

**Public Private**  
**Partnership Models for**  
**Developing Water**  
**Servicing**

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## Introduction

- Private participants in the water industry are many, but those in financing of water services in developing countries are few,
- There are high risks in developing countries, construction, management and debt collection.

- The international market for water is some US\$400 billion per year.
- This may be compared to the market for electrical energy of US\$1,000 billion a year.
- The private water market is largely in Western Europe (30%), followed by Asia (28%), North America (25%) and in decreasing order, Eastern Europe (5%), Latin America, Oceania, and Africa. growth in the water market is some 8-10% a year, largely from developing countries.
- Most public water supply companies have been protected by governments and are inefficient. There is a large loss rate, i.e. about 30% of water supplied is unaccounted-for.
- Water supply industry is capital intensive and the payback time is long.

## Investment Needs

The money to be invested in water supply over ten years is as follows:

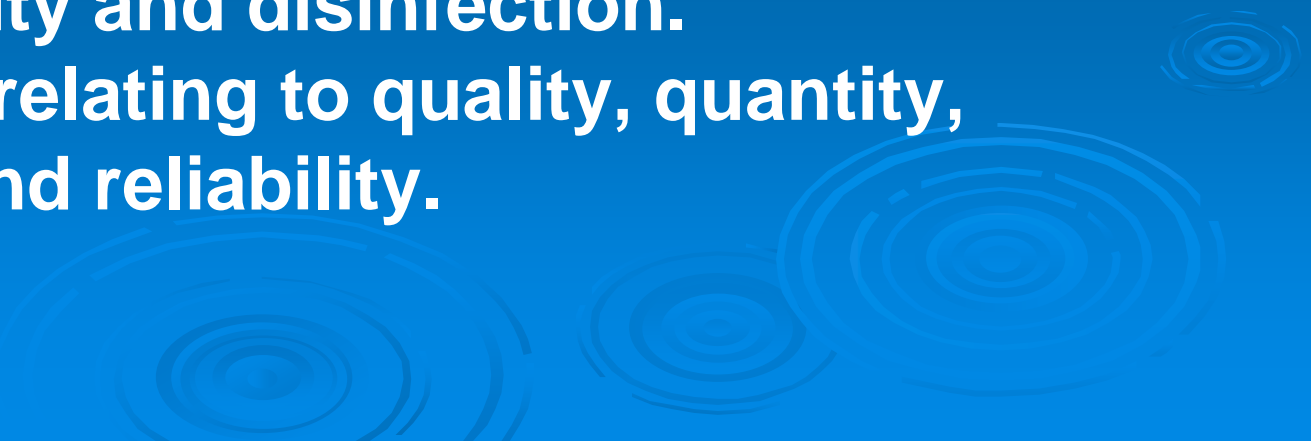
- In Asia, some US\$280 billion is required,
- in Latin America, US\$220 billion,
- in Africa US\$80 billion,
- in the Middle East US\$45 billion,
- in Eastern Europe US\$40 billion, and
- in North America and Western Europe US\$35 billion.

- **The percentage of the population not connected to a potable water supply scheme ranges from 58% in Indonesia, down to 20% in South America, while in Western Europe and North America practically all people (over 95%).**
- **The percentage of the water supply systems operated by private companies is still small.**
- **Of the total of the world population of 6 billion, only about 5% are served by private companies.**
- **Of this 290 million people, 126 million are in Europe, 72 million in Asia and Oceania, 48 million in North America, 21 million in South America, and 22 million in other countries.**

## **Things to be considered**

- **Appropriate Technology**
- **Capacity building**
- **Technical and management skills**
- **Lack of funding**
- **in the relationship between sanitation and water supply that new ideas are sought.**
- **Another reason for encouraging local participation is acceptability of risk.**
- **Risk could be running dry, pollution or payment.**
- **Large international funders may shy away from risk eg inability to collect payment, communities may be prepared to suffer the consequences of risk if it is more affordable,**

