


LIMITED RECOURSE PROJECT FINANCE FOR SUCCESSFUL PUBLIC INFRASTRUCTURE INVESTMENTS – THE CASE OF TCTA

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- ▶ **Challenges of financing large water resource infrastructure**
 - ▶ **TCTA's original role: Lesotho Highlands Water Project**
 - ▶ **TCTA's transition to generic water financing institution**
 - ▶ **Subsequent projects show the limits to the model**
 - ▶ **Some lessons and possible future trends**
 - ▶ **Conclusions**
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- ▶ **Large and lumpy, Long time frames**
 - ▶ Decade to conceive and built
 - ▶ Life spans 50 years +
- ▶ **Variability of supply – and demand?**
 - ▶ Climate affects both inputs and outputs
 - ▶ Sharing the ‘take or pay’ risks
- ▶ **What is being provided?**
 - ▶ Water? Reliability?
- ▶ **Externalities and changing social values**
 - ▶ Environmental issues, User priorities
- ▶ **Mobilising cash flow for different services**
 - ▶ Supply; ‘insurance’ (reliability); quality; amenity?

LARGE WR INFRA FUNDING CHALLENGES

LARGE WATER INFRASTRUCTURE – MAY BE MANY YEARS BEFORE IT IS USED



Desalination plant, Sydney Australia

Commissioned:-	2010 – not yet used
Capital Cost:-	A\$2 billion (ZAR19 billion)
Household cost:-	ZAR925/year (standby)
Household cost:-	ZAR1287/year (producing)





**SOUTH AFRICA HAS
ONE TOO:-**

**STERKFONTein DAM
SA'S 3RD LARGEST
(NO RELEASES
BETWEEN
1995 AND 2016)**

**TCTA ESTABLISHED
IN 1986 - TO FUND
PHASE 1 LESOTHO
HIGHLANDS
WATER PROJECT**



- ▶ Constraints on public budget – incentive to raise private finance
- ▶ Exploiting the TCTA's capabilities
 - ▶ (NWA 1998 allowed Ministerial Directives for new activities)
 - ▶ Berg River dam (R1.6 billion; City of Cape Town, main beneficiary)
 - ▶ VRESAP - Vaal System resilience (R2.7 billion; SASOL, ESKOM)
 - ▶ Mooi-Umgeni transfer (R520 million; Umgeni Water consumers)
 - ▶ Komati Water Scheme Augmentation; (R1.2 billion; Eskom beneficiary)
 - ▶ Acid Mine Drainage Ph1; (R924 million, Vaal system tariff & subsidy)

TCTA'S TRANSITION TO GENERIC WATER PROJECT FINANCING



Berg River dam – 1st European Investment Bank ZAR loan



**VRESAP & KOMATI:- ESKOM & SASOL -
TCTA, NOT BALANCE SHEET FUNDING**



Fitch Affirms TCTA's Projects at 'AA+(zaf)'; Outlook Stable

Fitch Ratings-London-06 January 2015: Fitch Ratings has affirmed the ratings of five South African water projects implemented and funded by Trans-Caledon Tunnel Authority (TCTA) at National Long-term 'AA+(zaf)' with Stable Outlooks and at National Short-term 'F1+(zaf)'.

The five projects are Berg Water Project's (BWP), Vaal River Eastern Sub-System Augmentation Project's (VRESAP), Mooi-Mgeni Transfer Scheme phase 2's (MMTS-2), Komati Water Scheme Augmentation Project's (KWSAP) and Mokolo Crocodile Water Augmentation Project's (MCWAP)

The ratings apply to the projects' debt instruments (bank facilities and commercial paper programmes). The five projects are carried out by TCTA on behalf of the South African government through the Ministry of Water and Sanitation.

The affirmation primarily reflects the projects' flexible tariffs. TCTA projects achieve high ratings (on the National Rating scale) because the associated major risks (construction cost overrun, delay, volume and supply, financial) are covered by the flexible tariff mechanism, which is designed to pass on these risks to the end-users through the Department of Water and Sanitation (DWS). The tariff mechanism therefore helps mitigate most of the risks in the projects, resulting in ratings being close to that of the sovereign.

