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PARIS-FRANCE**



**International
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**KEY NOTE
of**

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INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS



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**WATER OVER THE WORLD,
A worrying situation:**

- Natural hazards are poorly controlled,
- Wastage is inadmissible,
- Water pollution is significantly increasing,
- The situation of the poorest people is intolerable,
- Ecosystems are destroyed...

**Wastage and pollution of inland freshwater
might limit development
in most countries of the world before 2025 !**



Climate change consequences



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The climate change is likely to increase the frequency of extreme events, such as floods and droughts:



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**Indeed, basins are the natural territories,
in which water runs,
on the soil or in the sub-soil,
whatever are the national or administrative boundaries
or limits crossed.**



**An overall approach should be organized
on the relevant scale
of basin areas of rivers, lakes and aquifers,**



TWO HUNDRED AND SEVENTY SIX RIVERS OR LAKES AND HUNDREDS OF AQUIFERS ARE TRANSBOUNDARY ONES



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Transboundary basins per continent.

		2002	Percentage Of territory
<i>Africa</i>		59	62 %
<i>Asia</i>		57	39 %
<i>Europe</i>		69	54 %
<i>America North</i>		40	35 %
<i>America South</i>		38	60 %
<i>TOTAL</i>		276	45 %



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RIVER BASIN MANAGEMENT EXPERIENCED
A QUICK DEVELOPMENT IN MANY COUNTRIES



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INTEGRATED WATER RESOURCE MANAGEMENT

- OVERALL MEETING OF RATIONAL AND LEGITIMATE DEMANDS:

Agriculture

Domestic uses

Industry

Fish farming

Electricity

Transports

Leisure-Turism

Fishing...

- WASTEWATER TREATMENT AND RECYCLING,

- CONSERVATION OF ECOSYSTEMS:

rivers, lakes, wetlands, aquifers, costal areas,

- RISK PREVENTION :