## **Technical problems which could be addressed include;**

- 1. Designs using local facilities and workforce to increase local input and ability to pay.**
  - 2. Alternative water sources including hybrids to reduce risk.**
  - 3. Alternative transport including animal drawn.**
  - 4. Alternative energy sources.**
  - 5. Water quality and disinfection.**
  - 6. Standards relating to quality, quantity, pressure and reliability.**
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## **Public-Private Partnership Models**

a number of role models for drawing the private sector into the public water arena;

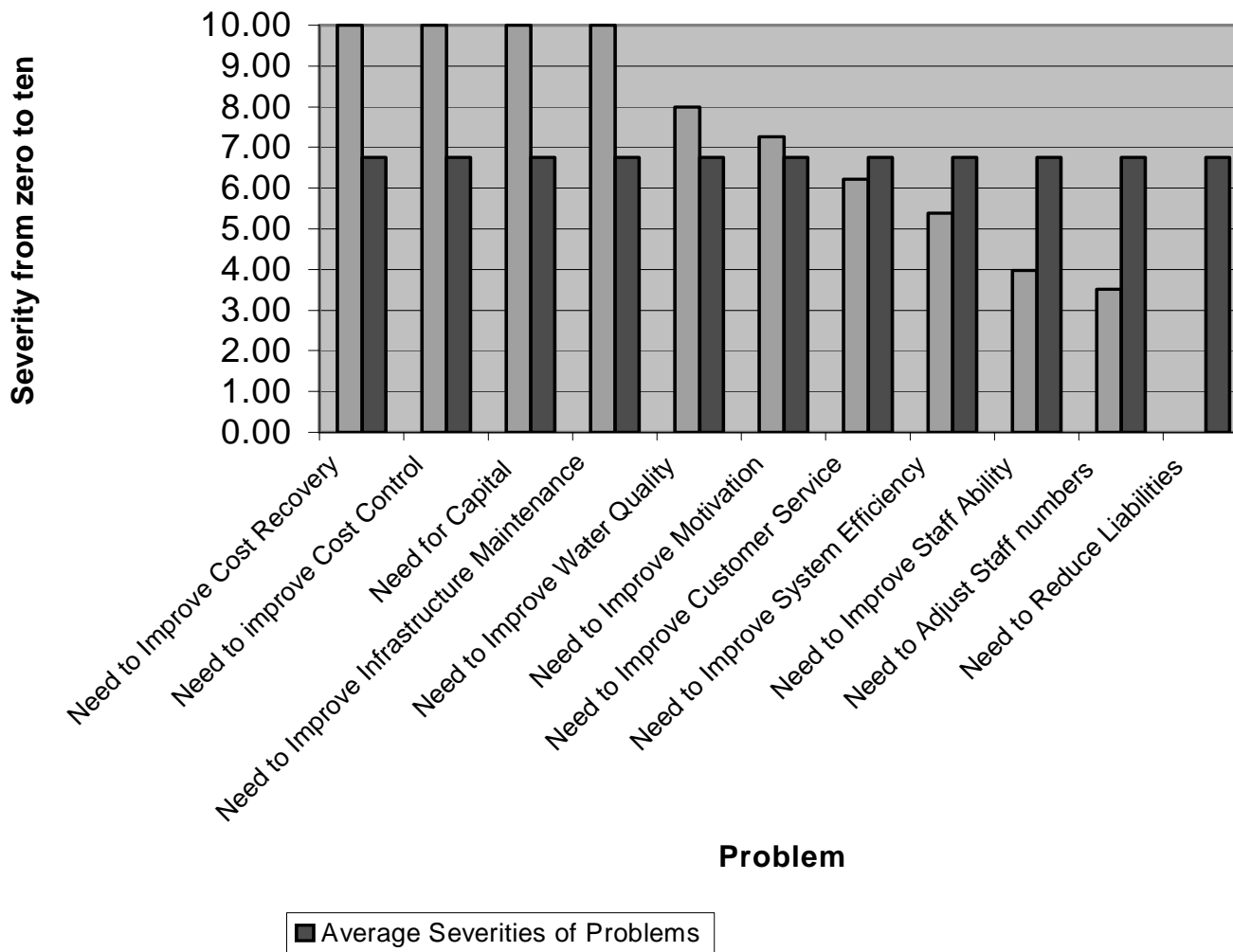
- 1. Full Privatisation**
- 2. Concession**
- 3. Lease Contract**
- 4. Management Contract**
- 5. Service Contract**
- 6. Corporatisation**
- 7. Public-Public Partnerships**
- 8. BOOT and BOT Projects**
- 9. Municipal Debt Issuance**
- 10. Private Consultants**



