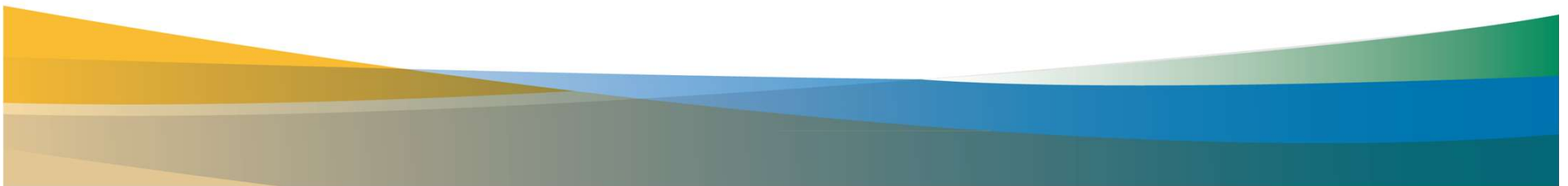




**OBSERVATOIRE DU SAHARA ET DU SAHEL**  
**SAHARA AND SAHEL OBSERVATORY**

# **The challenges of water in the Sahara and Sahel Observatory area**

**KHERRAZ Khatim**  
**Executive Secretary**





## The OSS: AN INTERNATIONAL ORGANIZATION

### MEMBERS

#### 25 African countries:

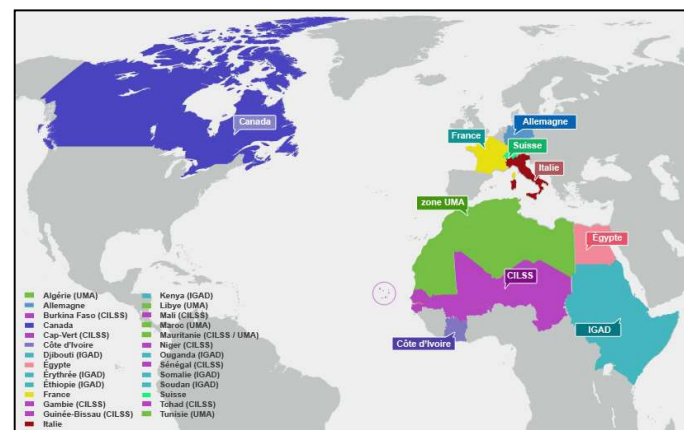
- North Africa: Algeria, Egypt, Libya, Morocco, Tunisia
- West Africa: Benin, Burkina Faso, Cameroon, Cape Verde, Côte d'Ivoire, Gambia, Guinea Bissau, Mali, Mauritania, Niger, Nigeria, Senegal, Chad,
- East Africa: Djibouti, Eritrea, Ethiopia, Kenya, Sudan, Somalia, Uganda

7 Northern countries :Belgium , Canada, France, Germany, Italy, Luxembourg , Switzerland

6 African organizations: UMA, IGAD, CILSS, CEN- SAD, LCBC,PAGGW

3 UN partner organizations : UNESCO, FAO, UNCCD

3 NGOs : Centre d'Actions et de Réalisations Internationales: CARI,  
Environment Development Action in the Third World ( ENDA) ,  
Réseau Sahel Désertification ( RESAD)



### Missions

- A North-South-South partnership Platform
- An interface between political and scientific actions
- An instrument made available to member countries

