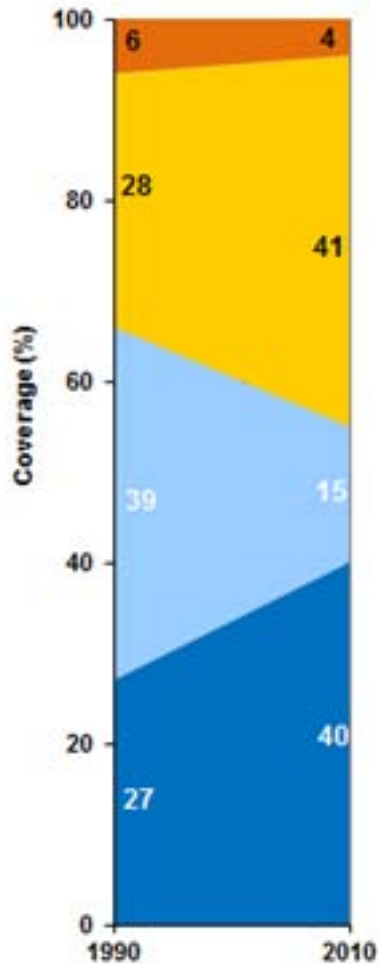
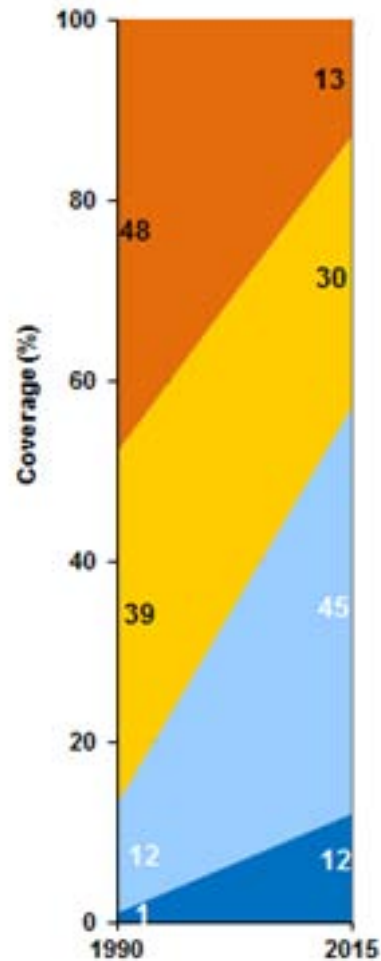


Total drinking water trends



- Surface water
- Other unimproved sources
- Other improved source
- Piped on-premises

Total drinking water trends



- Surface water
- Other unimproved sources
- Other improved source
- Piped on-premises

Ministerie van Buitenlandse Zaken

Diplomacy Water Productivity *Towards a stable world*

Job Kleijn

*Ministry Foreign Affairs
The Hague, Netherlands*

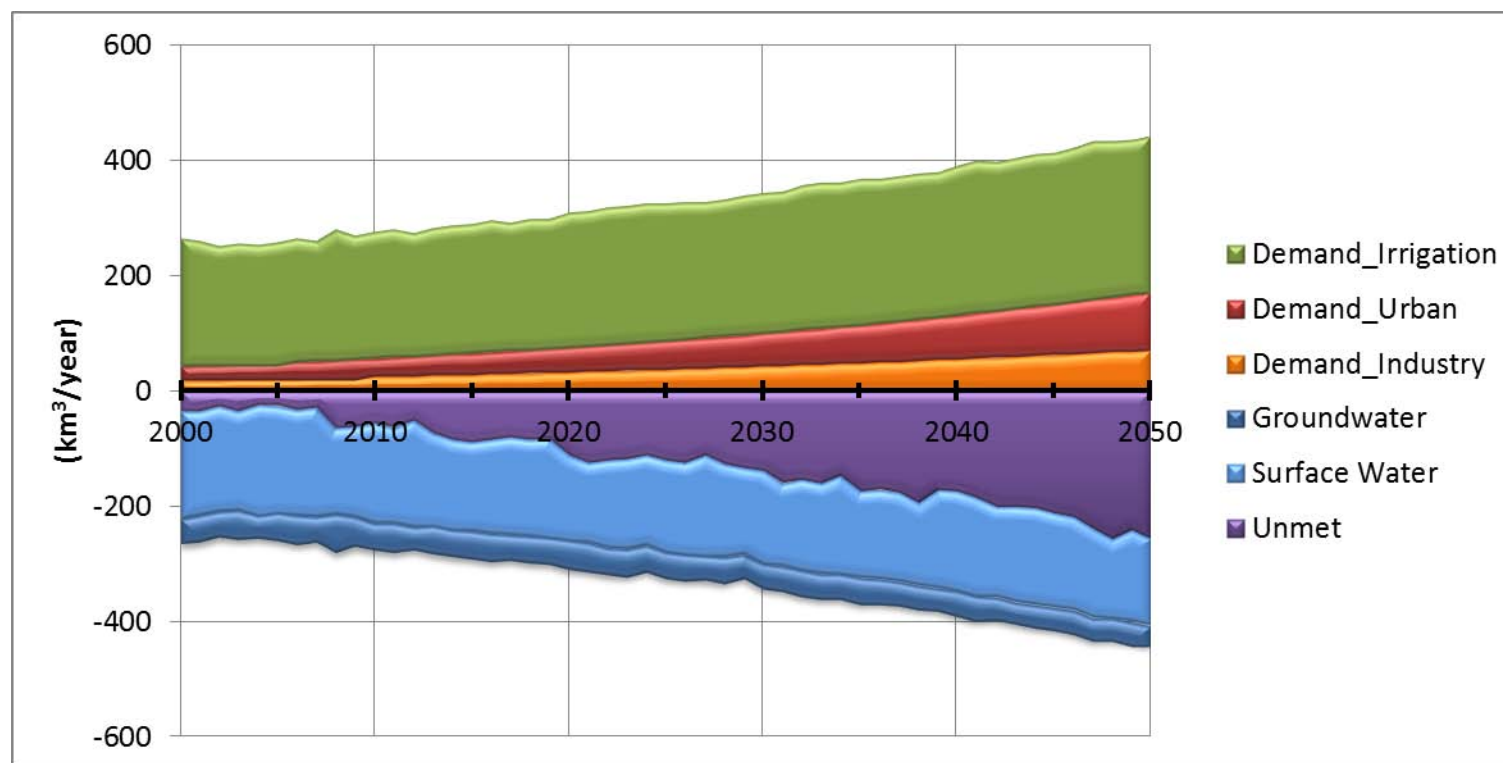
job.kleijn@minbuza.nl

19/5/17



Water Scarcity and Adaptation

Water Allocations and Water Productivity



Source: http://www.futurewater.nl/wp-content/uploads/2011/04/Final_Report_v11.pdf
MENA water outlook 2050. Peter Droogers, et al