## **Characteristics of Critical Decisions in Selecting PPP;**

- 1. Cost recovery**
  - 2. Cost control**
  - 3. Liability and exposure minimization**
  - 4. Capital input**
  - 5. Maintenance**
  - 6. System optimization**
  - 7. Staff and asset minimization**
  - 8. Quality of water, pressure, reliability**
  - 9. Staff motivation and ability**
  - 10. Customer service, accessibility**
- 

## Plot of Severity of Municipal Problems



Importance of various factors in deciding level of privatization

**Older models of privatization** included

- Purchase of the Water Company,
- Lease, and
- BOT (Build, Operate and Transfer).

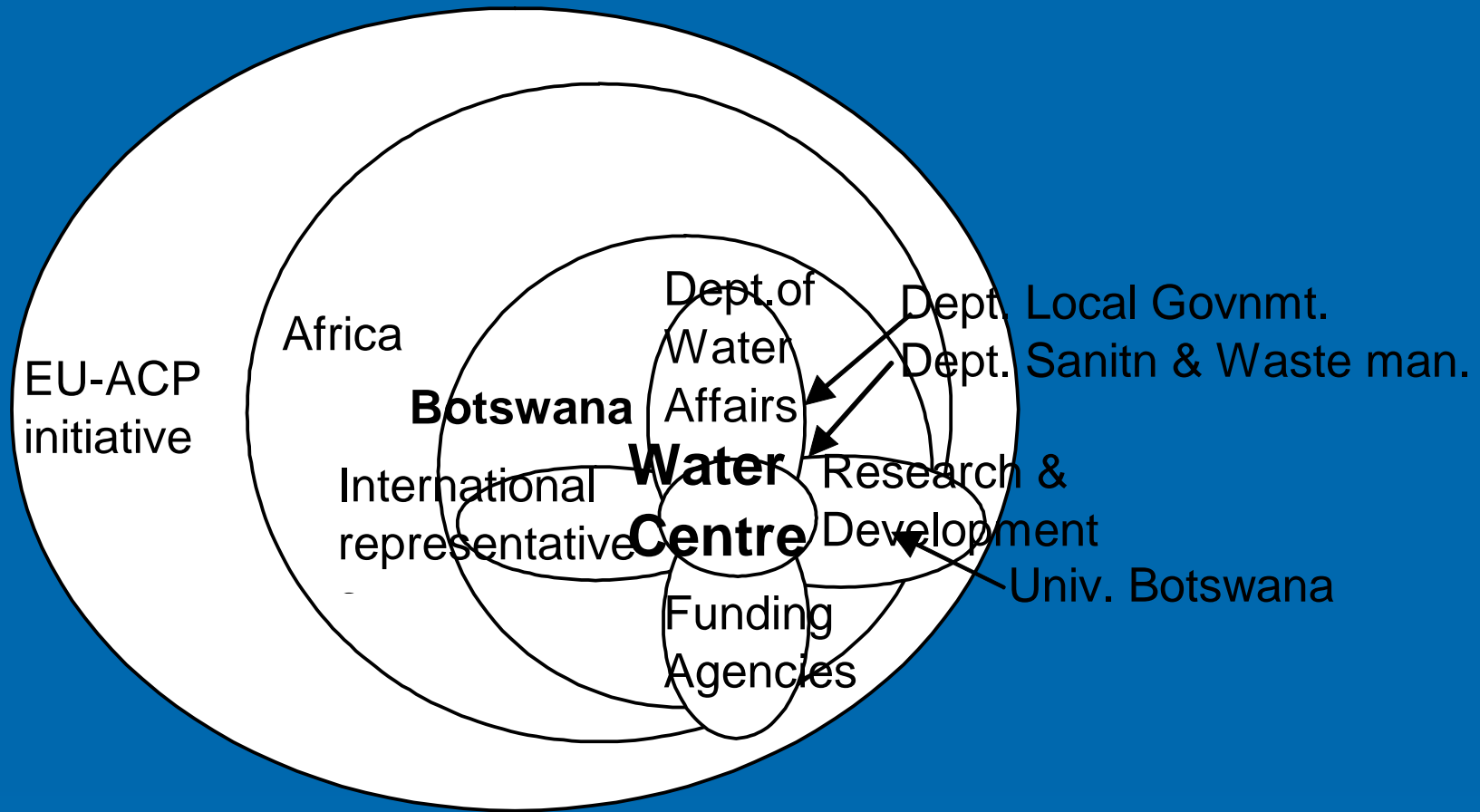
Current public funding is insufficient to meet demands in Africa as a whole.