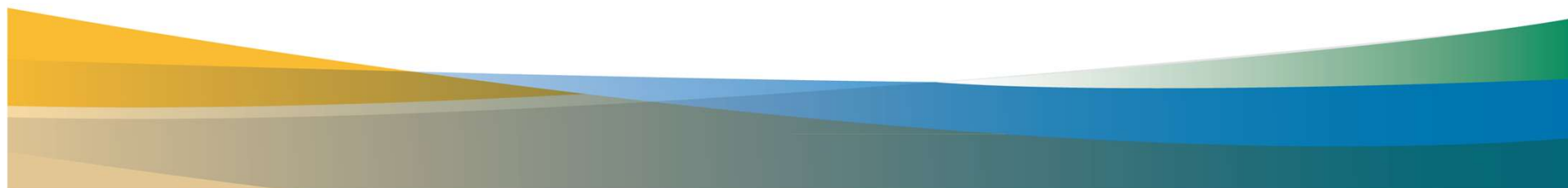
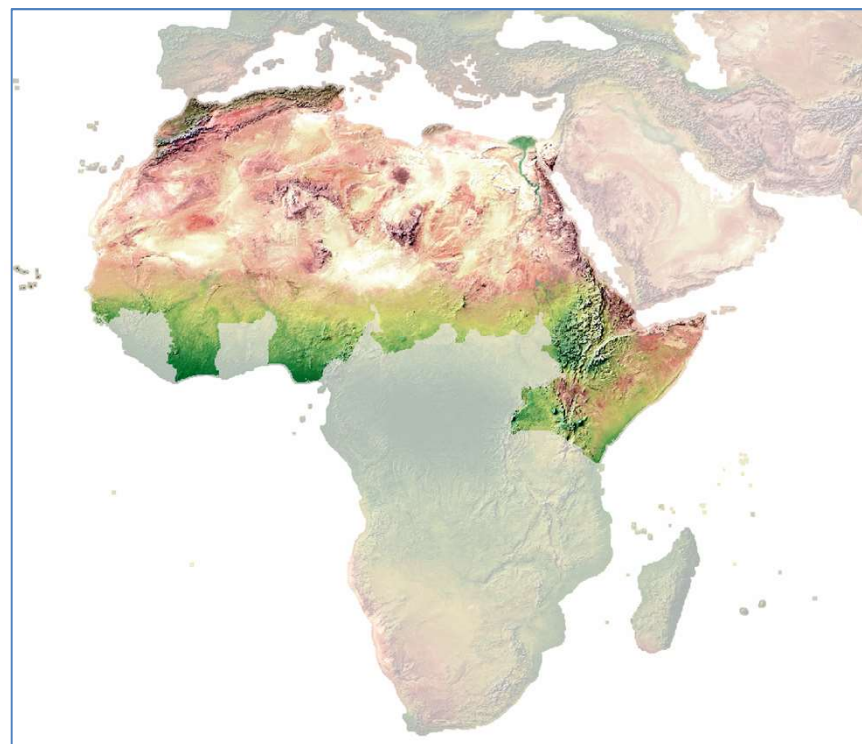
### Two major lines :

- Water
- Land



## A VAST TERRITORY, WITH SERIOUS PROBLEMS

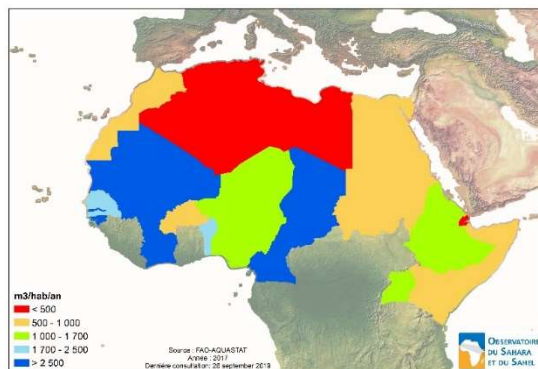
Water needs  
Food Security  
Population health (linked to access to sanitation)  
Degradation of water and land resources  
Energy availability  
Climate variability  
Stability and security  
Migration



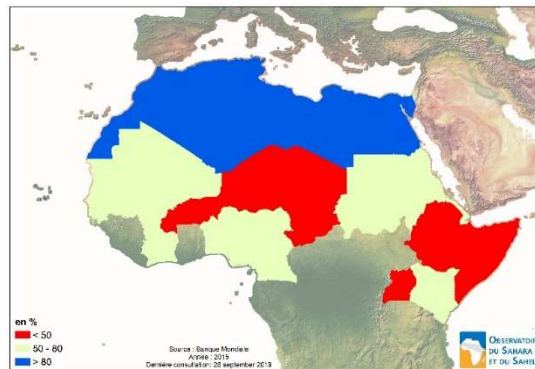


## A BRIEF OVERVIEW OF THE SITUATION

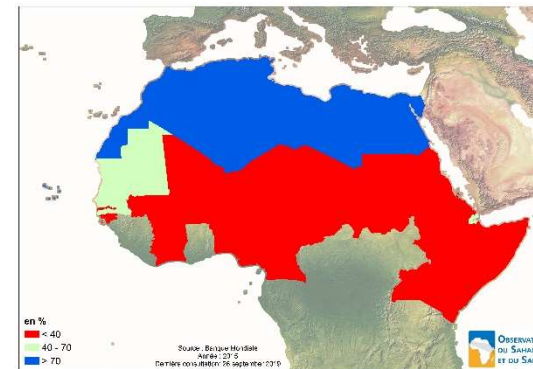
### RENEWABLE WATER RESOURCES



### ACCESS TO DRINKING WATER



### ACCESS TO SANITATION



In **North Africa**, low water availability , but a pretty good access to the services

