

# *UNOSD 2023: International Mayors Forum*

Dakar, Sénégal, 25<sup>th</sup> April 2023

## *Water as a Public Good*

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Director, CSEND, Geneva*

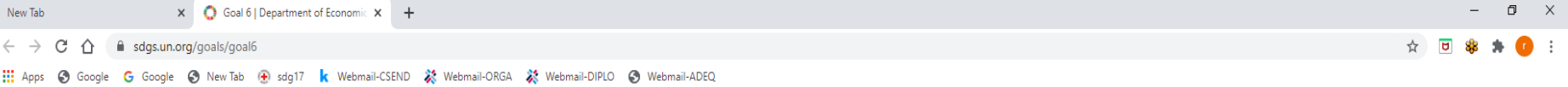
*Each of the SDGs represents one or more public goods!!!!*

 **SUSTAINABLE  
DEVELOPMENT GOALS**





# SDG 6 developments



## BEFORE COVID-19

DESPITE PROGRESS,  
**BILLIONS STILL LACK**  
WATER AND SANITATION SERVICES



**2.2 BILLION PEOPLE**  
LACK SAFELY MANAGED  
DRINKING WATER  
[2017]



**4.2 BILLION PEOPLE**  
LACK SAFELY MANAGED  
SANITATION  
[2017]



**TWO IN FIVE**  
HEALTH CARE FACILITIES  
WORLDWIDE HAVE  
**NO**  
SOAP AND WATER OR  
ALCOHOL-BASED  
HAND RUB  
[2016]



## COVID-19 IMPLICATIONS



**3 BILLION**  
PEOPLE WORLDWIDE  
LACK BASIC HANDWASHING  
FACILITIES AT HOME  
↓ ↓ ↓  
THE MOST EFFECTIVE METHOD FOR  
COVID-19 PREVENTION



**WATER SCARCITY**  
COULD DISPLACE  
**700 MILLION PEOPLE**  
BY 2030



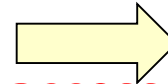
# *Each of the SDGs represents one or more public goods ...*

- ✚ ... hence measuring progress of the SDG agenda can also be termed as measuring if the amount / the value of a certain public good has increased, decreased or stayed the same



# Public Goods, Sustainable Development and the Contribution of Business

## Water as a Public Good



- ✿ **6.1-** By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- ✿ **6.2** -By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- ✿ **6.3** -By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- ✿ **6.4** -By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
- ✿ **6.b** –By 2030, support and strengthen the participation of local communities in improving water and sanitation management

## INDICATORS

## CUSTODIANS

<b>6.1.1</b> Proportion of population using safely managed drinking water services	WHO, UNICEF
<b>6.2.1</b> Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water	WHO, UNICEF
<b>6.3.1</b> Proportion of domestic and industrial wastewater flows safely treated	WHO, UN-Habitat, UNSD
<b>6.3.2</b> Proportion of bodies of water with good ambient water quality	UNEP
<b>6.4.1</b> Change in water-use efficiency over time	FAO
<b>6.4.2</b> Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	FAO
<b>6.5.1</b> Degree of integrated water resources management	UNEP
<b>6.5.2</b> Proportion of transboundary basin area with an operational arrangement for water cooperation	UNECE, UNESCO
<b>6.6.1</b> Change in the extent of water-related ecosystems over time	UNEP, Ramsar
<b>6.a.1</b> Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan	WHO, OECD
<b>6.b.1</b> Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	WHO, OECD

