



ICID CONFERENCE 2018: INNOVATIVE AND SUSTAINABLE AGRI-WATER MANAGEMENT



Hydro-economic modelling for transboundary river basin management

Towards more integrated approach

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Land and Water Division
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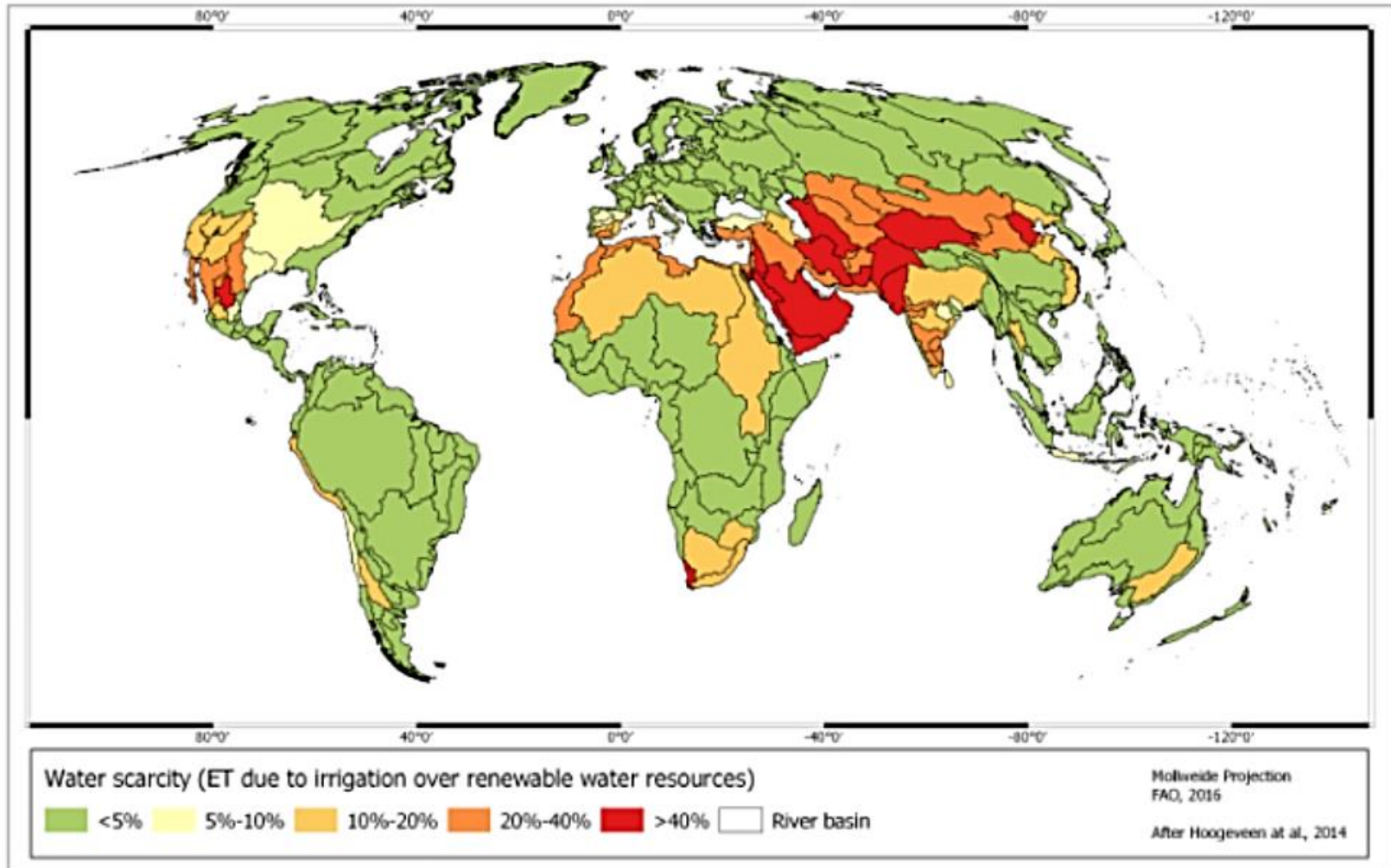


Faculté des sciences et de génie
Département de génie civil
et de génie des eaux

Saskatoon, 15 August 2018



WHY THIS SIDE EVENT?