In the **sub-saharan zone**, water, but a weak access

In **both cases**, the problems will be exacerbated by an increase in needs related to :

- Population growth
- The rise of the living standard
- Climate change: decrease in precipitations ,rising temperatures and therefore increasing needs

**AND STILL, WE HAVE TO LOOK CAREFULLY AT THE DEFINITIONS .....**

#### Access to drinking water

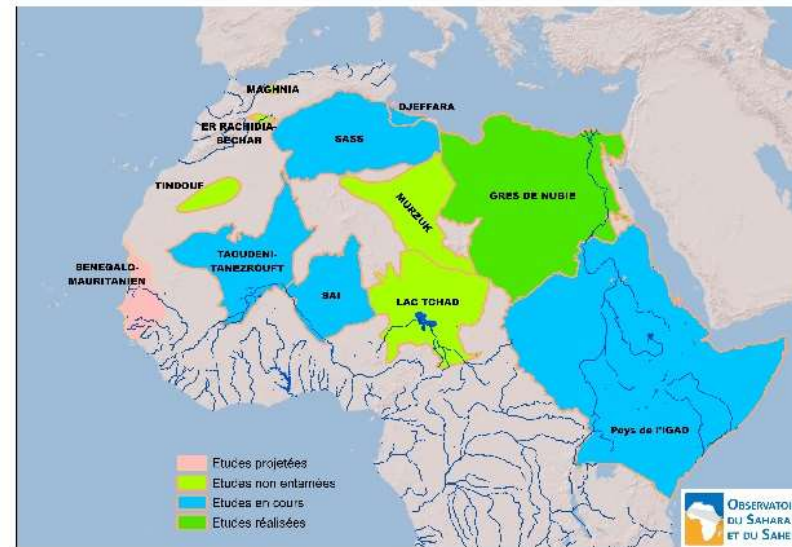
Access to a minimum of 20 liters of drinking water per day per capita within 1000 meters .



**Is it really satisfying ??**



## THE WATER RESOURCES? ALMOST ALL SHARED

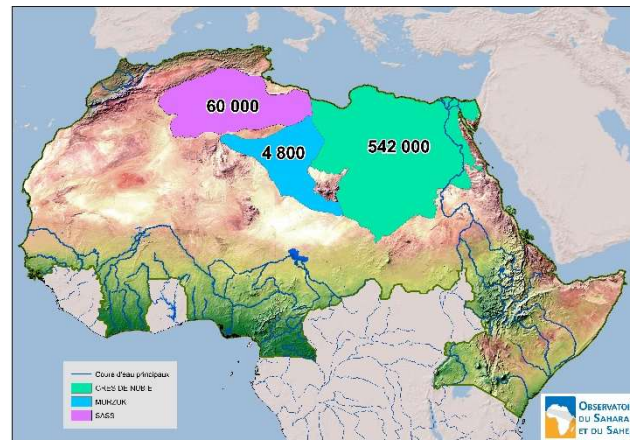


- 10 major catchments
- 12 major trans-boundary aquifer systems

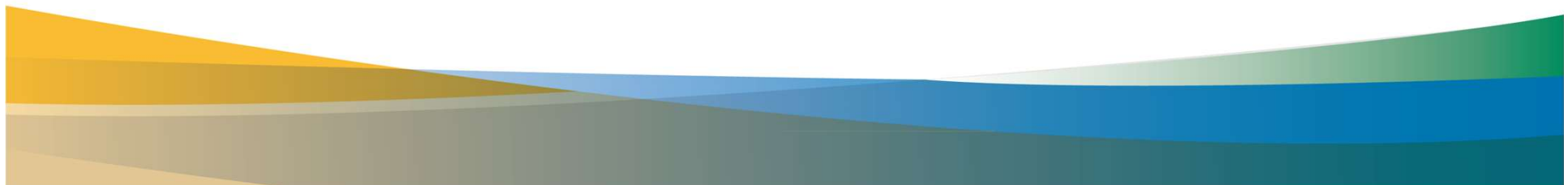


OBSERVATOIRE DU SAHARA ET DU SAHEL  
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## SOME FOSSIL WATERS ... SHARED AS WELL



An interesting and important reserve ..... ..  
But with fundamental questions related to the "Protection of a heritage", to technical and political consultation mechanisms, to distribution and management (or even transfers) to put in place, to the conditions of a "sustainable" exploitation, and therefore to the hazards of an adventurous exploitation .....  
This is already hard for visible superficial resources .....







