



Circle U.
European University Alliance

The geo-political economy of water scarcity in agriculture

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Academic Seminar on the Adaptation of Agriculture to Water Scarcity

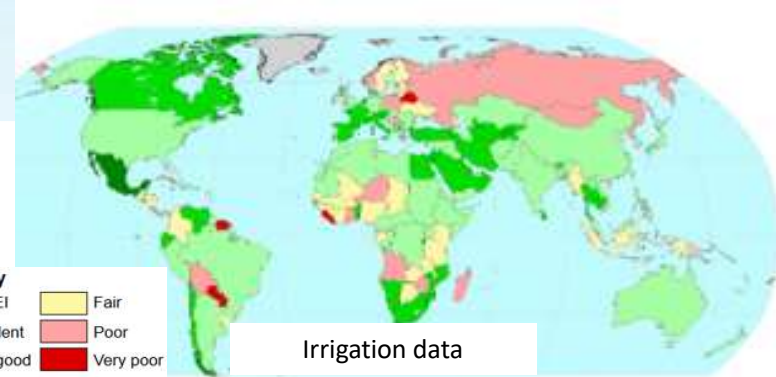
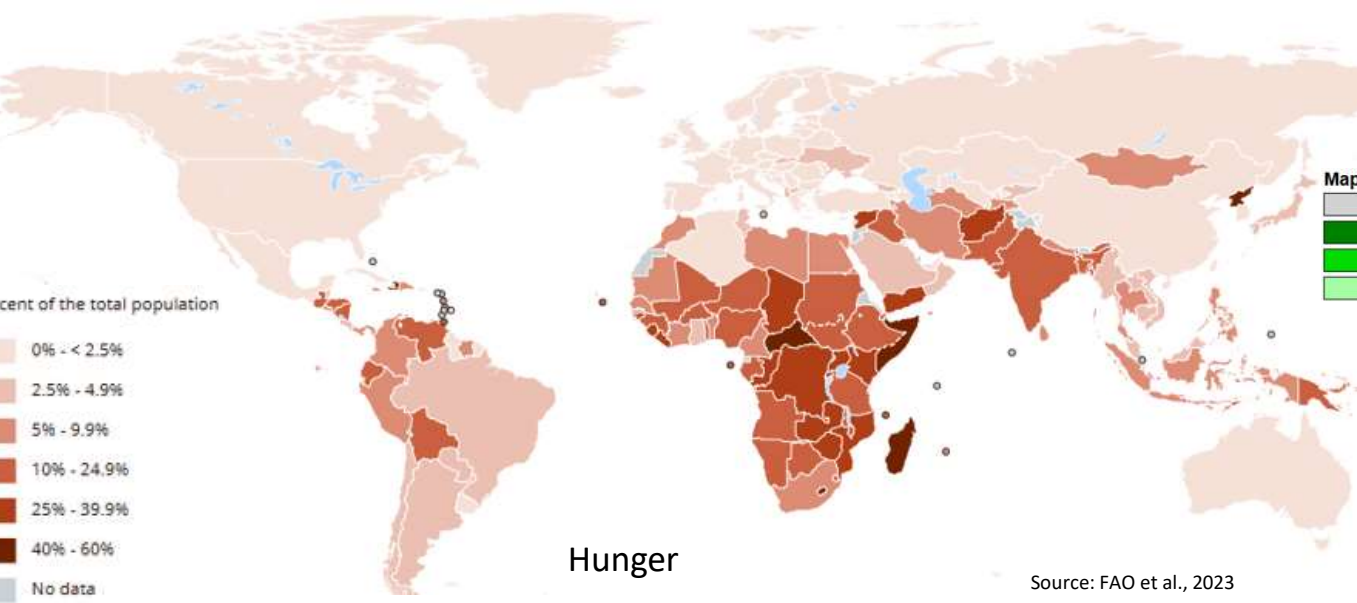
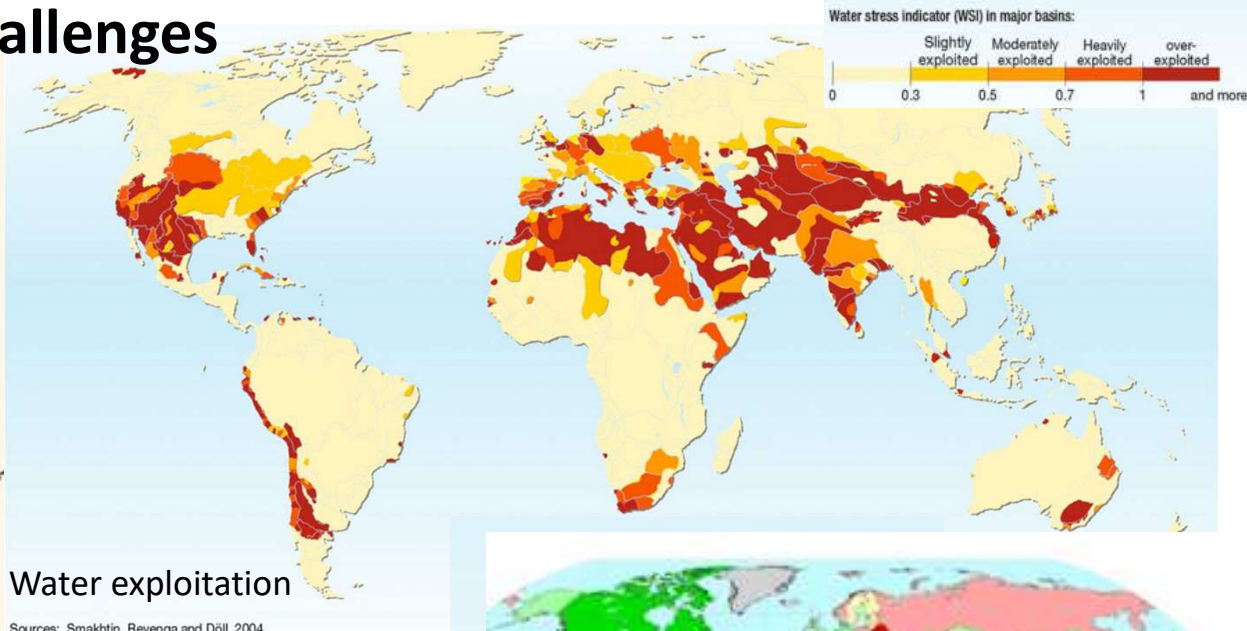
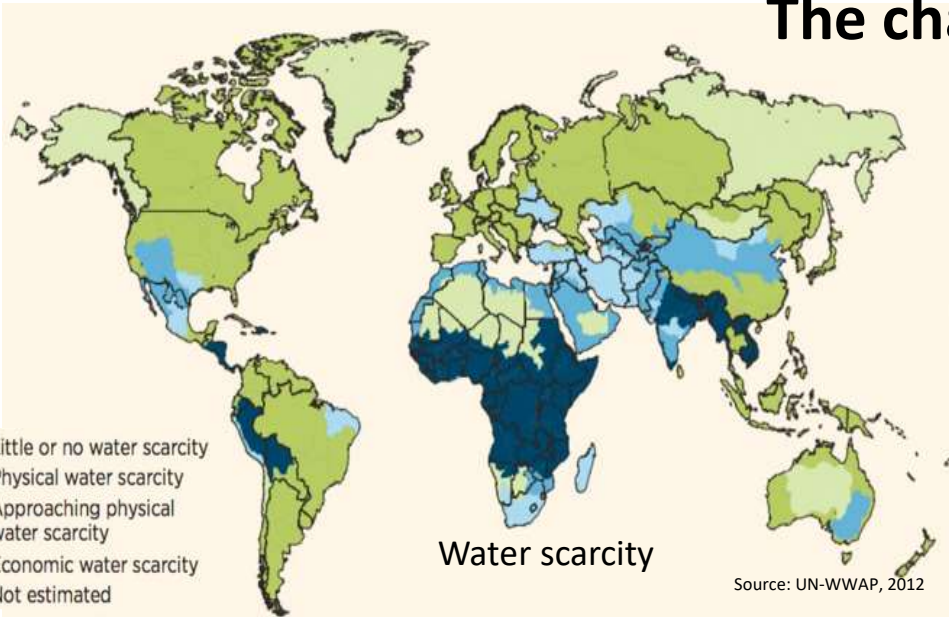


