

#### WaterNet short course Financing of Water Infrastructure projects

#### Trends in financing of water infrastructure

#### Jaap Arntzen 11<sup>th</sup> April 2018, Johannesburg, South Africa



## Structure of presentation

- Growing public financing gap
- Levelling off of international assistance
- Water sector reforms
- Search for private investments

New sector financing paradigm: 1. Better creditworthiness, 2. Leveraging of capital, 3. Minimise capital requirement, 4. Better targeting of capital, 5. Readjust strategies of banking institutions – water is a key development component

HLPW, 2018

#### Main trends

- Growing funding gap
- Levelling off of ODA
- Search for new funding sources, particularly from private sector
- Drive towards Irrigation: food and water security?

# Growing Funding Gap

With growing infrastructure in place, the service gap becomes more important

- *Funding gap*: how much is needed? Solution: increased funds. *Service gap* for what? Solution: better targeting and increasing efficiency.
- Camdessus report: need to double funding in water sector to US\$ 30 p.a. Reality; only marginal increase.
- Back log for Africa: US\$93 billion p.a. (capital investments: US\$61 billion; O&M US\$32 billion)
- High level political forum 2018: realising SDG6 by 2030 requires US\$1.7 trillion investment
- Global estimates vary between \$6.7 trillion (2030) to \$22.6 trillion in 2050 (HLPW 2018)
- Country differences:
  - LIC mostly depend on aid (1T);
  - Otherwise dominance of public funding (2Ts)
- Possible causes:
  - Less 'traditional' funding available: e.g. ODA and domestic government funding
  - Low capacity to attract new funding sources, especially from private sector.
    - Lack of suitable HR capacity
    - Water sector not attractive
    - Poor proposals

Need for pro-poor subsidies: households provide twothirds of funding for drinking water & sanitation (HLPF 18)

## Progress of SDG 6 in 2017

- Water and sanitation access:
  - 6.6 billion people (90+% of the world's population) used improved drinking water sources
  - 4.9 billion people (around 70% of the world's population) used improved sanitation facilities.
  - People without access live predominantly in rural areas. Need for accelerated investments in rural areas.
- A 2016-2017 survey found that over 80 per cent of 74 responding countries had clearly defined procedures for engaging service users/communities in water and sanitation management.
- More than 2 billion people globally are living in countries with excess water stress (withdrawals over 25% of renewable fresh water resources. Northern Africa and Western Asia experience water stress levels of 60+%.
- More than half of the countries now have IWRM plans.
- ODA for the water sector:
  - Rising but constant as a % of total ODA disbursements (around 5%)
  - In 2015, ODA disbursements in the water sector totalled about \$8.6 billion (a 67% increase over 2005)
- Source: based on Report of the Secretary-General, "Progress towards the Sustainable Development Goals", <u>E/2017/66</u>

## ODA 1990-2004 review & transfers

- ODA water sector increased less than overall ODA.
- High level political forum: aid commitments are falling.
- ODA for water sector increased from \$2.6 billion in 1990 to US\$3.4 billion in 2004. Two thirds water; one third sanitation.
- Most ODA for water come from few countries: Germany, France, IDA, Japan & USA,
- For Africa:
  - ODA highest in north Africa (absolute figures)
  - ODA per capita highest in Sub-Saharan Africa and north Africa.
- Country determinants of ODA:
  - Population size
  - Economic & political stability
  - Geostrategic visibility
- New 'uses:
  - ODA is important to leverage private sector funding
  - Development of special water facilities (e.g. African Water Facility & SADC Water Fund)

Special attention is needed for countries with a weak water infrastructure and no capital markets (source: Task Force on Financing Water for All.

# Search for new funding sources

- Realisation: tariffs and subsidies cannot meet funding requirements in LICs, especially for the poor.
- Shift towards greater private investments
- Requirements:
  - More attractive water sector
  - Favourable enabling environment
  - Reduce the risks and increase the benefits.
- Use of concessionary & public funding as leverage for private funding

# Making water infrastructure fit to finance (source: OECD, 2010)

- Demonstrate the value of water security to economic growth & development
- Increase multi-purpose water infrastructure
- Establish an enabling policy and regulatory environment
- Use competition and innovation where possible
- Overcome inefficiencies
- Balance financial risks and rewards
- Maintain old finance but 'grow' new finance sources- opportunities

#### Water sector reforms

- Common in many countries
- Purpose is to secure a more sustainable, efficient, affordable and transparent water sector
- Components:
  - Separation of responsibilities, in particular water resources management & water provision
  - Independent water regulator for performance assessment of water service providers.
  - Integration of water and wastewater operations and charges.

## Water sector reforms (WSR) in Botswana

- Purpose of WSR:
  - Separation of roles and responsibilities
  - More efficient water supply
  - Increased re-use and recycling of wastewater
- The reforms:
  - One single water service provider (parastatal Water Utilities Corporation)
  - Integrated management of fresh water supply & wastewater treatment (WUC)
  - Dep. Of Water Affairs responsible for:
    - Water resource management and planning
    - Planning & construction of large water infrastructure.
  - New water regulator (not yet established)
- Results:
  - Roles & responsibilities clearly separated: capacity & knowledge constraints of WUC
  - No increased re-use and recycling <u>as yet</u>
  - No increased water efficiency <u>as yet</u>:
    - Water losses have increased
    - Supply costs have not decreased need for extra subsidies

## Food security versus water security?

- Irrigation in Africa:
  - High potential and low uptake.
  - Water intensive: consumption and use
  - High water consumption & low productivity compared to other economic sectors
  - Common plans for large scale irrigation
- Key questions:
  - What is the irrigation sector's ability to pay?
  - What are the opportunity costs?

#### Example of Cubango Okavango River Basin

- Irrigation now accounts for around two third of all water abstractions
- Current water charges are very low or 0.
- Irrigation is the core of most development plans in the basin (Angola & Namibia). Share of irrigation in water abstractions may increase to over 90%.
- Irrigation judged uneconomic in TDA but economic in MSIOA
- High development scenario threatens the downstream Okavango Delta & Botswana's tourism sector
- Possible management interventions:
  - Cautious development in the basin
  - Review irrigation plans vis-à-vis other benefits of other sectors
  - Water-efficient irrigation
  - Consider proper water use charges

'While this may properly reflect plans at the national level such as Plan Gerale and the Green Scheme, it is unlikely to maximise the basin's valued added as the value added in the irrigation sector is much lower than that of other economic sectors' (OKACOM, 2011)

#### Literature

- Clermont, Florence (2006). Official Development Assistance for Water from 1990 to 2004. World Water Council.
- Gurria, A (2014). Financing Infrastructure for a Water Secure World. OECD speech.
- Fay, M. *et.al.*, (2017). Rethinking infrastructure in Latin America & the Carribean: spending better & achieve more. World Bank.

#### THANK YOU

Contact details: Dr. Jaap Arntzen jarntzen@car.org.bw info@car.org.bw www.car.org