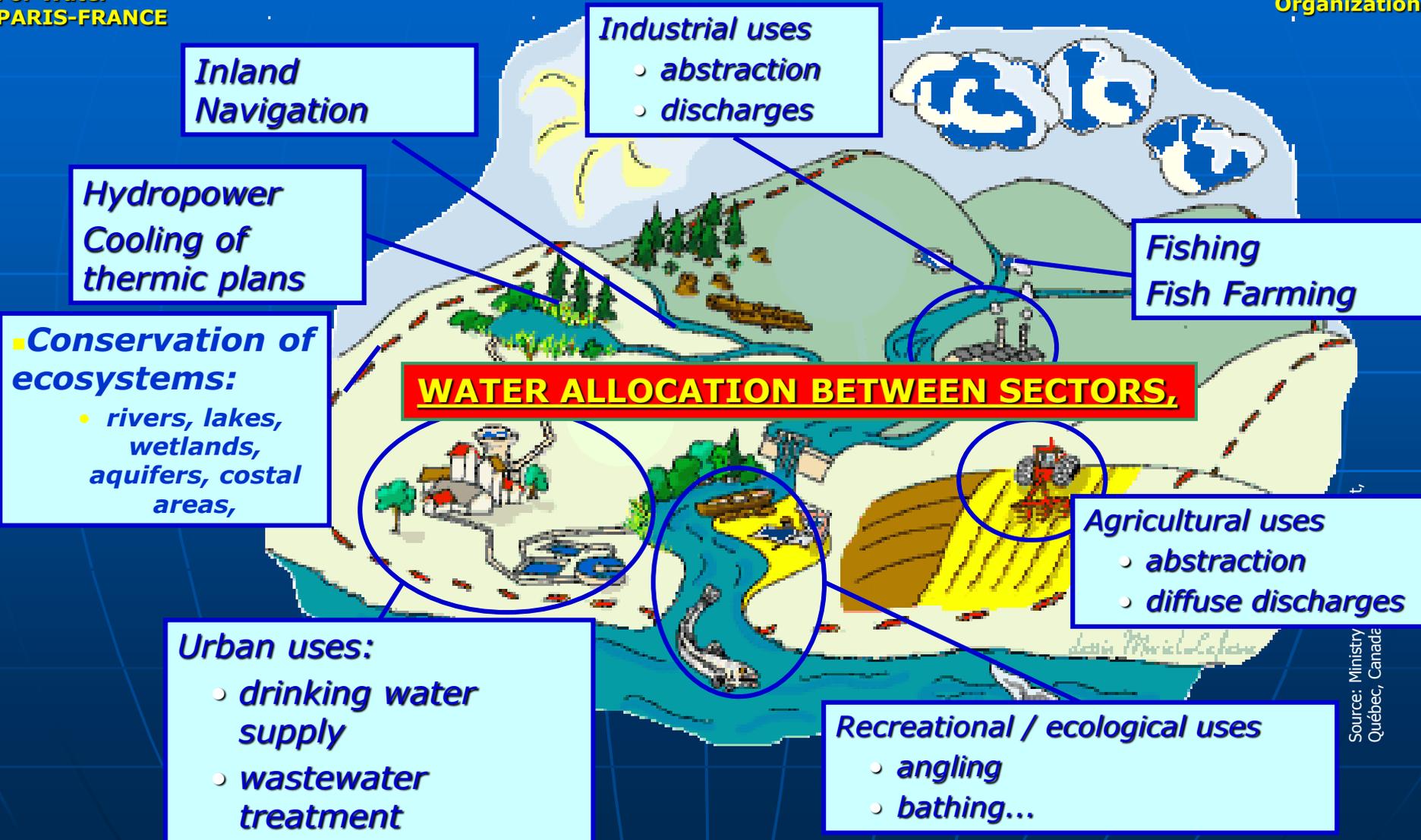
Erosion

Drought

Floods



A MULTIPURPOSE APPROACH OF MAJOR WATER USES





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**MOBILIZING NEW RESOURCES
SHOULD BE PLANNED IN MANY REGIONS
WHEN THEY ARE SOCIALLY ACCEPTABLE ,
ECOLOGICALLY FRIEND
AND ECONOMICALLY REASONABLE.**





INTEGRATED WATER RESOURCE MANAGEMENT :



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DEFINING ROLES AND RESPONSIBILITIES OF EACH:
There is never a sole and unique manager!



Multilateral organizations



International commissions



Central or federal government



Local authorities = states (Federation)
= municipalities
= villages



Large public regional planners

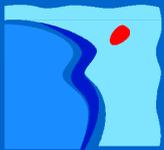
basin organizations?



Water users : = community
= individuals



Civil Society : = enterprises
= researchers
= NGOs



water resources management should be organized:



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Conflicts requirements collected
from each point of view



Designing a program
through **dialogue**



Reaching **agreement**
with an ambitious program



...with the participation in decision-making

of the concerned Governmental Administrations and local Authorities,
the representatives of different categories of users
and associations for environmental protection or of public interest.

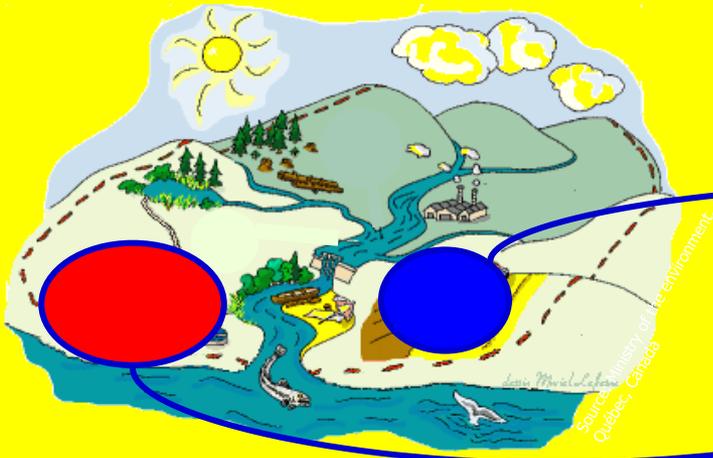
water resources management should be organized:



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Watersheds

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Description of the initial situation

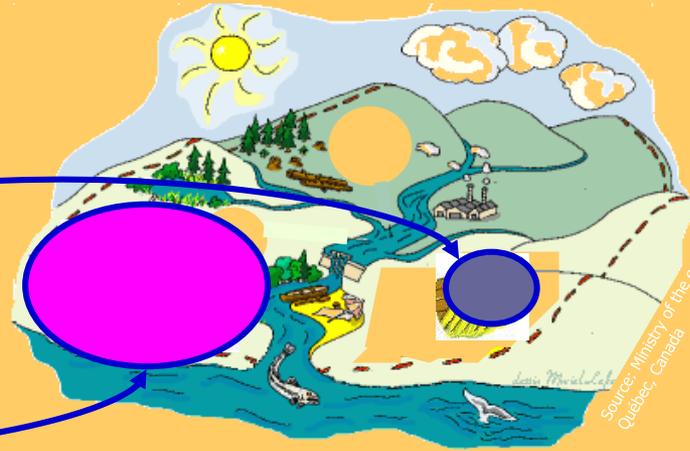


Focus on economic aspects:

- estimate the economic "weight" of water uses and services
- assess the level of recovery of costs of water services

2025

Baseline scenario: projection for 2015



Baseline scenario:

- appraisal of evolutions of uses, pressures...
- identification of potential gaps in water status with GES

... based on Basin Management Plans

that define the medium and long-term objectives to be achieved;



THE COSTS TO BE FINANCED



Costs	Definition	Example
Direct costs	Financial expenses	<i>Amortization, capital and interests, renewals</i>
	Operating expenses	<i>Wages, electricity, Rents, equipment maintenance, analyses ...</i>
Environmental costs	Costs of damage caused to the environment by a specific activity	<i>Pollution of an aquifer, destruction of wetlands...</i>
« Resource » cost	Value of the alternative disregarded when choosing a particular activity (= opportunity costs)	<i>Cost of the electricity which could have been produced if water had been available and not pumped for irrigation</i>

= total cost -



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FINANCING WATER POLICY:

- ◆ The international official aid (Mainly **Loans**) only represents 10% of the investments made worldwide.
- ◆ Public budgets cannot bear alone all the investment and operating costs.
- ◆ The users must contribute according To the "polluter-pays" principle and the "users-pay" systems.

= **WATER MUST PAY FOR WATER**



water resources management should be organized:



VARIOUS COMPLEMENTARY SYSTEMS FOR COST RECOVERY : THE 3" T"

ADMINISTRATIVE TAXES: paid to the general budget.

General taxes or penal fines

New ecological tax.

WATER-RELATED CHARGES:

National water charges – transiting through
"Special Accounts of the Treasury"

Basin water charges – levied by the Water Agency

THE PRICING OF COMMUNITY SERVICES:

Price of raw water – levied by big developers

Price of drinking water – levied by the municipalities
or water suppliers

TRANSFERTS: International aid or from other economical sectors.