## The problems have two very different natures So , what solutions???

### For North Africa :

1. We can already act (energetically and quickly !!) to bridge the gaps :

We can earn 10%? 20%? 30 %? by improving the overall management of the networks; In the long run, this will not compensate for population growth if it keeps its current pace (on and on a problem that will have to be seriously addressed one day or another ..... ) nor the natural increase in water needs, linked not only to this growth but also to the overall improvement in the living standard.

2. We can mobilize unconventional water resources :

- Desalination of seawater: Yes, but at what cost? In particular that of energy, and surely not a resource to be put in improperly managed networks. And who will pay ?
- Reuse of processed wastewater: with a very strict control over quality . And an intelligent information and a serious awareness of users not always very motivated .....
- Use of fossil water (SASS): a consultation mechanism exists since 2008, between Algeria, Libya and Tunisia

3. It is also necessary to take into account the economic value of water in all sectors of activity , by improving the knowledge of the true cost of water( a lot to do ..), and by introducing an adapted pricing, which reduces (all?) forms of waste.



## WHAT ABOUT THE SUB-SAHARAN AFRICA?

**Water, but no access to it: Lack of funding / energy / political priorities ?? which means that despite water availability, having access to it remains very difficult**

**And therefore: a vital need for additional mobilization of water resources , without which none of the problems of the region will be solved.**

**NO RESPONSE TO WATER ISSUES WITHOUT AN EFFICIENT AND COORDINATED MANAGEMENT OF GROUNDWATER AND TRANS-BOUNDARY SURFACE WATERS**

**YET, TODAY:**

**Underground resources are still poorly known and underexploited**

- **A mechanism is being negotiated for the Iullemeden Taoudeni Tanezrouft Aquifer: Out of the 7 affected countries (Algeria, Benin, Burkina Faso, Mali, Mauritania, Niger and Nigeria), only 4 have signed the Memorandum of Understanding. (Long ...) procedures are in progress.**
- **A second aquifer mechanism project in the IGAD region is still making its very first steps due to a lack of knowledge**





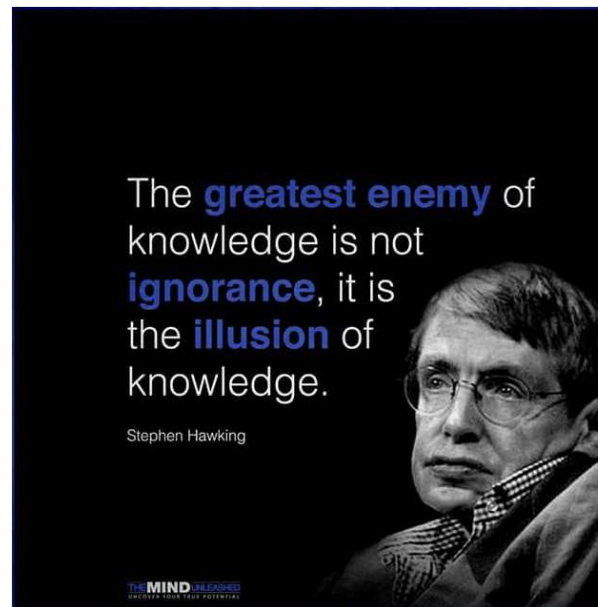
SO ?

**HUGE FINANCIAL AND TECHNICAL REQUIREMENTS,  
BUT FIRST, IT IS NECESSARY TO:**

- Improve water governance, in terms **of knowledge**, strategic choices, efficient management and planning
- Promote the use of renewable energies, less expensive to invest in, but profitable afterwards
- **COMMUNICATE MORE AND BETTER WITH POLITICAL ENTITIES**, to whom too little summarized and understandable information is provided, to make water more important in agendas, in speeches and above all in facts,
- Keep on establishing effective consultation mechanisms for groundwater.....
- Invest, also and especially, in the current and the future OPERATOR :
  - To whom the national and regional issues will have been explained very early (that is the role of school...)
  - Who has to be trained or prepared to the trades of water by integrating the related disciplines (economy, politics, sociology, culture)



I know, that's a lot ,  
But we are here to tell the truth.....





# THANK YOU FOR YOUR ATTENTION

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