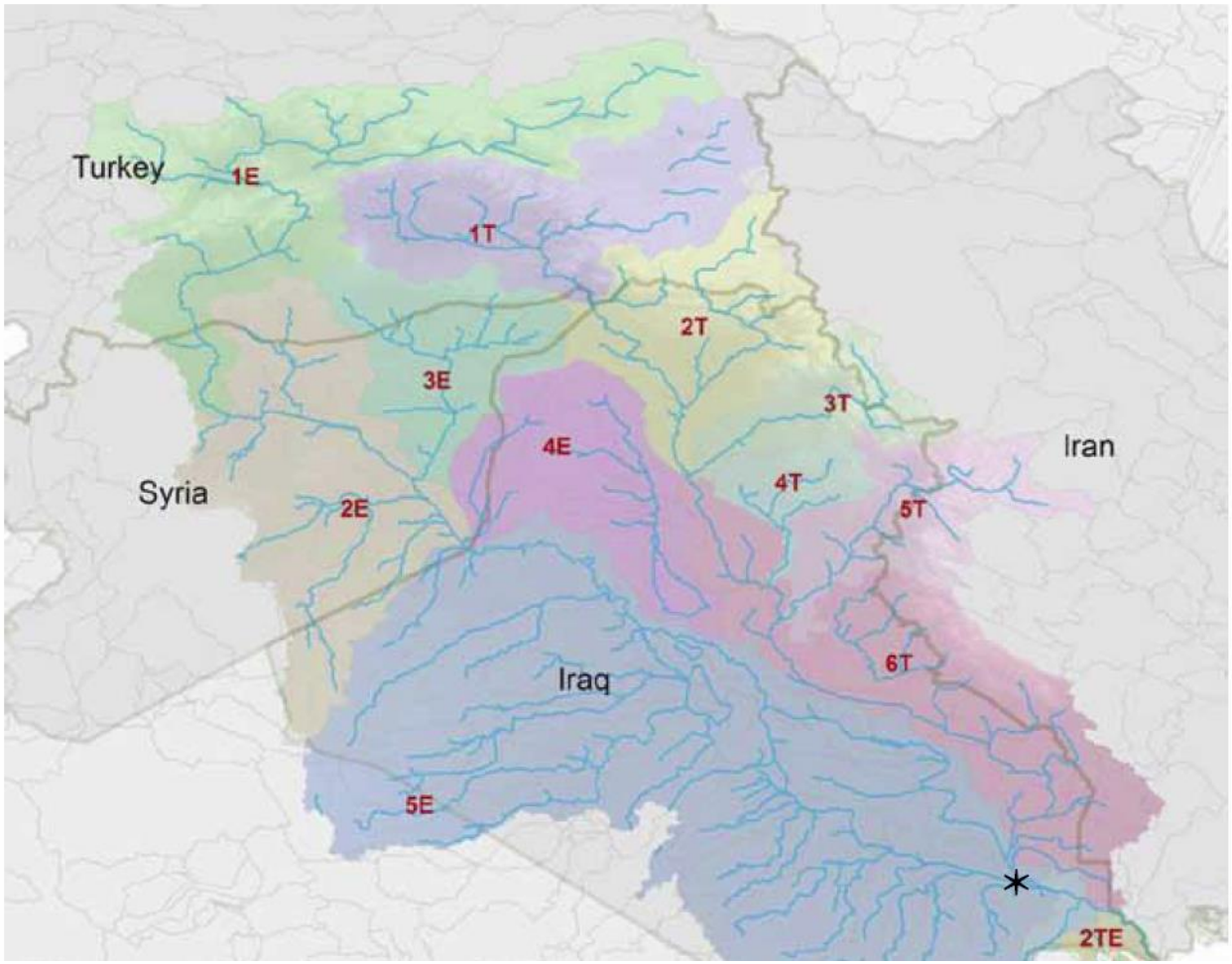


1 Business as Usual

2 Solutions with volume potential <15 MCM are not labelled

SOURCE: MWI; USAID; team analysis

From a benefit perspective:
Example of Benefit Modeling, Euphrates-Tigris basin
(from SIWI, Stockholm International Water institute, 2012)