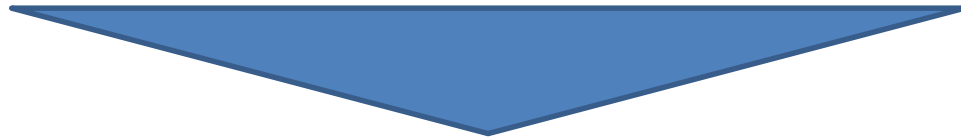


Several river basins globally are approaching water scarcity



WHY THIS SIDE EVENT?

- Population growth and rising incomes continue to drive demand for water
- Increasing competition between water, energy, agriculture, fisheries, livestock, forestry, mining, transport and other sectors
- Impact on livelihoods and the environment should be studied and estimated



Multi-objective modelling solutions together with complex decision support systems for policymakers



WHY THIS SIDE EVENT?

Hydro-economic models have policy implications and uses in:

- infrastructure expansion and operations planning
- water allocation and markets
- adaptation pathways (e.g. to climate change)
- design of institutional policies to achieve environmental, social and economic targets (governance, rights, etc.)
- economic policy impact analysis
- basis for regulation and law



How can we translate scientific results into immediate lessons or rules for policymakers?



SOME MORE BACKGROUND – Senegal River Basin

Enhanced cross-boundary water resource management in the Senegal River Basin (TCP/INT/3602)

Project outcome: Enhanced cross-boundary water resources management in the Senegal River Basin

OUTPUTS

1

Improved OMVS and countries capacities for multi-objective water resources management

2

Established hydro-economic model for the Senegal Basin and increased understanding of benefits of joint water resources management

3

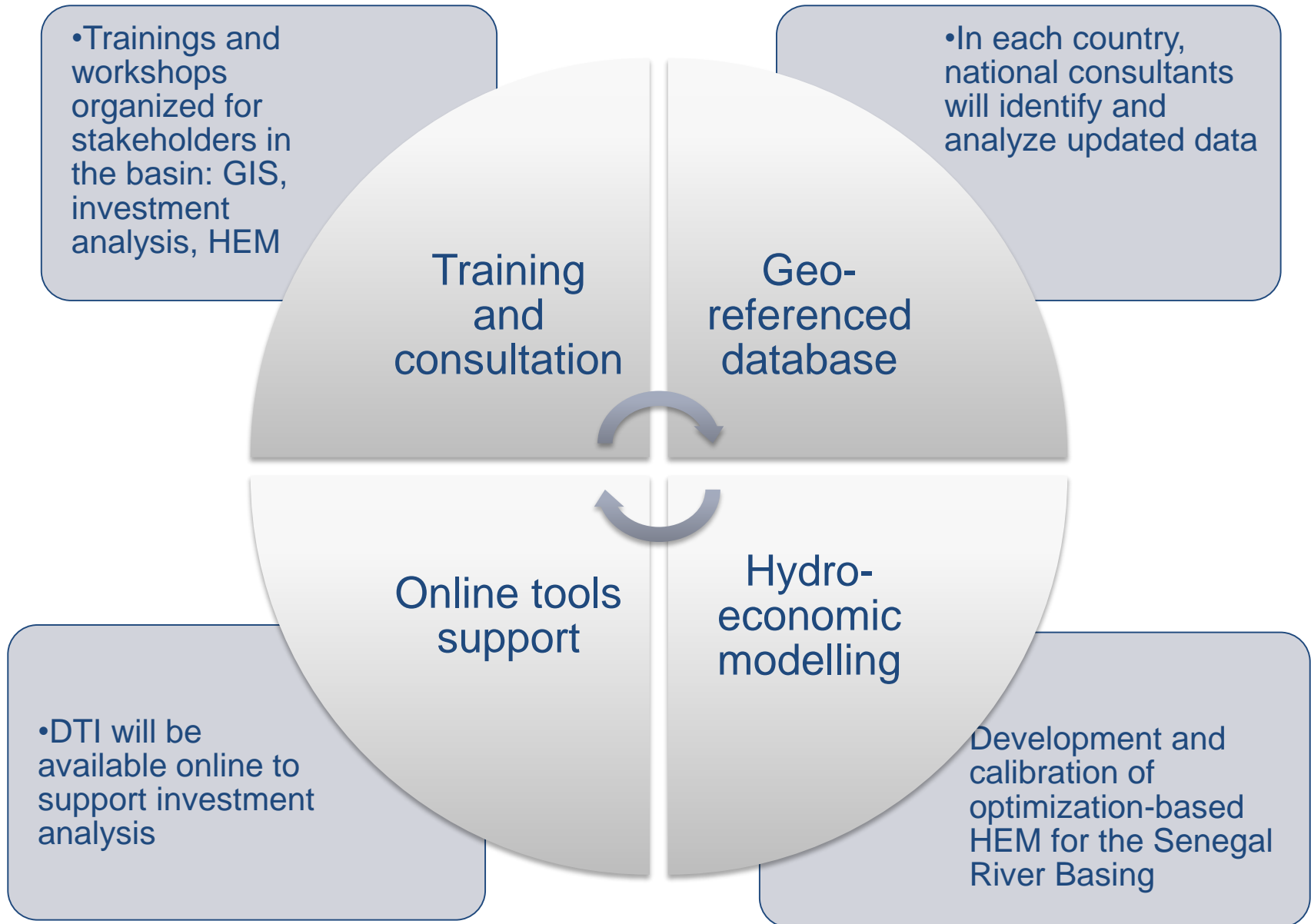
Identified cross-boundary investment areas