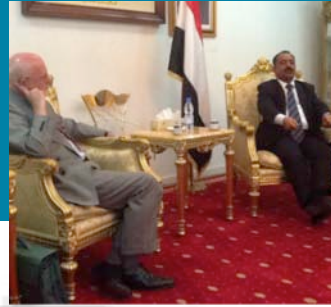
Game changer/ need for indicator

trigger

25% target NL



Yemen: The request for an open database



Yemen Parliament members

Consultations diplomatic level

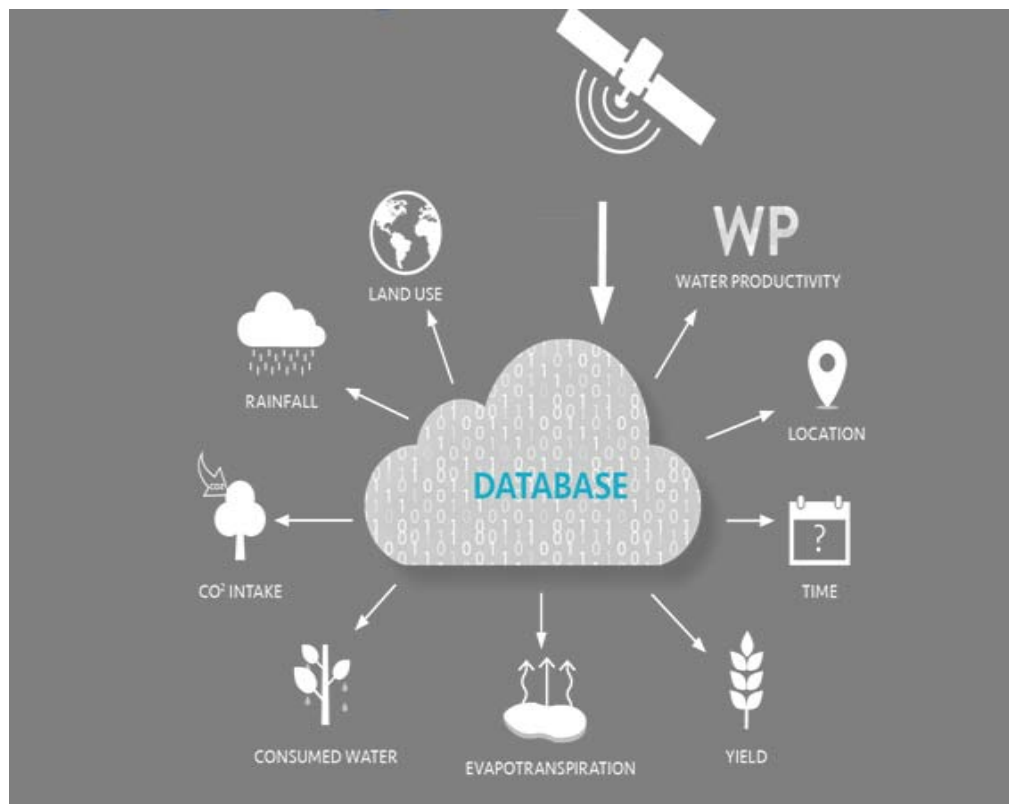
Invitation by Speaker of the Parliament -FAO and
EKN 4

Request for introduction of a cloud based
database to measure Land and Water
productivity





March 2015: FAO agreement for a database



- Open source
- Objective
- Near real time

Reach of the Database

Database

- I. Continental level
- II. Country river basin level
- III. Irrigation scheme level





WAPOR

<http://www.fao.org/in-action/remote-sensing-for-water-productivity/en/>

<http://www.fao.org/land-water/overview/global-framework/partners-meeting/en/>

<http://www.fao.org/land-water/overview/global-framework/partners-meeting/partners-meeting-report/en/>



SUSTAINABLE DEVELOPMENT GOALS

the challenge

manage
monitor
manage



Towards a stable world: What are the causes of instability?

1. Ideological differences

2. Global inequality GPG

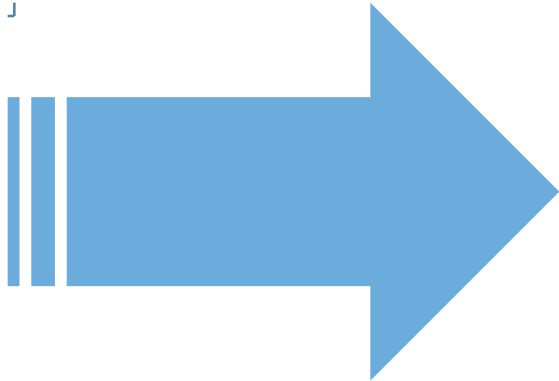


CHINA
CARTOON

CARTOON
MOVEMENT



Targets for MoFA- IGG Water



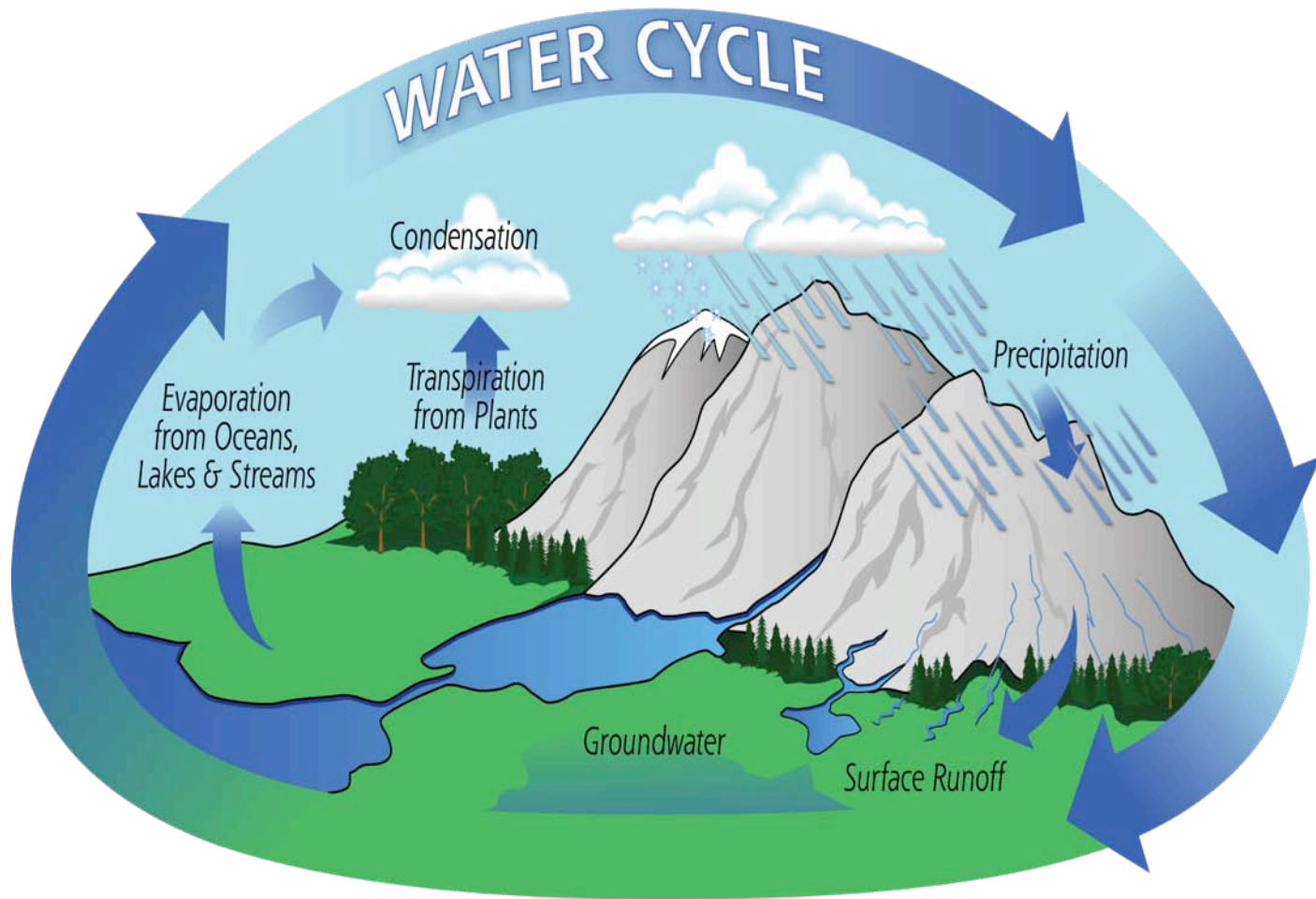
Increase water productivity in agriculture with 25%