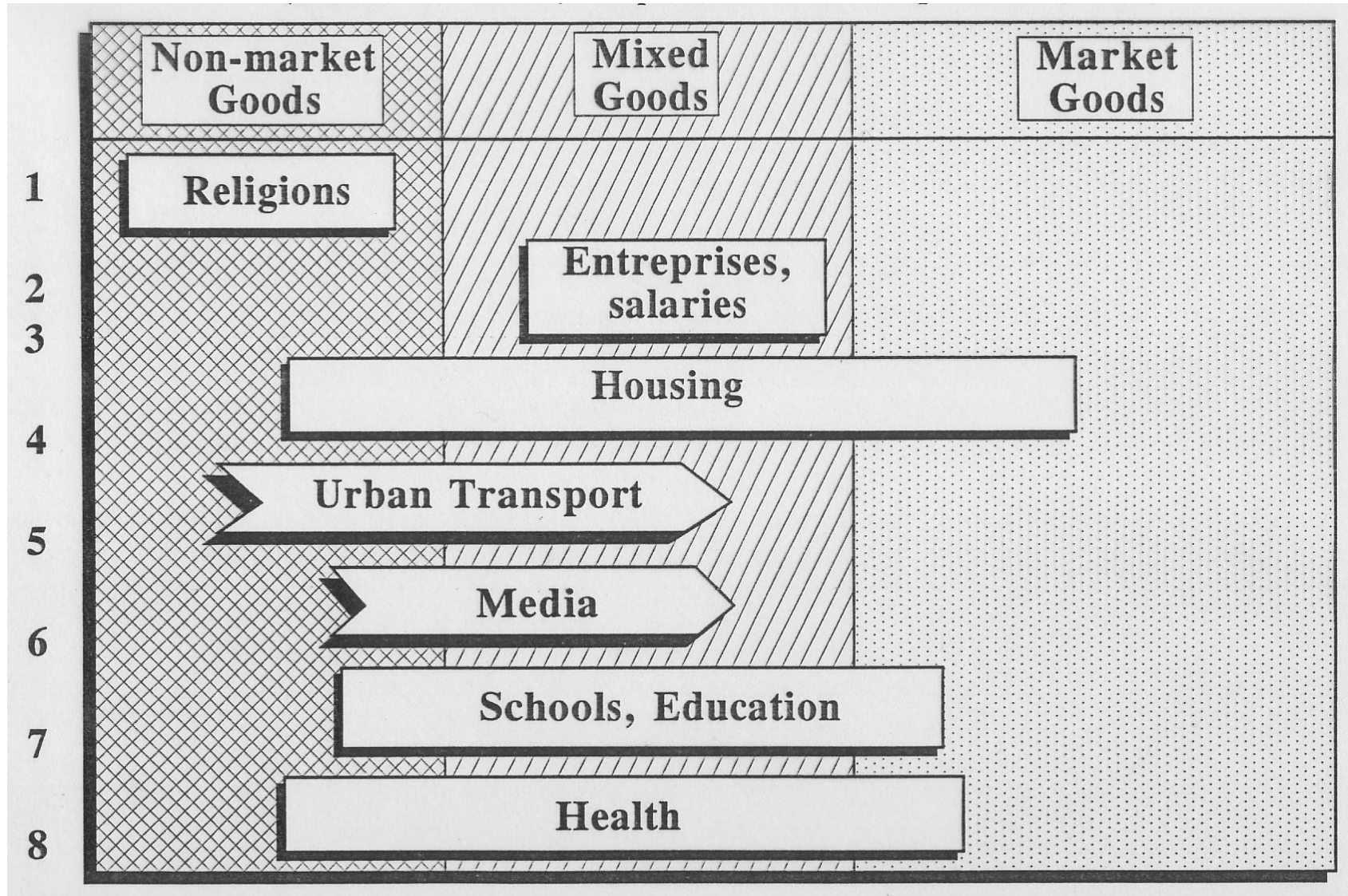
# *Leverage effect for social change: financing water & sanitation infrastructures*

## **Public / Private investments**

- ❖ Public deficits and debts are generally too high
- ❖ Private owned distribution water companies do not extend their distribution networks where it is not financially attractive
- ❖ Existing water funds are not big enough to reach the Sustainable Development Goals and there are only a few choices in comparison with global needs.
- ❖ Water funds do not guarantee access to water.