So **private investment** is the solution and the opportunity for leverage is a good way forward.

The funds required to provide basic potable water to unserved communities in Africa are nearly EU 50 billion .This shows the solution is not possible by simple donations and self funding by increasing economic turnover is the most possible scenario.

**Some of the issues which need to be addressed are;**

- 1. Level of risk in supply level,**
- 2. Internal generation of wealth,**
- 3. Sources of funding, overseas and in Africa,**
- 4. Obtaining the co-operation of consumers with regard to payment and managing their water consumption effectively is an important business aspect**



Positioning of the Botswana Water Centre

In the figure following The Black arrows denote public, the hatched arrows private and white arrows community.

The 6 models are;

1. **ABO**: Authority **B**uilt and **O**perated
2. **APE**: Authority-**P**rivate **E**nterprise (Built and Operated)
3. **PBO**: **P**rivately **B**uilt and **O**perated
4. **PBC**: **P**rivately **B**uilt, **C**ommunity Owned
5. **CDO**: **C**ommunity by **D**onation **O**wned and Operated
6. **CBO**: Community Built and Operated

Successive schemes are drawn with increasing community input.

**The first** is often objected to by the community, whereas **the last** is likely to have management problems.

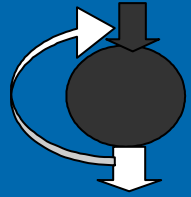
**Model 4** will let all parties become involved, but

**Model 5** may be preferred by some donors if there is an apparent lack of institutional capacity.

In all cases the interest and responsibility of the community is expected to be increased.

# ALTERNATIVE PUBLIC-PRIVATE-COMMUNITY SERVICE STRUCTURES

**Acronym**  
1.  
ABO

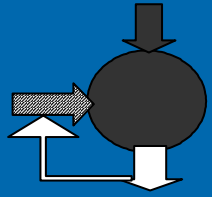


**Characteristics**  
Municipal built, operated

**Comments**  
Autocratic  
Common



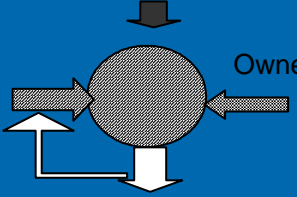
2.  
APE



Installed by Authority  
Operated by Private Co.

Professional  
management

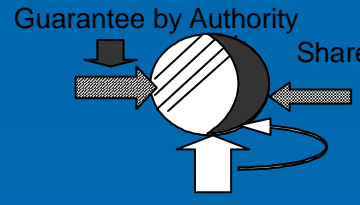
3.  
PBO



Owned + operated by  
Private Co.

Private finance.  
Risky

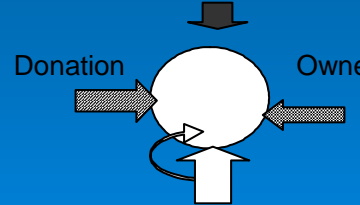
4.  
PBC



Guarantee by Authority  
Shared ownership

Capacitating.  
Legalities?.

5.  
CDO



Donation  
Owned by Community.

Alternative tech  
possible

6.  
CBO



Community owned  
eg Rural

No advance.  
Common in country

A=Authority  
B=Built  
C=Community  
D=Donor  
E=Enterprise  
F=Facilitator  
G=Group  
O=Operate  
P=Private





THANK YOU ALL!!