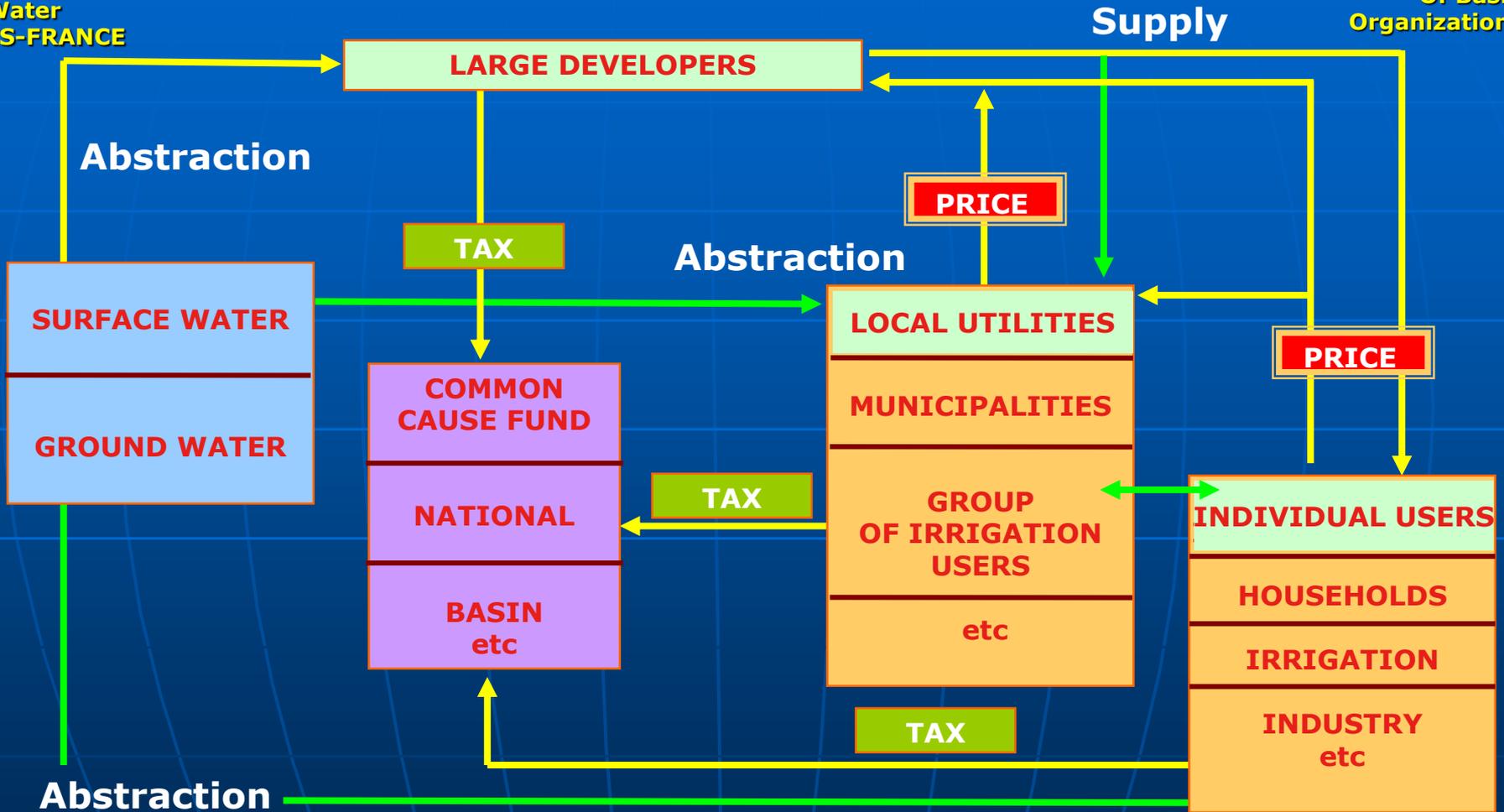


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FINANCING WATER POLICY :



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←→ Abstraction of raw or treated water/discharges of waste or polluted water
 ← Yellow Arrow → WATER-RELATED TAX = ABSTRACTION - DISCHARGE
 ← Yellow Arrow → PRICE = PAYMENT OF THE SERVICE/ABSTRACTION - DISCHARGE



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EQUALIZATION OF FINANCIAL EFFORTS:

- Territorial equalization:
in the same geographic area or basin
- Sectoral equalization:
between public services – drinking water – electricity – sanitation – solid wastes ...
- Equalization between users:
rich, poor, big consumers / polluters,
small consumers / polluters
- Equalization between functions:
between upstream and downstream areas,
between commercial services and administrative functions



AN INDUSTRIAL AND COMMERCIAL MANAGEMENT IN ORDER TO BALANCE THE BUDGETS



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"WATER MUST PAY FOR WATER"

**WATER SUPPLY
SERVICES**



METERS



USERS

EXPENDITURE

INCOME

Investment



- Financial amortization
- Technical depreciation

- Number of m³ consumed/user

X

Operation



- Manpower
- Energy
- Consumable goods/supply
- Small equipment for operation
- External services