# *The Role of the Market in Rhine-Alpine Model*

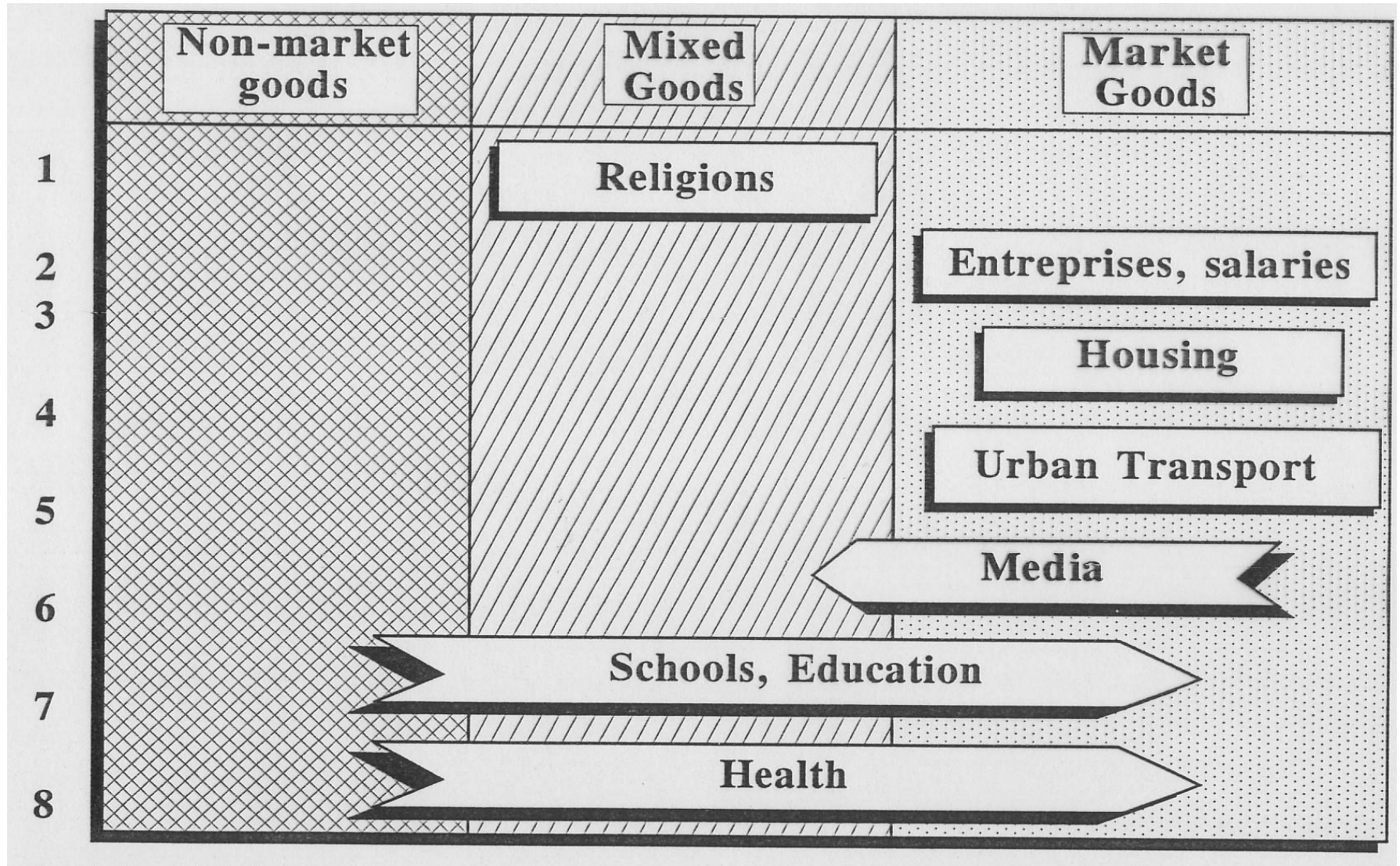
Source: M. Albert, "Capitalisme contre Capitalisme, 1991)





# *The Role of the Market in Neo-American Model*

*(M. Albert, 1991)*



**Figure 4: Common Types of Public-Private Partnerships**


Contract Type	Description	Level of Risk
Management contract	Operator receives fee to perform operations and routine maintenance. Asset owner pays for repairs, extensions, etc. Little risk to private operator.	Asset Holder
Lease (affermage) contract	Operator keeps revenue but must pay specified operating and maintenance costs and lease fee, and possibly percentage of revenue. Operator loses money if costs and fees exceed revenue and thus has incentive to lower costs and increase water connections and bill collection.	
Build-and-operate contract	Eventual operators construct or rehabilitate and sometimes design water system, then manage operations under either management or lease (affermage) arrangements.	
Invest, build, and operate contract	Contractor-operator is also required to provide portion of investment costs. Schemes are operated as concessions, in which operators assume all costs and retain all revenue for extended period (e.g., 10 years in Paraguay, 18 years in Bangladesh).	

Figure 4. Overview of PPPs commonly found in the water sector. "Public-Private Partnerships for Rural Water Services." IFC International

# WATER AS A PUBLIC GOOD:

## New Models- SSE/GA/A/77/L.60/18-4-2023

(Source: R.Saner, L. Yiu, M. Filadoro, V. Khusainova, Pacific Journal of PA, Vol.37, 2015. Four Options for management of the water sector)