Louvain-la-Neuve, 18 octobre 2023

Main issues on water scarcity in agriculture vis-à-vis food security

1. EQUITY : about 10% of the world's population lives in countries with high and critical water stress
2. EFFICIENCY : increasing imbalance of supply and demand
3. GOVERNANCE : policies and institutions for water justice & food security
 - Research for sustainability

The challenges

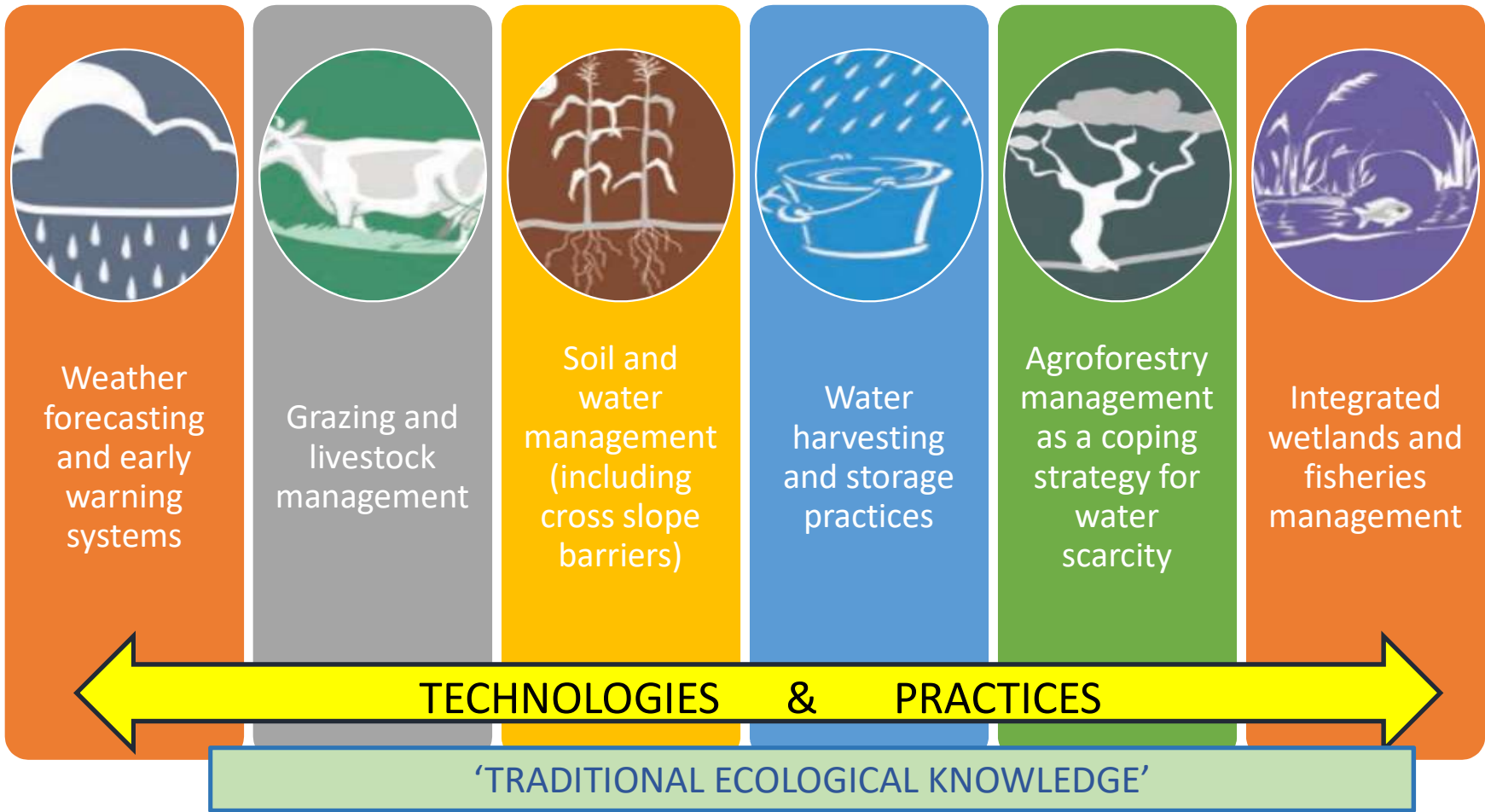
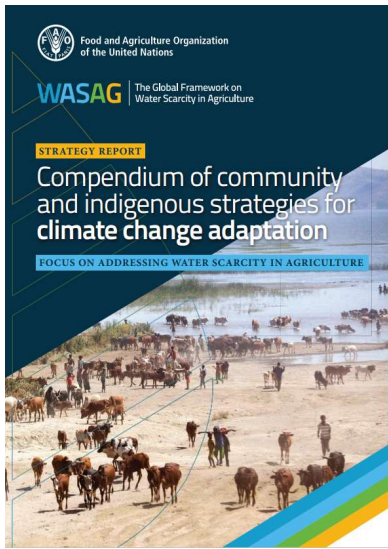


Starting point:
the FAO's Global Framework on Water Scarcity in Agriculture



Key action areas :