Access to Drinking water en Sanitation

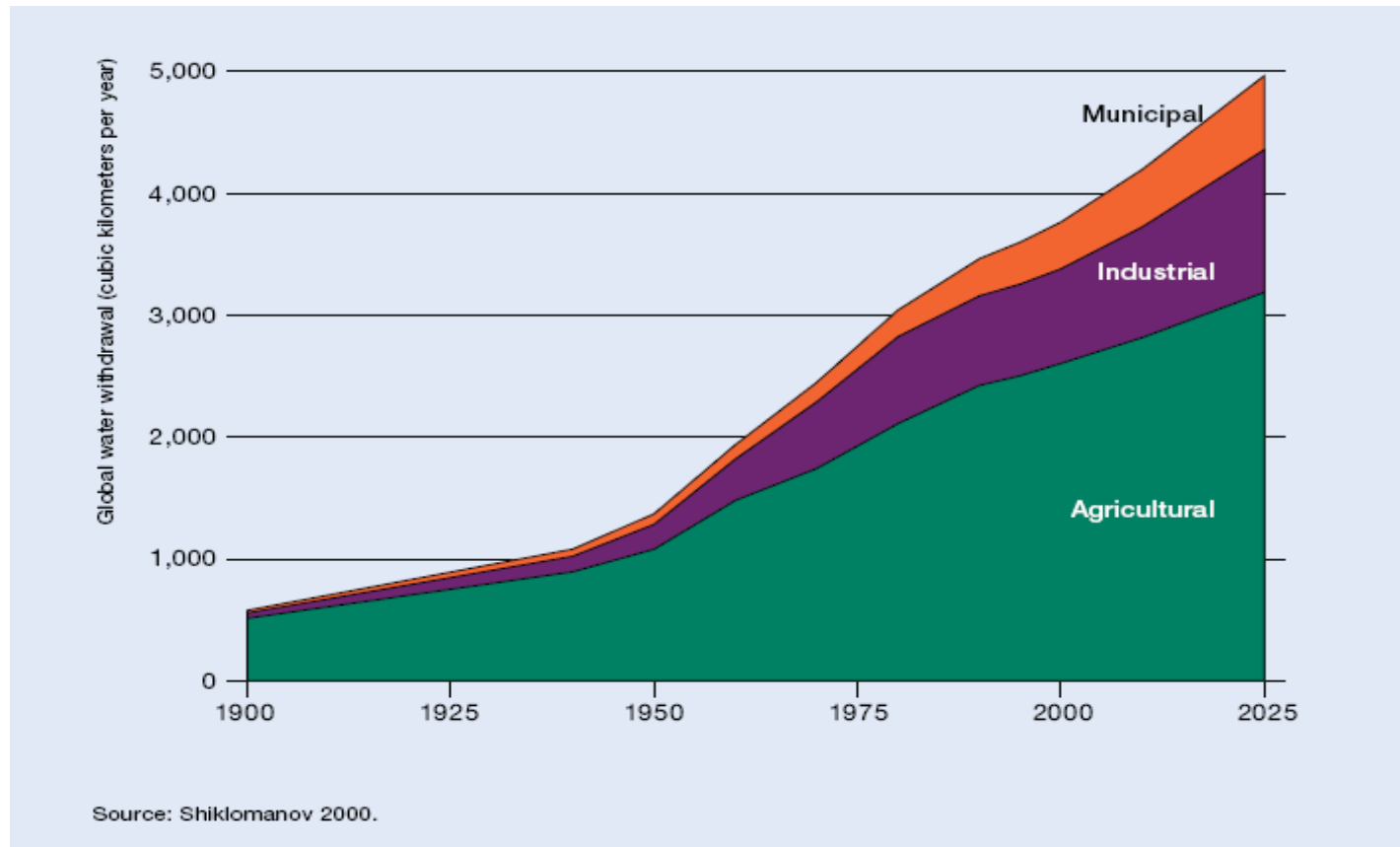


Improve delta management for safety





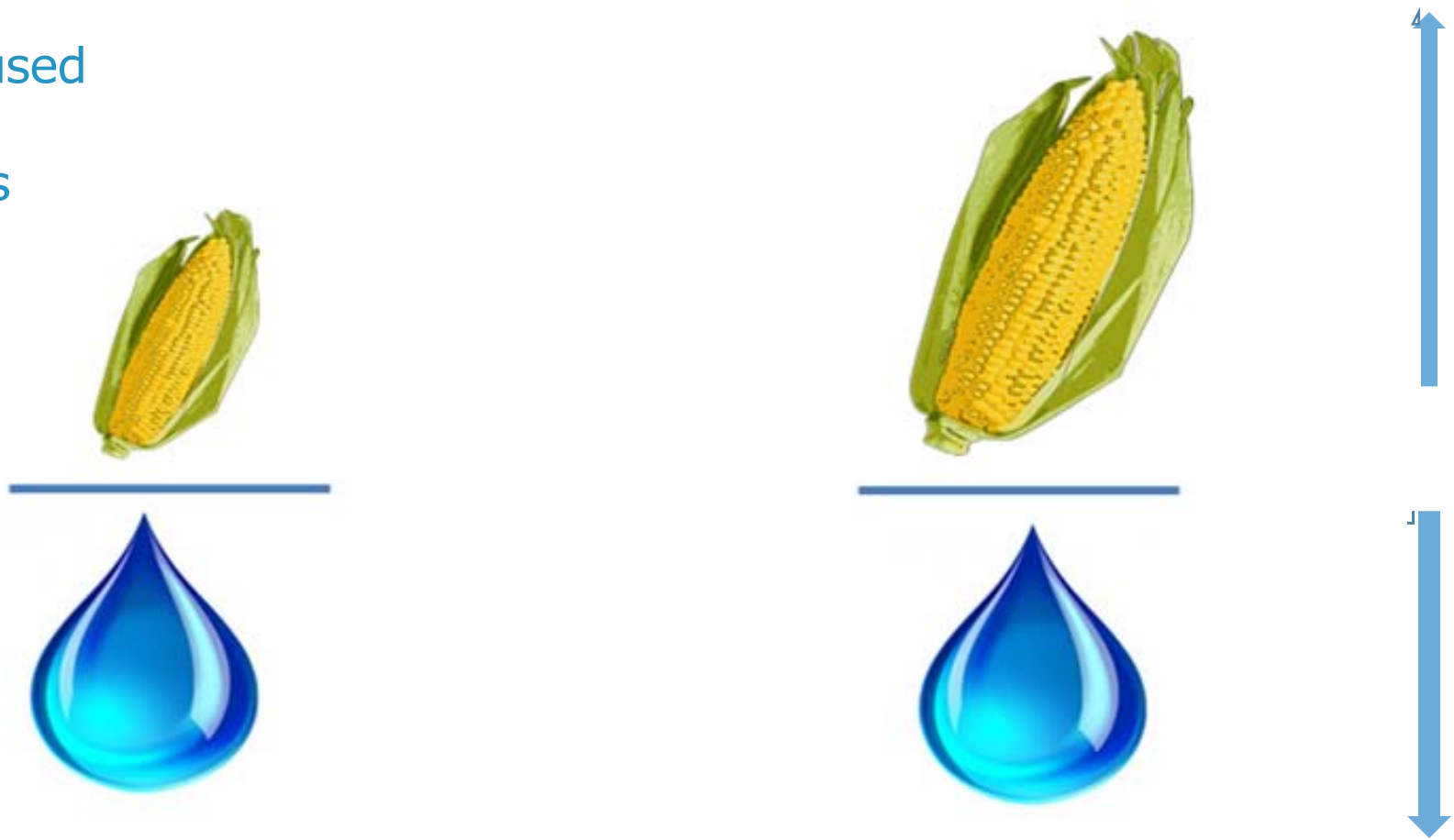
Increasing pressure on finite water resource by main water consumers





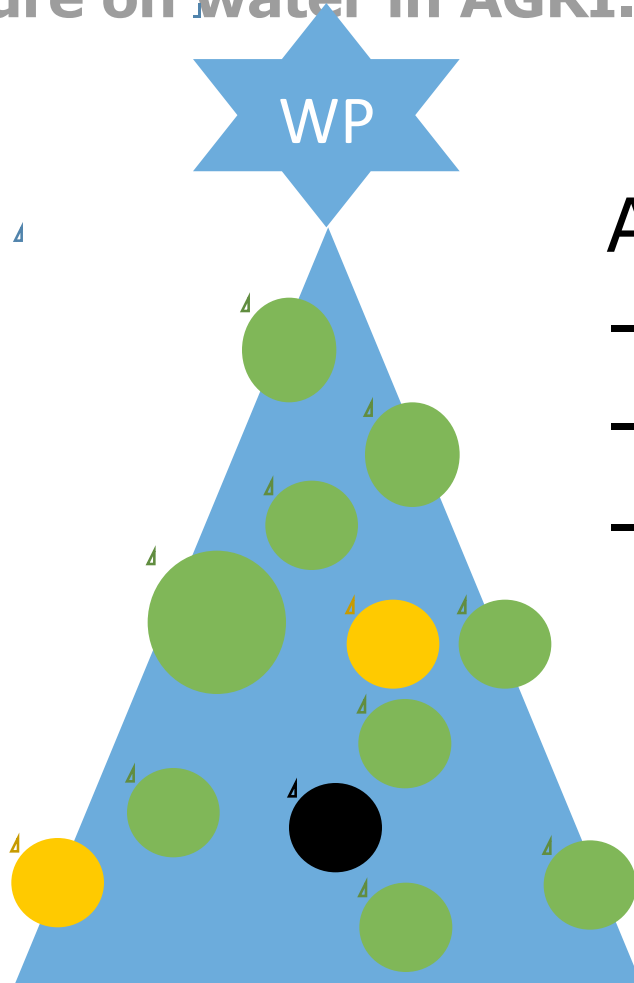
WATER PRODUCTIVITY WP

- Water used
- \$ USD
- Calories



-The game changer !!
-Now we are able to talk
-Are we managing with all
pressure on water in AGRI.

-using RS
the same language
our investments to reduce



Aim:
-Compare
-Analyse
-Act



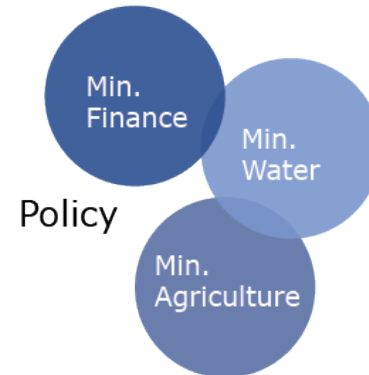
Stakeholders



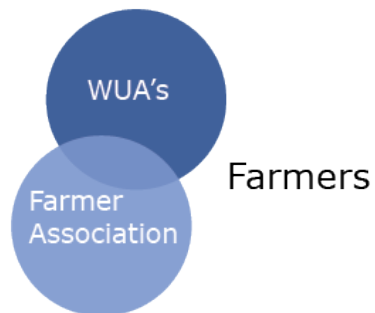
Increase transparency on water use,
create evidence-based news



Assessment overall availability,
long-term planning, valorisation of
water



Decision-making in investments, crop
choice, water infrastructure



Assisting of farmers in related aspects
such as improved seedlings, risk
management in insurances

Private
Sector



Improving WP with small scale irrigators in Ethiopia

Farmer Liyu Fetene:
“The Wetting Front
Detector helped us
save time and labor
by reducing
irrigation frequency
without affecting the
growth and
performance of the
crops,”