- Price/ m³

=

Taxes



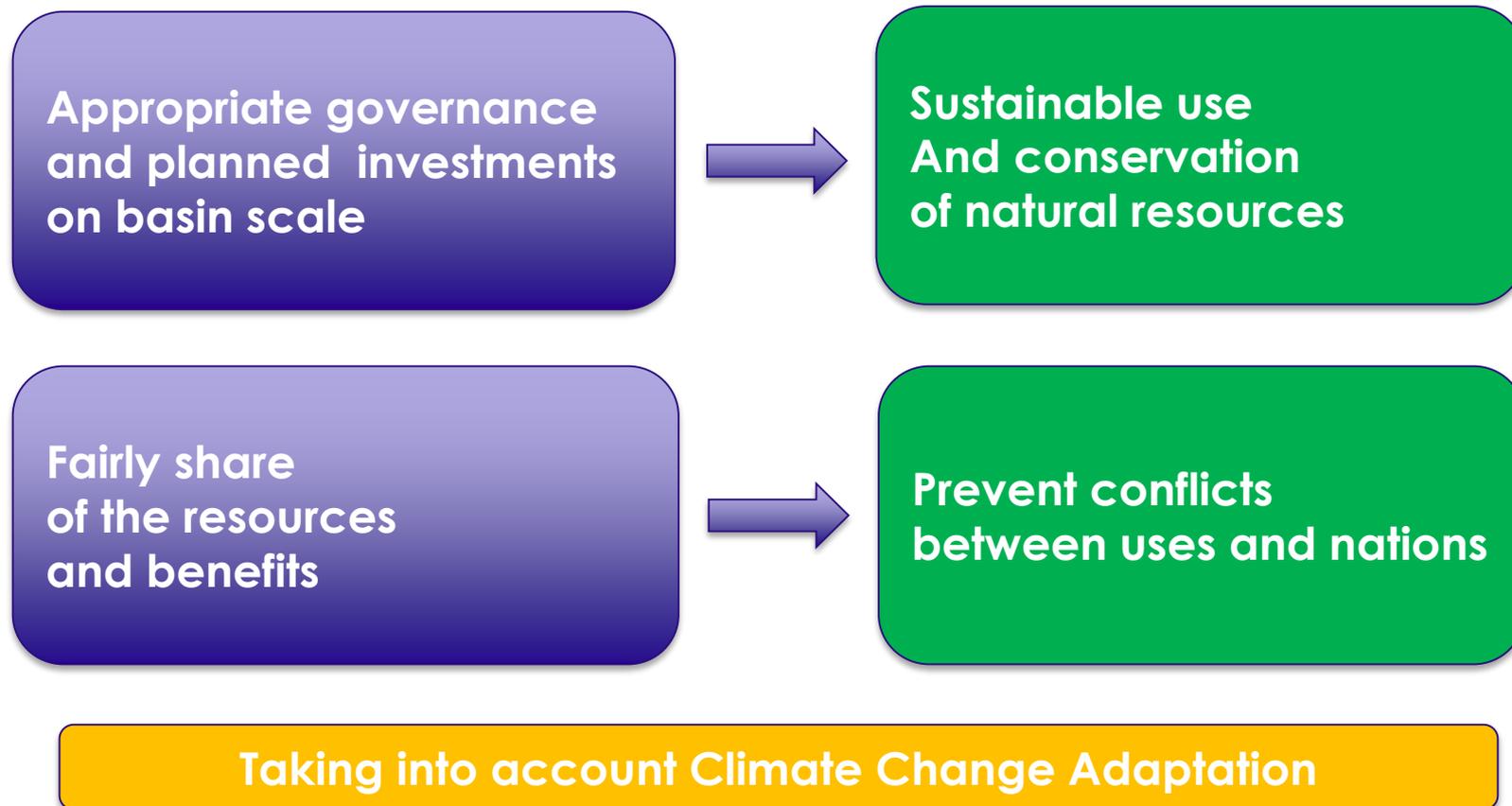
- Local taxes
- "Water Agency" charges
- "Rural solidarity" charges
- Value-added tax (VAT)
- Tax for waterways

- INVOICES**
- Bonus for decontamination

TOTAL EXPENDITURE = Σ CONSUMPTION X PRICE

How to use, share and preserve water resources ?

→ Integrated Water Resources Management



AFD group: +1,5 Bn€ of financing since 2004 for hydropower or multi- purpose installations



...With a focus on:

- Rehabilitation (still lagging behind, enormous needs)
- Small and medium hydro projects
- Large multi-purpose regional projects
but only with high level safeguards, in co-financing with other MFIs

...With a specific involvement:

- in transboundaries basin organizations :
Senegal (OMWS), Mekong River Committee, Niger (ABN), etc.
- in HSAP (Hydro Sustainability Assessment Protocol)

Mainly through public finance,

but Proparco is also quite active across all continents

-> given the high risk-profile of multi-purposes dams,
financing has been relatively classic so far.

But public resource is getting scarce...

The conditions for private sector involvement:

- **Clear and transparent attribution mechanism**
with long-term PPA contracts
- An **efficient allocation of risks**, in particular:
 - **Geological risk**
 - **Risk on hydrology**
 - **Risk on resources management**
(allocation between users)
- Recognized **financial capacity of the off-taker**
(often, a public national company with liabilities...)
or **equivalent guarantee mechanisms**
- **Access to finance**, for investment with a highly capitalistic profile.