4

Assessed trade-offs between water for energy production and water for agriculture/fisheries development



SOME MORE BACKGROUND – Senegal River Basin

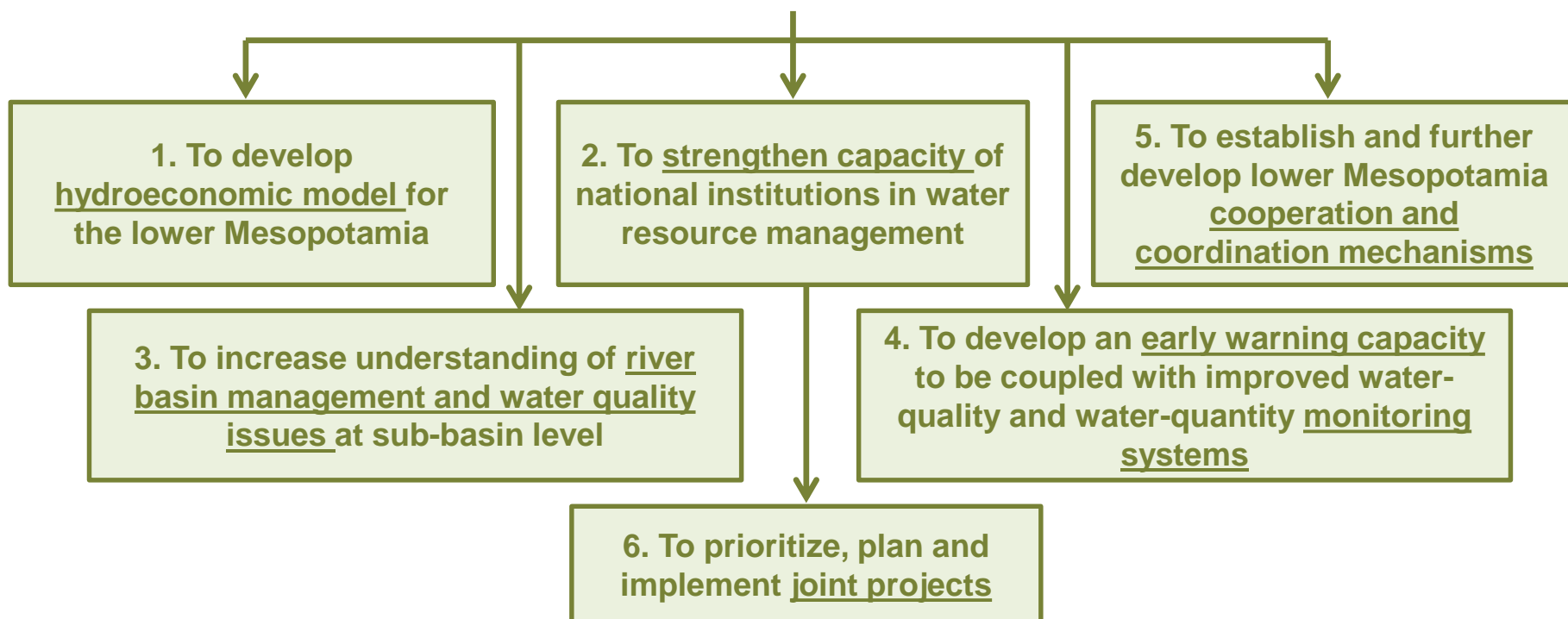


SOME MORE BACKGROUND – E&T

Support Cooperation on Water Resource Management in the Lower Mesopotamia (Iran, Iraq and Syria)