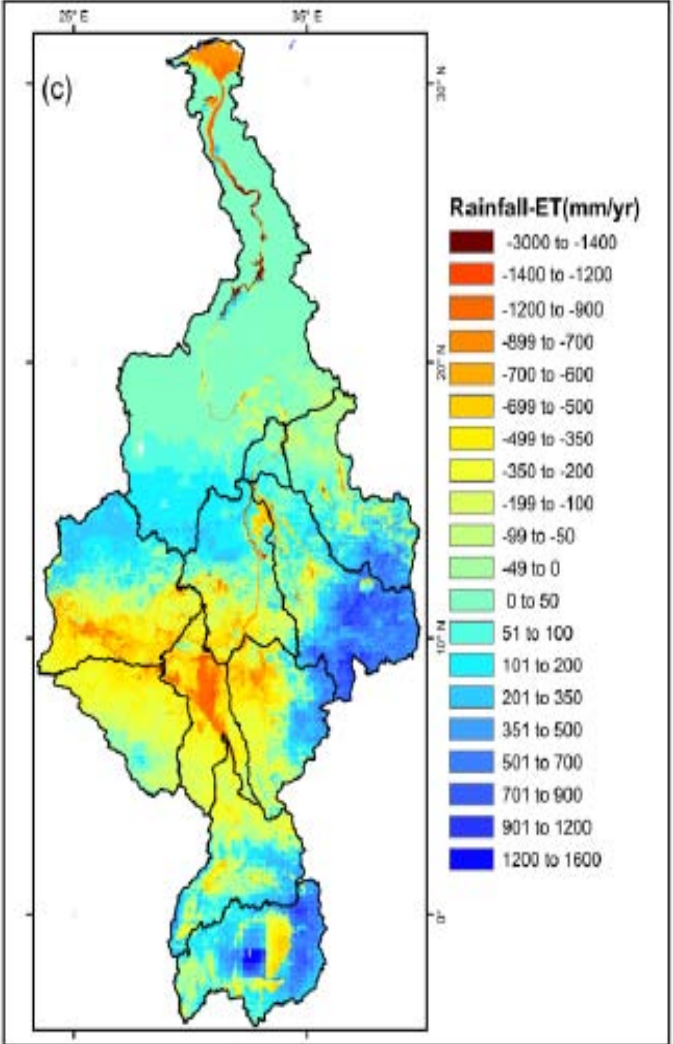
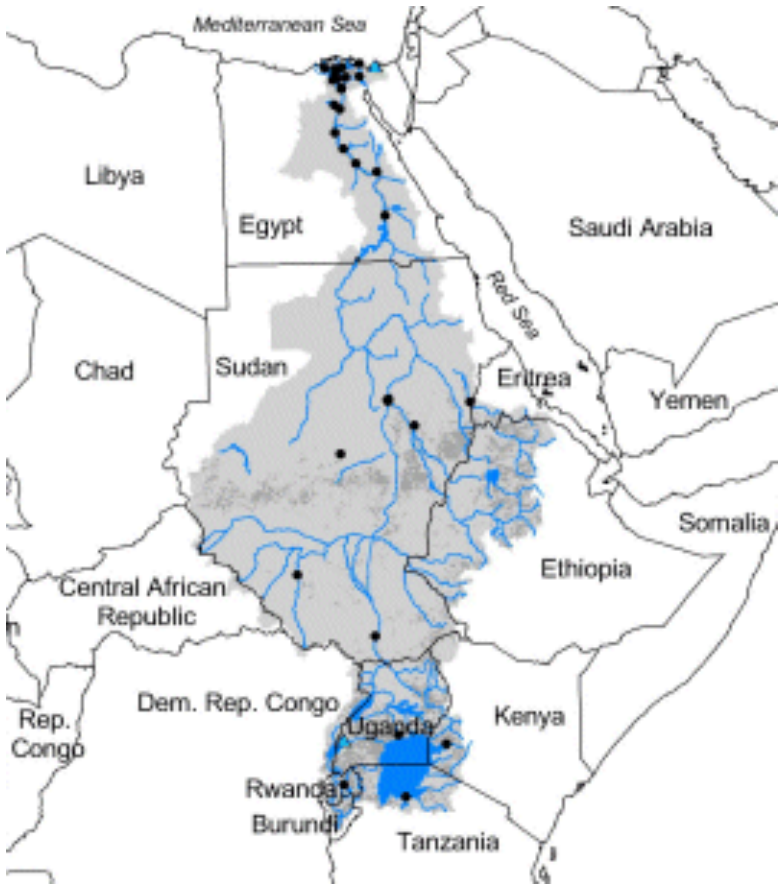