The role of IFIs to allow private investment :

- **Co-financing:** Sharing the investment should give more comfort to the private sector
- **Strong institutional support:** supervising the project should give more comfort to the private sector
- **Ensuring proper basin-level management of the resources**
- **Ensuring proper E&S management with equitable benefit sharing mechanism** - which at the end reduce the risk of having works stopped because of social non-acceptance.
- **Providing partial guarantees** for the off-take over 20 years
- **Providing credit enhancement for bonds issuance** by the private sector



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Prioritizing large dams projects in the West African region

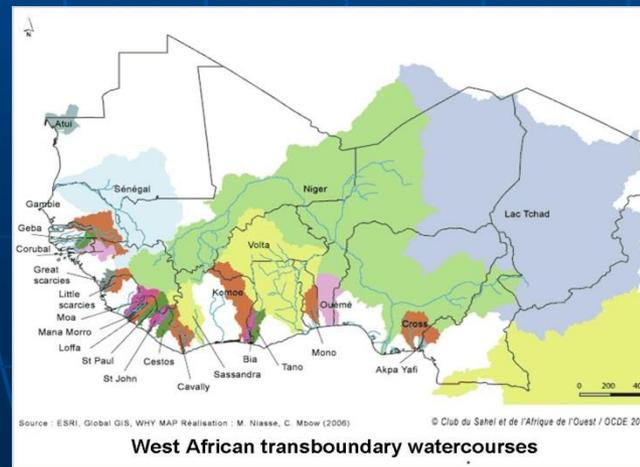


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Many large dam projects are currently in the pipeline in West Africa. However, some of them have been waiting for a very long time, in some cases more than 50 years.

In order to clarify the situation on the status of these projects, ECOWAS Water Unit launched in 2009 the "Dialogue on large water infrastructures in West Africa" for identifying the projects that could have the most significant positive impact on regional integration.

1. establishment of criteria for identifying the most promising structures
2. application of the criteria and proposal of a list of priority works





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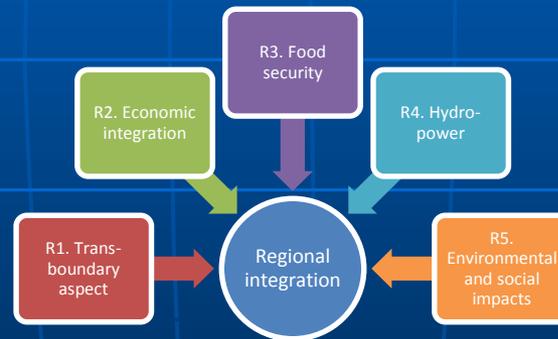
Prioritizing large dams projects in the West African region



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Five axes of criteria were defined with the perspective of regional integration:

- 1) projects should have trans-boundary importance,
- 2) the structure should be managed by several states,
- 3) the dams should contribute to regional food security,
- 4) a capacity to distribute hydro-power to a number of countries should exist
- 5) Minimal environmental and social changes on a trans-boundary scale.



Out of 39 projects studied, 8 dams were selected at the end of the process.

All dams will produce hydropower (a total of about 1000 MW), while half of the structures are multi-purpose dams, also intended for irrigation of about 75 000 ha.



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**TODAY,
IT IS USELESS TO
"REINVENT THE WHEEL"**

!



**AS ALL EFFECTIVE TOOLS ARE AVAILABLE TO MOVE FORWARD FAST,
IF THERE IS A POLITICAL WILL TO DECIDE TO DO SO!**

**LET'S GET MOBILIZED !
YES WE CAN.....**

MERCI DE VOTRE ATTENTION!
THANK YOU FOR YOUR ATTENTION!

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Réseau International des Organismes de Bassin
International Network of Basin Organizations
Red Internacional de Organismos de Cuenca