	Public	Private	Private-public partnership	Cooperative
Conception of water management	A human right and a social good	An economic good or a commodity	An economic good and a renewable natural resource	A socio-ecological good, an economic good and a renewable natural resource
Advantages	<p>Protection against customers' exploitation</p> <p>Equitable distribution of services</p>	<p>Access to unserved areas</p> <p>High level of competition</p>	<p>Increased competition during tendering stage</p> <p>Inflow of private capital</p> <p>Private sector knowledge, technology and capacity</p>	<p>Voluntary and open membership</p> <p>Education, training and information</p> <p>Concern for the community</p>
Disadvantages	<p>Lack of political will to charge cost-recovering tariffs</p> <p>Inefficient operation</p> <p>Exposed to cross-subsidisation to other government services</p>	<p>More expensive than network water</p> <p>Environmental concerns</p> <p>Price fixing could occur</p>	<p>Private monopoly can erode public power</p> <p>Inequitable supply</p> <p>Lack of transparency with regulator</p> <p>Little voice for consumers</p>	<p>Lack of awareness of their business potential among governments and the general public</p> <p>Lack access to loan finance to help them expand their business</p> <p>Lack of technical knowledge and access to new technology</p>

# *Water Management in the Netherlands,” Ministry of Infrastructure and Environment (2011).*

[http://www.rijkswaterstaat.nl/en/images/Water%20Management%20in%20the%20Netherlands\\_tcm224-303503.pdf](http://www.rijkswaterstaat.nl/en/images/Water%20Management%20in%20the%20Netherlands_tcm224-303503.pdf)

The sequence of priorities in the form of a diagram:

## **Category 1 Safety and the prevention of irreversible damage**

- 1 stability of flood defence structures
- 2 settling and subsidence of peat bogs and moorland
- 3 nature dependent on soil conditions

takes precedence over:

## **Category 2 Utilities**

- 1 drinking water supply
- 2 power supply

takes precedence over:

## **Category 3 Small-scale high-quality use**

- 1 temporary spraying of capital-intensive crops
- 2 process water

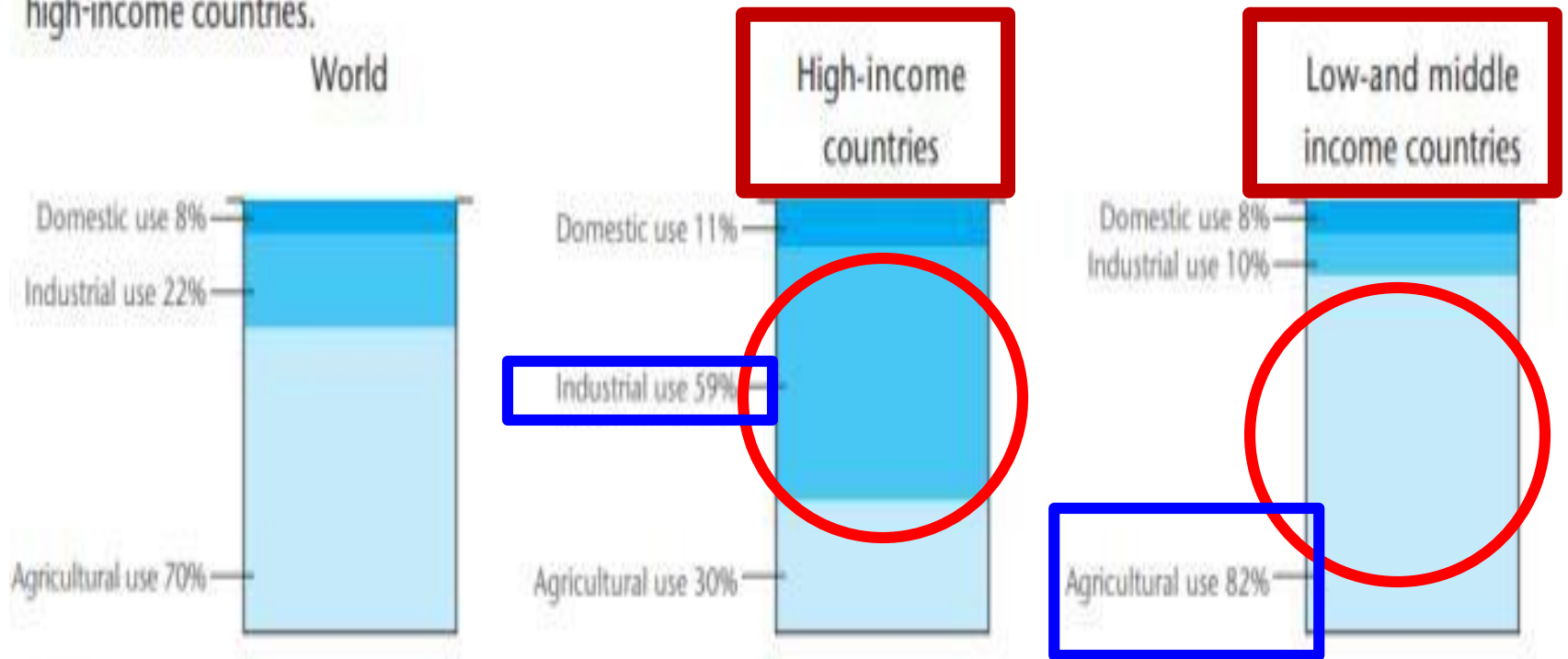
takes precedence over:

## **Category 4 Others (economic considerations, also in terms of nature)**

- 1 shipping
- 2 agriculture
- 3 nature, as long as no irreversible damage occurs
- 4 industry
- 5 water recreation
- 6 lake fishing

## Competing water uses for main income groups of countries<sup>6</sup>

Industrial use of water increases with country income, going from 10% for low- and middle- income countries to 59% for high-income countries.



Ref. 6: "Water for People, Water for Life" United Nations World Water Development Report, UNESCO, 2003  
[www.unesdoc.unesco.org](http://www.unesdoc.unesco.org)

# *LDCs request for Industrialisation- Manufacturing!!*

## *Related Policy Considerations:*

1. Current forms of industrialisation means investment – Finance/Technology AND more allocation of water
2. If quantity of water is fixed (additional ground water limited or risk of salination and drop of surface levels)- water for industrialisation would have to be drawn from agriculture
3. Loss of water quantities for agriculture can lead to conflicts and access to a diminished amount of water needs to be carefully negotiated and planned
4. Agriculture based on less water intensive crops will be needed requiring investment and potentially re-allocation of land
5. And water use by industry should be limited- urgent need for reduction of waste of water, recycling of water and new production methods that are less water intensive

# *Water Conflict in Bolivia- 2005*

Bolivia's constitution stated that all basic services should be guaranteed by the state, universally distributed and quality assured. In 1997, the de Lozada Government followed World Bank advice and started a privatization strategy including privatisation of water utilities.

A foreign company was given the mandate to implement the privatisation (Water and Sanitation) which led to a massive 35% increase of costs (annual USD 445.-) per household of the indigenous people living in the high altitude region El Alto. Most Alenos earned an average of 750.-USD per year!!!

The situation led to massive strikes and violent confrontations, until the next government terminated the contract with foreign company. Bolivia initially received a 52 \$ million investment/soft loans from WB, IFC, BID and CAF. **Once the government terminated the contract, Bolivia had to pay back 15.1 million USD but water systems were still not modernised in the El Alto region and tensions remained high.**

# *Netherlands Polder System & Renewable Energy (Wind Farms)*

*(<https://en.wikipedia.org/wiki/Polder>)*



Areas of the Netherlands located below sea level (blue)



Wind farms in the Noordoostpolder



# Water Management of the Netherlands

(Ministry of Infrastructure- <https://www.rijkswaterstaat.nl/en/water/water-management>)

## Water management

**As a low-lying country, the Netherlands is vulnerable to flooding. More than a quarter of the country is below sea level and almost one third is at risk of flooding from rivers.**

**As sea levels rise and soil levels fall, the risks are constantly growing. NL are facing increasingly extreme weather conditions.**

**Policy focus: Crisis & Water Management; Managing main waterway networks, continuous Monitoring**

# The remarkable history of polder systems in The Netherlands

(FAO: <https://www.fao.org/family-farming/detail/en/c/283291/>)

The Polder systems function in a context of rising sea and river levels, continued lowering land levels, increasingly multifunctional use of land (urbanisation, recreation and tourism, nature conservation, culture conservation), interference of agricultural policies, and other interests.

**A plethora of government, non-government and private parties with intense negotiation practice make up the polder governance arena. The oldest of such organisations are the “water boards” with the mandate to provide safety from water threats for all citizens.** The physical and institutional polder culture is indeed a crucial aspect of the Dutch national identity.

# *Swiss Mountain Irrigation Channels “les Bisses”*

*(<https://www.houseofswitzerland.org/swissstories/history/bisses-valais-irrigation-channels-tourist-hit>)*



# *“Les Bisses”: Source of Inspiration for Noble price economist Elinor Ostrom’s concept of Communal Ownership)*

<https://lenews.ch/2016/12/13/the-swiss-commune-that-inspired-a-nobel-prize-winning-theory-on-communal-ownership/>



# QUESTIONS & ANSWERS



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PUBLIC GOODS,  
SUSTAINABLE  
DEVELOPMENT  
&  
THE CONTRIBUTION OF  
BUSINESS

*The link between, corporate  
responsibility & sustainable  
development*

ROLAND BARDY, ARTHUR RUBENS,  
RAYMOND SANER, & LICHIA YIU

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