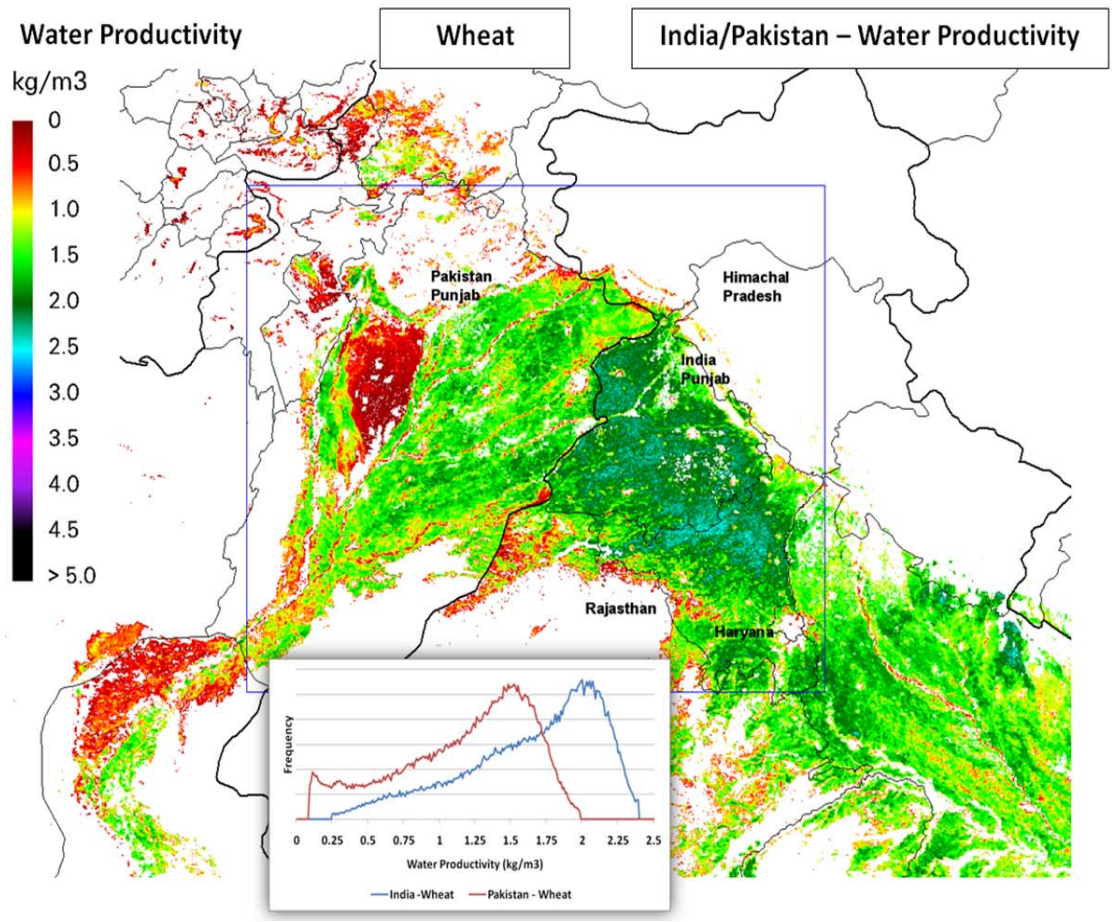
Photo credit: Tadesse Desalegne / IWMI

P. Schmitter, A. Hailelassie, Y. Desalegn, A. Chali, S.
Tilahun, S. Langan, J. Barron



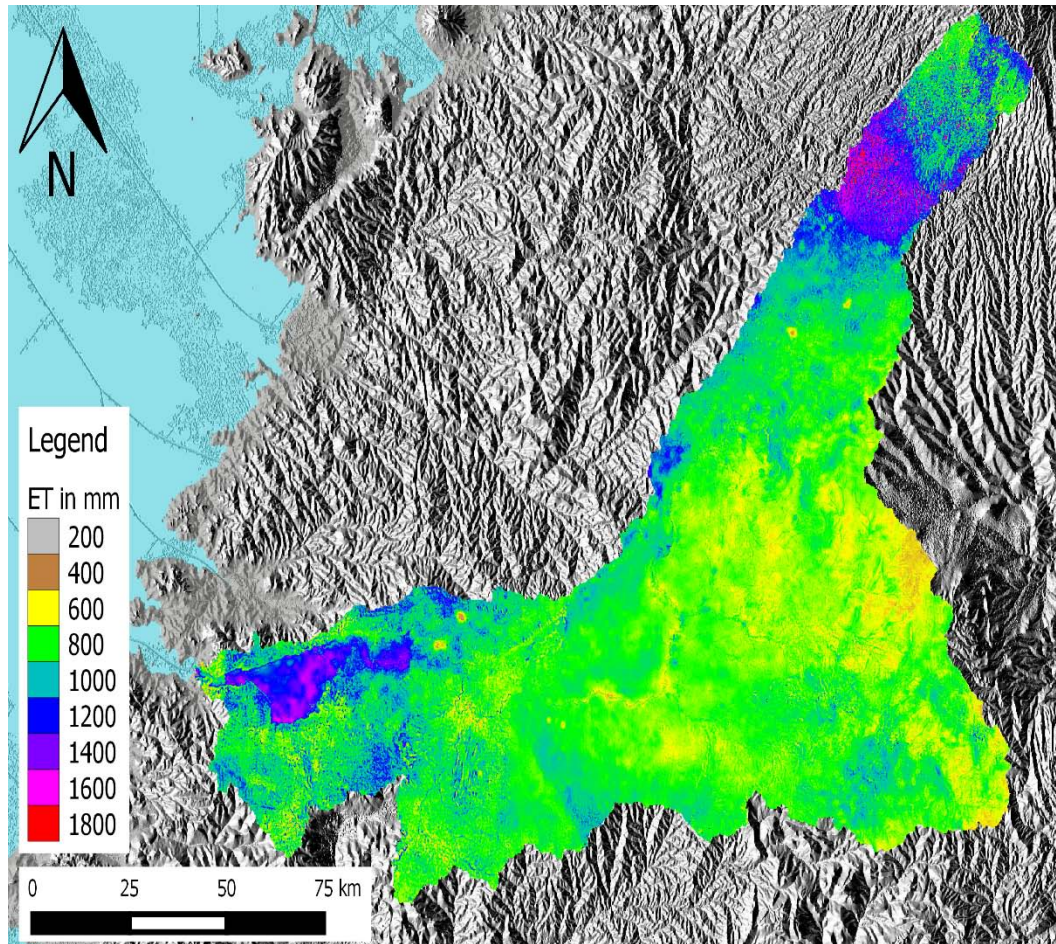
Nile Basin