MAIN OBJECTIVE

To strengthen cooperation on water resource management in the lower Mesopotamia

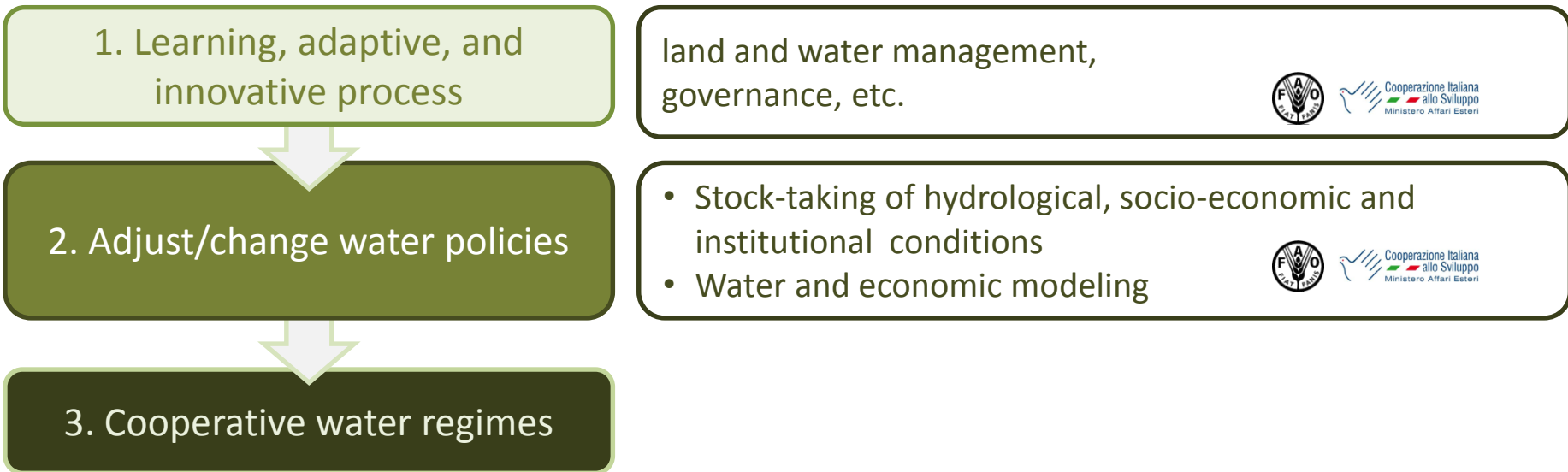


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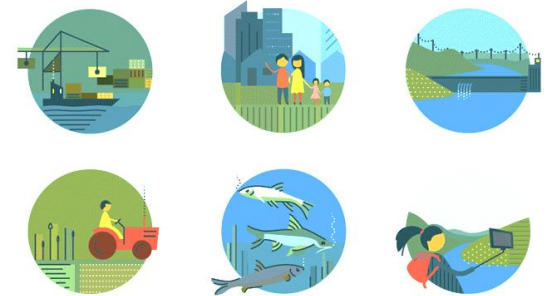
NEW PARADIGM IN THE BASIN

Shift in national discourses from individual country thinking to mutual benefits



OBJECTIVES OF THE SIDE EVENT

- Share **knowledge and results** from hydro-economic models applied to various contexts
- Discuss the theme of **collaborative management** in shared river basins
- Tease out **lessons learnt** in translating modelling results to support policymakers in making cohesive decisions



AGENDA

Time	Presentation
9:00 – 9:15	Introduction to the event: overview and objectives Maher Salman, FAO
9:15– 9:30	Keynote speech: informed decision making at the River Basin level Amadou Lamine Ndiaye, OMVS
9:30 – 09:45	Setting the scene: how can hydro-economic models help policy making? Claudia Casarotto, FAO
09:45 – 10:05	Overcoming barriers between hydroeconomic model and policy application Frank Ward, New Mexico State University
10:05 – 10:15	Q&A session
10:15 – 10:30	Health Break
10:30 – 10:50	Benefits and costs of the coordinated development and management of the Senegal River Basin Amaury Tilmant, Université Laval
10:50 – 11:10	HEM for identifying water resource vulnerabilities in data-scarce basins -The case of the Tigris-Euphrates River Basin Charles Rougé, Université Laval
11:10 – 11:20	Q&A session
11:20 – 11:50	Moderated discussion: from research to policy a) Perspective of the policymaker: Amadou Lamine Ndiaye, OMVS b) Perspective of the researcher: Samar Razavi, University of Saskatchewan c) Moderated discussion Moderator: Fethi Lebdi, AgWA
12:50 – 12:00	Wrap-up and conclusions Maher Salman, FAO





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THANK YOU



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