The projects are supported by a high level of government involvement and commitment through the inclusion of DWS in the tariff payment and debt service arrangement. The one-notch difference from the sovereign's rating reflects the lack of an explicit guarantee, some execution risk (the potential for a failure in financial planning) and political risks (the tariff can be adjusted, provided the government makes or ratifies the decision).

- ▶ **Need solid cash flow guarantee for limited recourse funding!**
- ▶ **Olifants River Water Resources Development Project**
 - ▶ No cost sharing agreement with *future* mines in regional system
- ▶ **Mokolo Crocodile Augmentation Project (Ph 2)**
 - ▶ Project definition uncertain due to energy policy fluidity
- ▶ **Mzimvubu dam, intended multipurpose**
 - ▶ Neither energy or agricultural agencies in support

TCTA'S MODEL HAS LIMITS

Challenge: awareness, willingness to use model

- ▶ *“in our context, it is not practical to ring-fence billions of rand for the possibility of a drought that might not come to pass.”*

Xanthea Limberg, Cape Town mayoral committee member
for water and waste services, 2017

- ▶ *“it is impractical to fast-track supply schemes of sufficient scale quickly enough to compensate for a drought.”*

(never heard of insurance?!)

**LARGE WATER INFRASTRUCTURE
DIFFICULT TO FINANCE?**

- ▶ **Limited recourse project funding has important benefits**
 - ▶ *Critically, imposes discipline on parties*
- ▶ **Incremental projects to increase capacity of existing systems**
 - ▶ *Easier than greenfield, single component projects*
- ▶ **Successful methodologies protect public from regulatory capture**
 - ▶ *Financial & technical systems analysis reflected in tariff structures*
- ▶ **Development from 'supply infrastructure' development**
 - ▶ *to quality issues - treatment, reuse and desalination*
- ▶ **TCTA's growth, development and future role and functions**
 - ▶ *Depends on water sector reforms*
- ▶ **Future role and functions –**
 - ▶ *Depends on coherent balancing of social and economic goals*

DISCUSSION – SOME LESSONS AND POSSIBLE FUTURE TRENDS

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STRENGTHS OF MODEL

**STRENGTHS CAN
BECOME WEAKNESSES!**

Water affairs bid to fix finances ‘has collapsed’

Auditor-General Kimi Makwetu gives the water and sanitation department a qualified audit opinion, and warns recommended changes have been ignored

02 OCTOBER 2017 - 05:57 KHULEKANI MAGUBANE



Auditor-general Kimi Makwetu. Picture: BUSINESS DAY

The Department of Water and Sanitation’s interventions aimed at cleaning up its shambolic financial state has fallen apart and is inadequate to pull it into a clean audit, says Auditor-General Kimi Makwetu.

He gave the department a qualified audit opinion for its 2016-17 financial year. In the previous year it incurred the highest irregular as well as fruitless and wasteful expenditure finding of any department.

Lessons from transforming a South African special-purpose vehicle into a project implementation agency

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The Trans-Caledon Tunnel Authority was established in 1986 as a special-purpose vehicle to implement the South African side of the binational Lesotho Highlands Water Project. In 2000, it was transformed into a generic public project implementing agency. In this role, it has funded and implemented the timely and economical delivery of large strategic water projects. Its implementation methodologies avoided many of the risks associated with such projects, due largely to the disciplines imposed by its financing model. However, the organisation remains subject to political uncertainties, which means that its project pipeline is dependent on unpredictable mandates, which limits its ability to plan its operations. It nevertheless provides a useful case study of the mobilisation of private finance for public sector infrastructure projects as well as the political challenges inherent in public sector institutional reform.

1. Introduction: the challenge of financing large water resource infrastructure

The Organisation for Economic Co-operation and Development (OECD, 2009) stated that there are just three generic sources of

(PAPER AVAILABLE)

- ▶ Will Lesotho Phase 2 succeed?
- ▶ Will TCTA and DWS trading structure be merged?
- ▶ Can the Minister overcome internal opposition?
- ▶ Will Gauteng realise that the AMD project is a scam?
- ▶ Can we imagine a national sanitation & water utility

IN THE NEXT EPISODE ?



CHAPTER THIRTEEN

CONCLUSION:- A PRIOR CONDITION?

Building a capable and developmental state

KEY POINTS

South Africa needs to build a state that is capable of playing a developmental and transformative role.

The public service needs to be immersed in the development agenda but insulated from undue political interference.