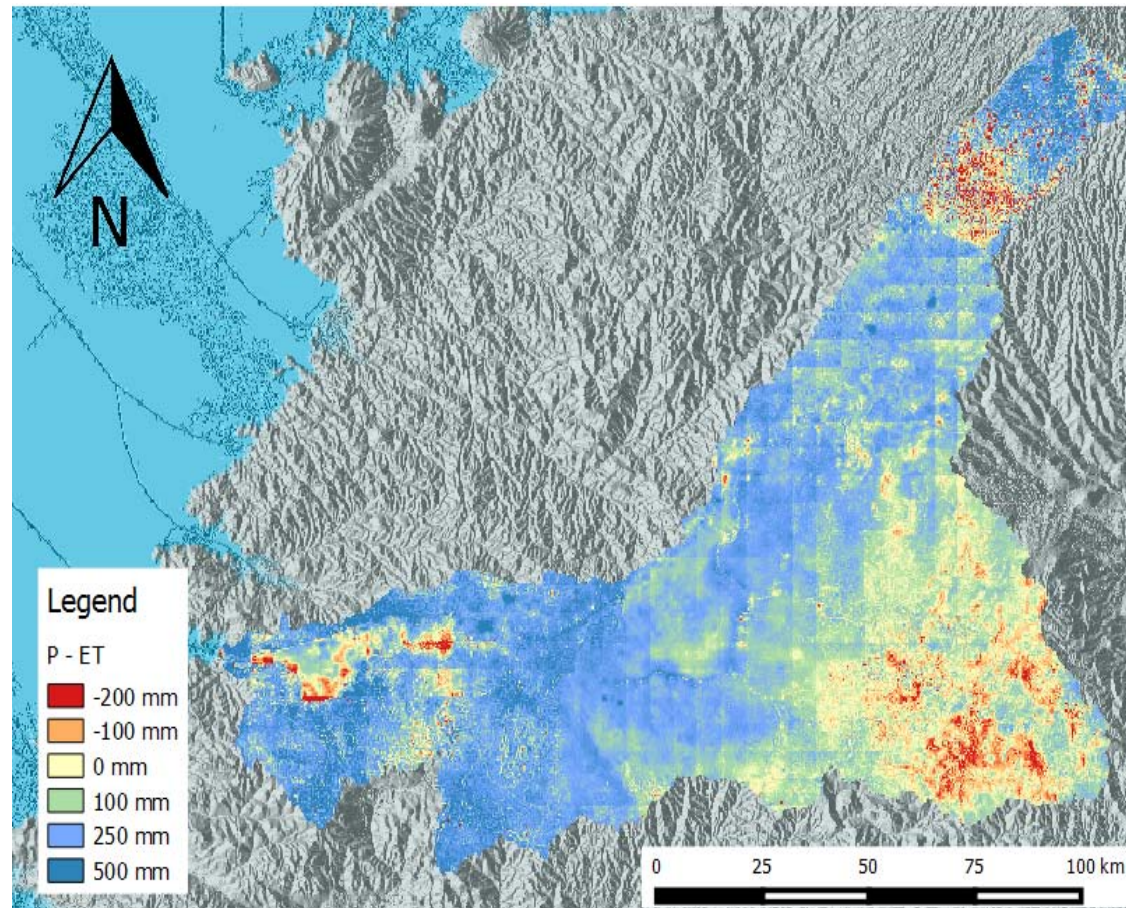


Annual ET variability 2014 Mara Basin



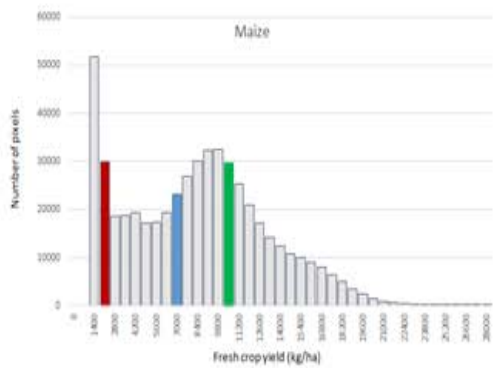
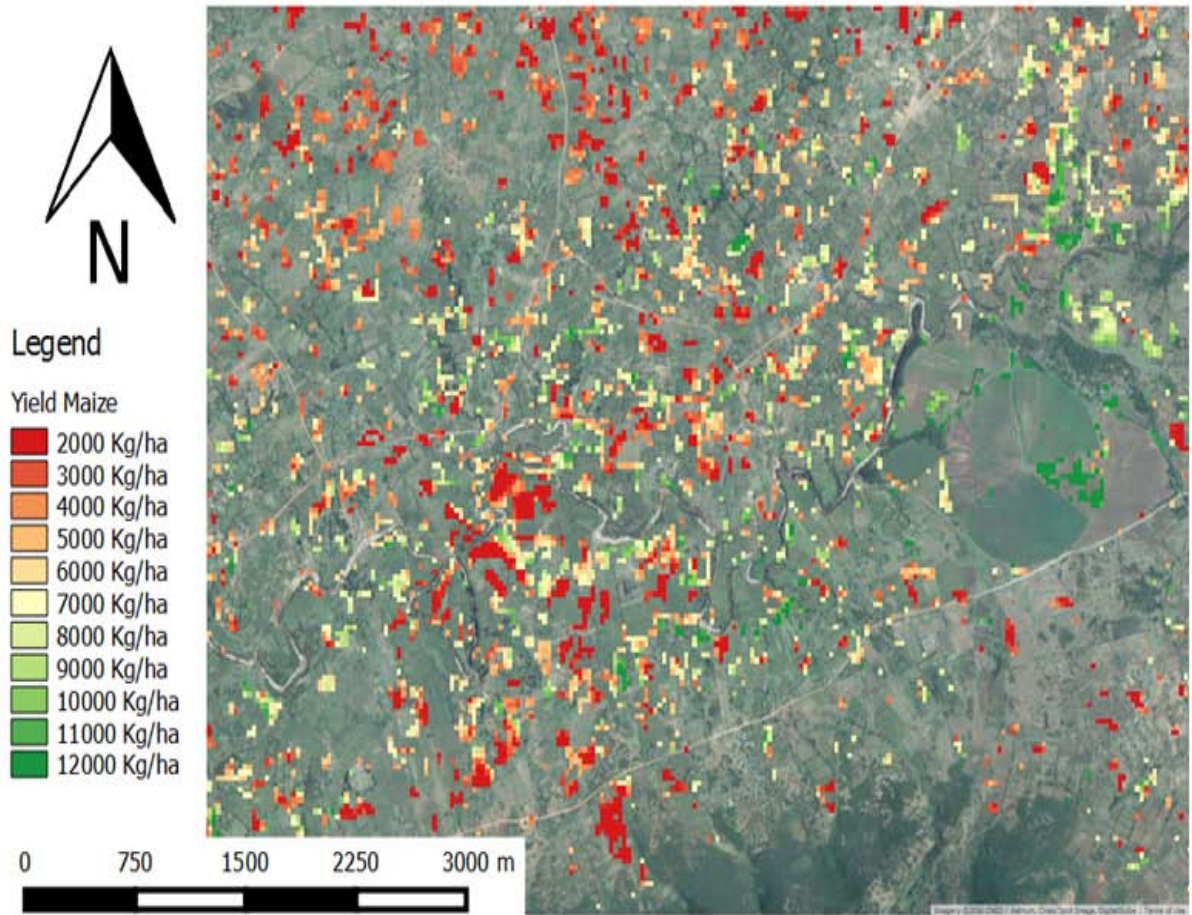


Annual Water Yield (P – ET) 2014 Mara Basin (mm/yr)