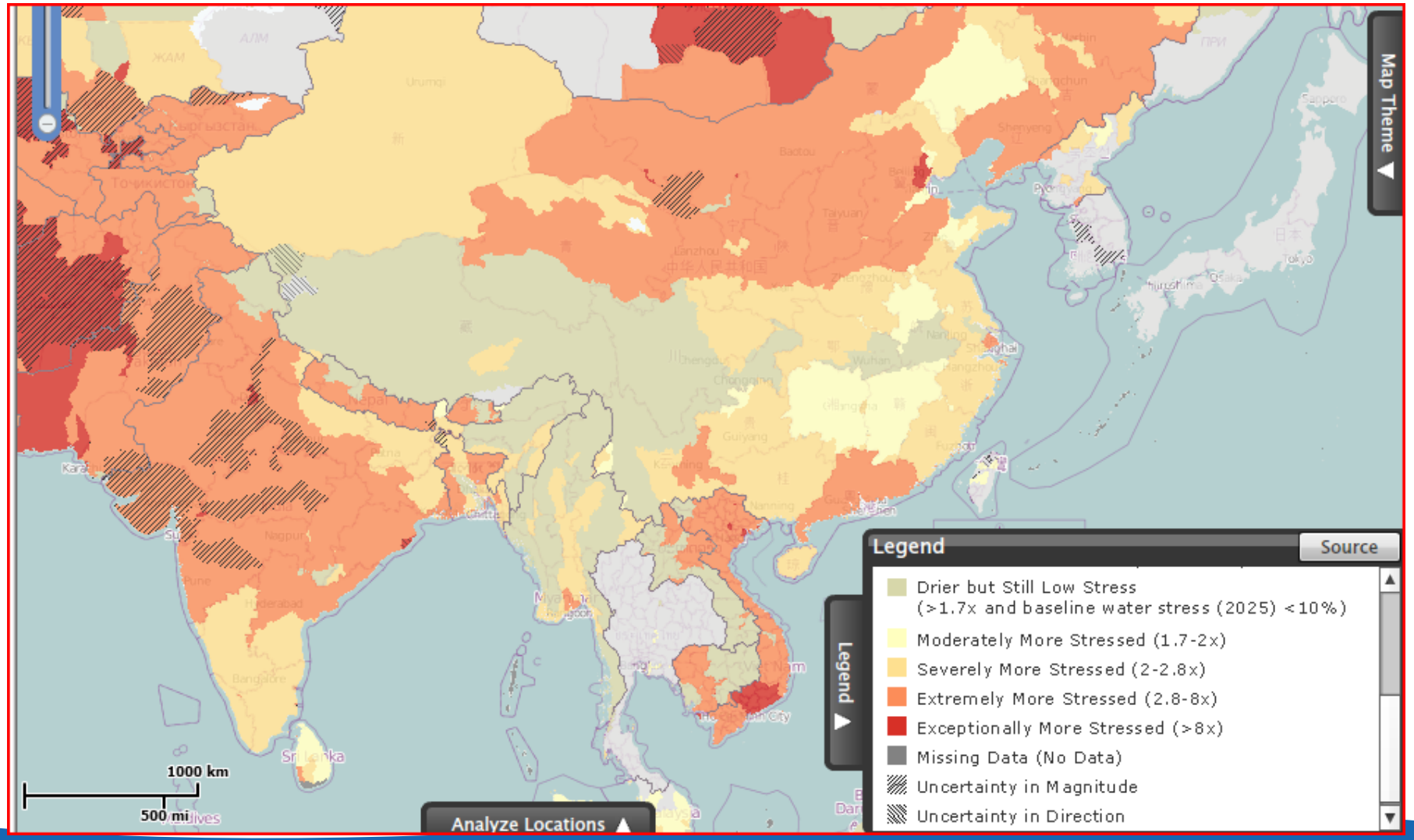
Benefit analysis presents different scenarios for water allocation, and thereby different benefits from the water use (SIWI)

	Sub-basin	Baseline value (USD)
Baseline values		
Agriculture Hydropower	All All	4.8 billion 3.5 billion