**IF WE ARE NOT ABLE TO MOBILIZE ENOUGH MONEY,
WE SHALL NOT HAVE THE FRESH WATER WE NEED!**



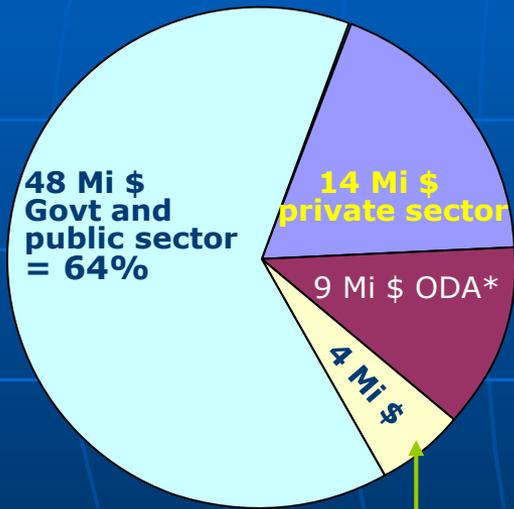
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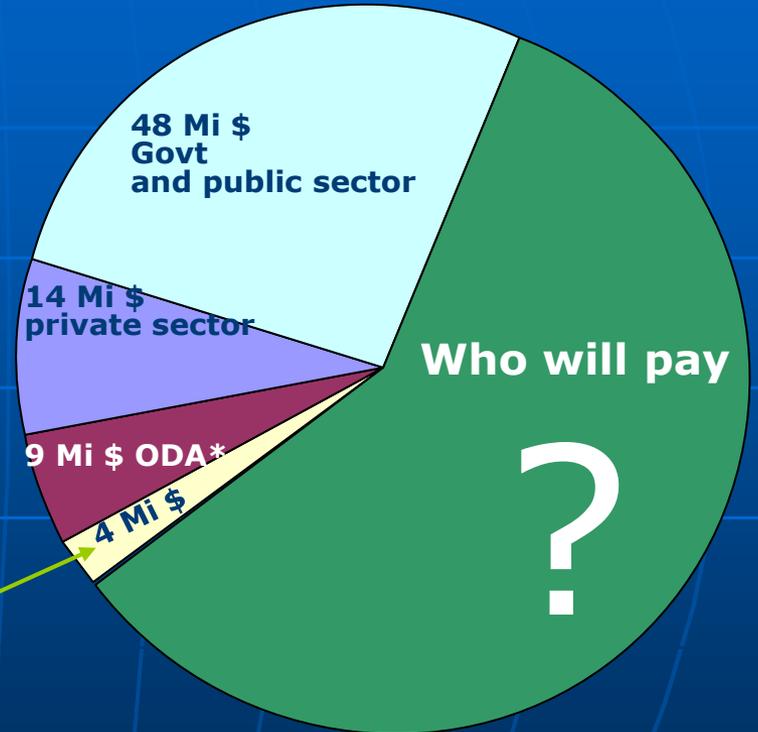
Who will pay ?

FOR THE NEXT 25 YEARS

NOW



International firms



75 milliards \$ / year

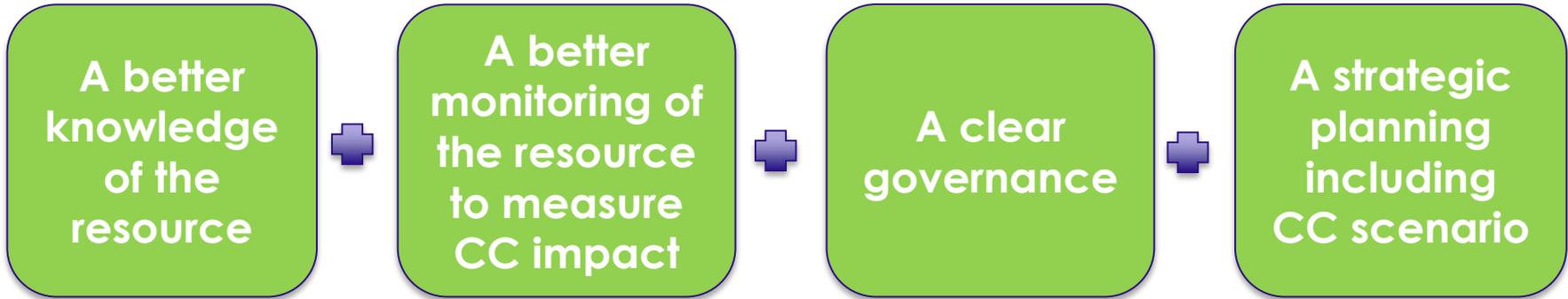
180 milliards \$ / year

* Official Development Assistance

How to deal with climate change?



→ Climate change adaptation needs :





FINANCING WATER POLICY :



ALL THE USERS MUST CONTRIBUTE

- ➔ The taxpayer : - income taxes, taxes
- ➔ The offender : - fines
- ➔ The user : - water-related taxes
- ➔ The polluter : - price of community services
- ➔ The individuals : - price of his own works

There is always someone who has to pay !

THE CHOICE DEPENDS OF EACH NATIONALPARTNERS