Crop yield Maize





Crop water productivity: Maize

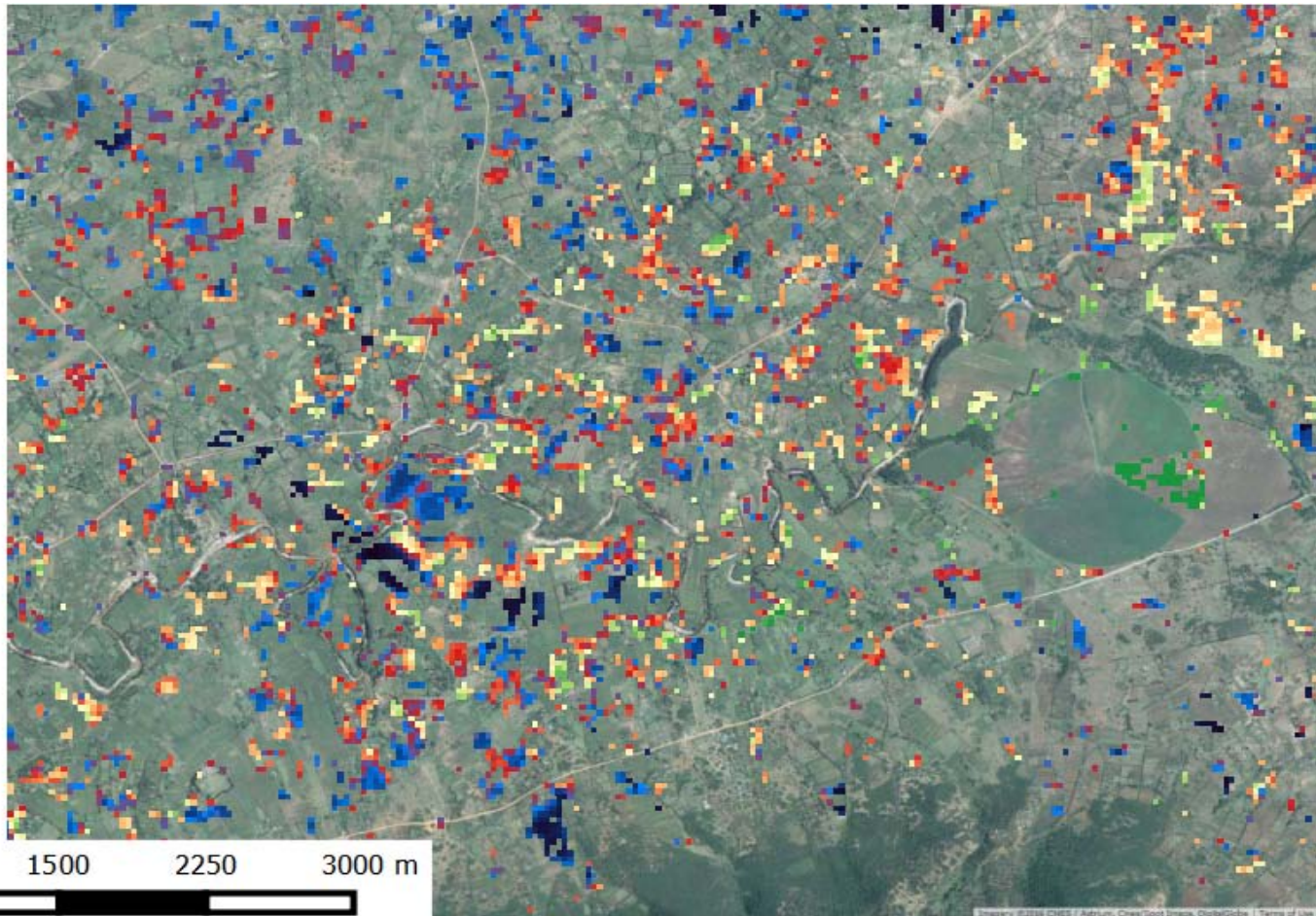


Legend

Water Productivity
Maize



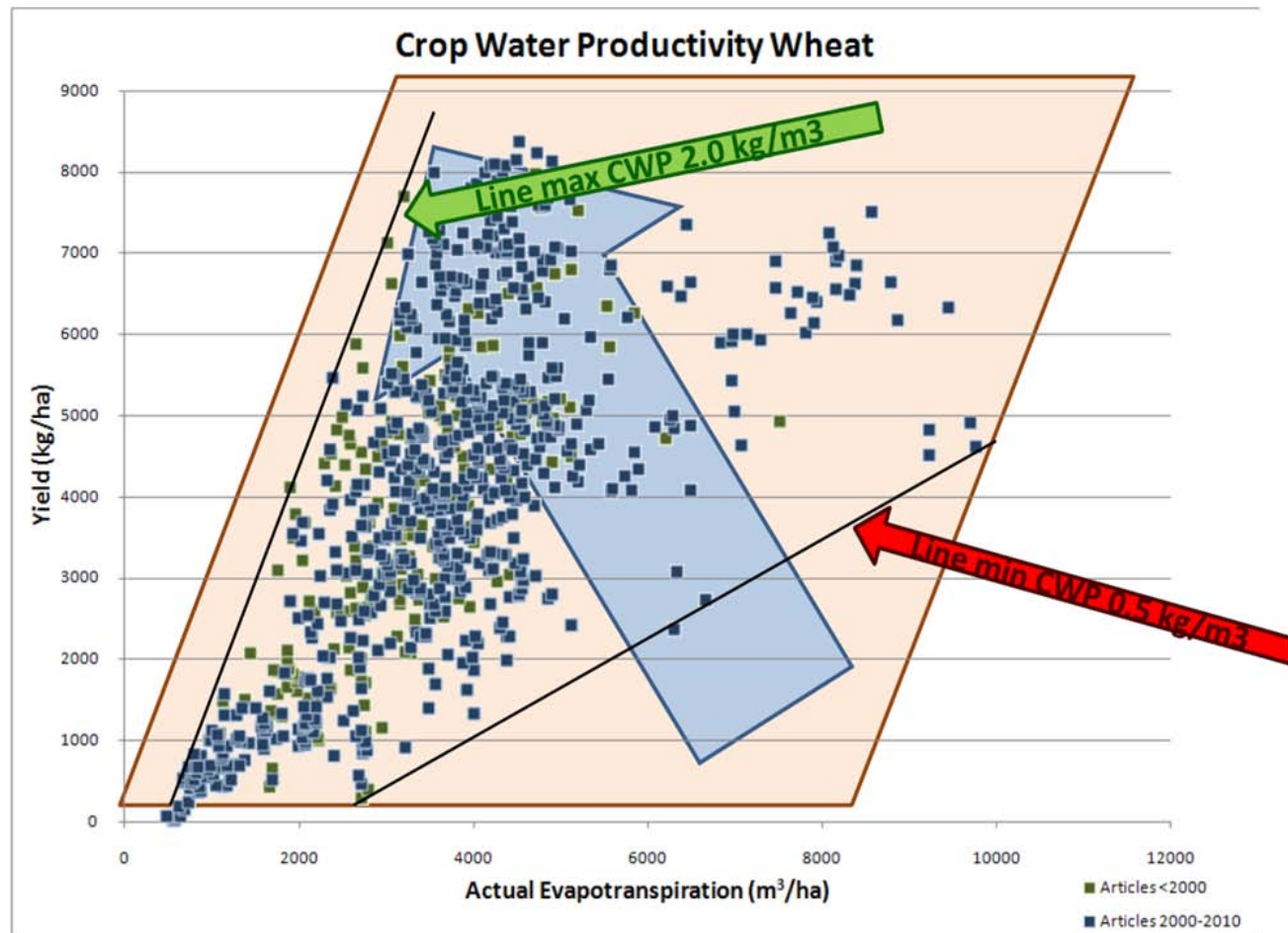
0 750 1500 2250 3000 m



Imagery: ©2016 CNES / Airbus, CNES/Spot Image, DigitalGlobe. Terms of Use



International literature review





Thank you. Remember:

- Water is a GPG =Common responsibility
- Water – geopolitics – threat multiplier
- Scarcity is a matter of pressure, allocation, valuing water and inefficient use of water.
- Set measurable targets. Talk same language
- RS is a game changer for WATER

Focus on 25% WP as a start