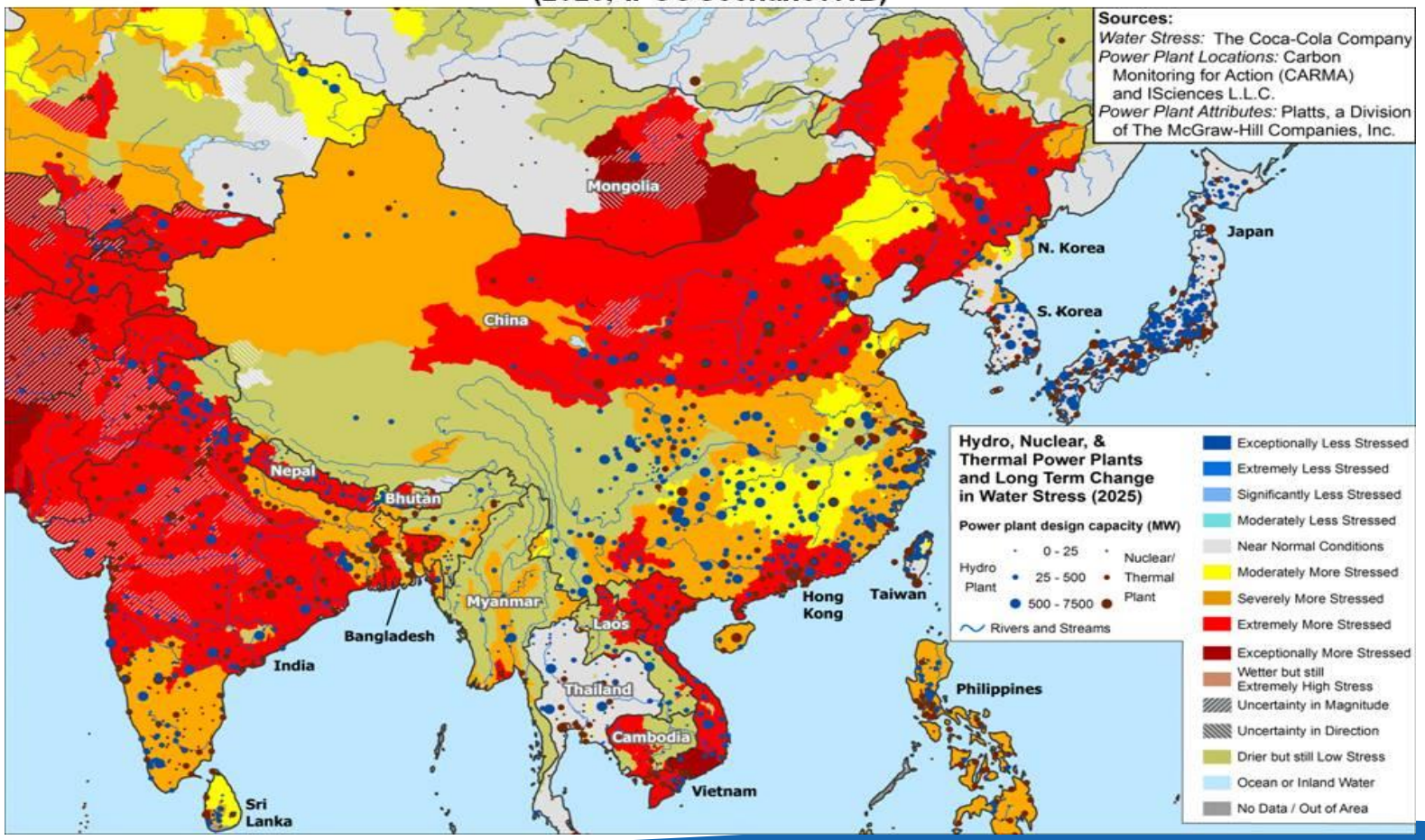
Simulations

		Sub-basin	Use of saved water for agriculture*	Use of saved water for hydropower*	Use of saved water for environmental flow	Value of saved water (USD)**	Shadow value (USD) of environmental flow***
1	30% WUE improvement	Improvements made in all sub-basins	50%	50%	0%	1.15 billion	0
2	30% WUE improvement – all saved water used for agriculture	Improvements made in all sub-basin	100%	0%	0%	1.45 billion	0
3	30% WUE improvement – all saved water used for hydropower	Improvements made in all sub-basins	0%	100%	0%	214 million	0
4	30% WUE improvement – saved water spilt between agriculture, hydropower and environmental flow	Improvements made in all sub-basins	35%	35%	30%	788 million	515 million
5	30% WUE improvement – social planner simulates environmental flow of 2.5 BCM each to 5E and 6T each of both sub basins)	Improvements made in all sub-basins	50% in all sub-basins except 5E (33%) and 6T (26%)	50% in all sub-basins except 5E (33%) and 6T (26%)	0% in other sub-basins 34% in 5E and 48% in 6T	1.02 billion	286 million

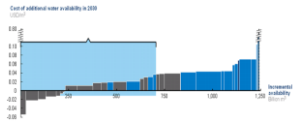
From a risk perspective: water stress in 2025 according to "Aqueduct"



Risk analysis presents the risk for different uses, economic sectors or regions, including scenarios for the future (WRI)



Results in countries to date



	Analytics performed/ongoing	Multistakeholder process in place	Outcome
South Africa	Completed in 2011	Since December 2011	Concrete proposals on: - Municipal leakage reduction - PPP between Mining and Municipalities - PPP on Irrigated Agriculture
Mongolia	Initial analysis just finished	Established spring 2014	Decided on priority areas
India	Completed in 2011	Discussions ongoing	Influenced 5-year plan by National Planning Commission; Study Report on Collective Action
Jordan	Completed in 2011	Opportunities explored at present	Influenced New National Water Strategy, and subsequent Action Plan
Tanzania	Initial analysis just finished	Established spring 2014	Decided on priority areas
Mexico	Completed in 2012	Agreement to establish	Influenced New National Water Strategy
Karnataka	On agriculture in 2012. Industry and Urban just finished.	Discussions ongoing	PPPs on Irrigation
Peru	Just starting	Agreement to establish, summer 2014	Priority areas identified
Maharashtra	Just starting	Established spring 2014	Decided on priority areas, hydro-economic analysis to be finalised