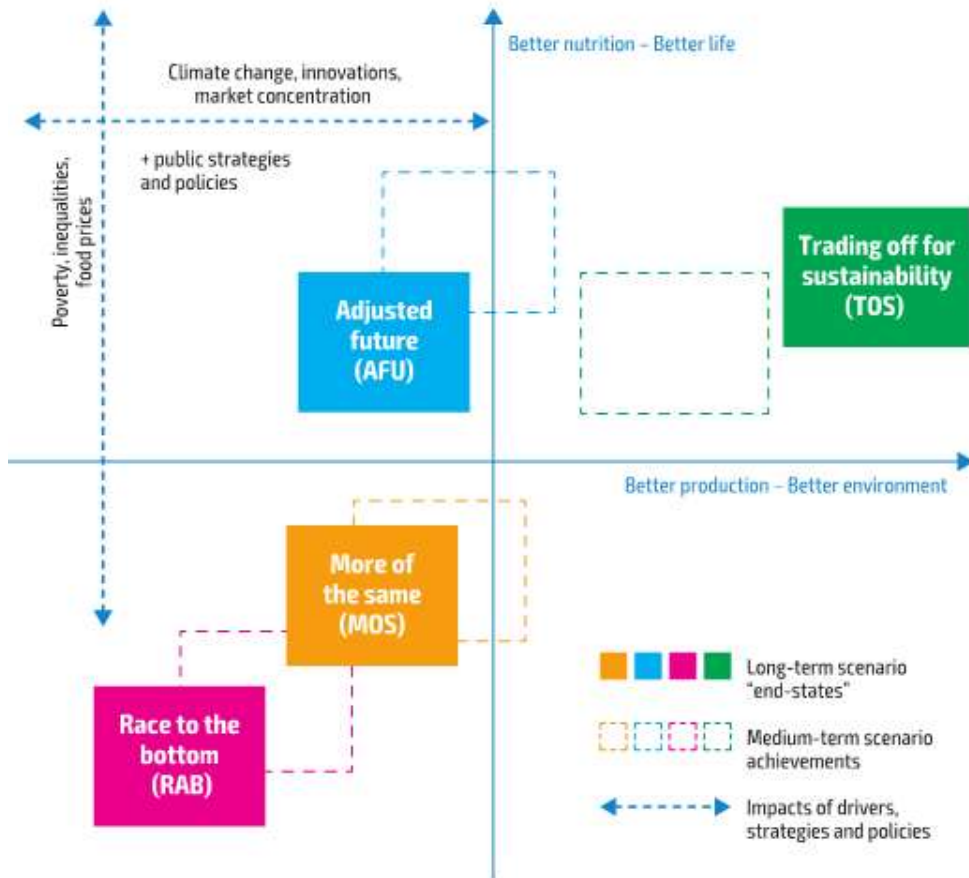
1. Initiatives for ↓ water scarcity
2. Innovation & data
3. Research & training
4. Awareness raising



GOVERNANCE

A sustainable and resilient future?

Medium-term achievements and future “end-states”



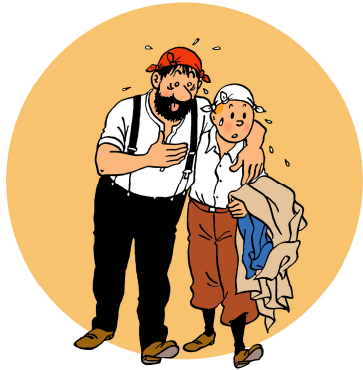
Four “priority triggers” for transformation :

- 1) institutions and governance;
- 2) consumer awareness;
- 3) income and wealth distribution; and
- 4) innovative technologies and approaches

OK! ... but how ?



A sustainable and resilient future... For whom and at what cost?



Win-Win situations



Cooperation

Conflicting objectives →



Trade-offs

Cooperation	Trade-offs
Sustainable yields by internalizing water social and environmental costs	BAS Large scale agriculture \leftrightarrow Inclusive small and peasant agriculture
Reduction of water contamination and pollution	Increasing agrifood output \leftrightarrow Reducing agrifood water exhaustion
Science-informed virtual water trade	Minimizing water use expansion \leftrightarrow Maintaining consumption patterns
Funding public & private water infrastructure	\uparrow Foreign exchange inflows <u>from few exports</u> \leftrightarrow Diversification
Funding social protection by water and land security	Innovating technologies \leftrightarrow Increasing employment
Global multi-scale water governance	\uparrow Water availability by regulation \leftrightarrow \uparrow Water availability by the market
Funding water-accountable and water-justice R&D	Inclusive water rights \leftrightarrow Resistance to structural institutional change



Thank you

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