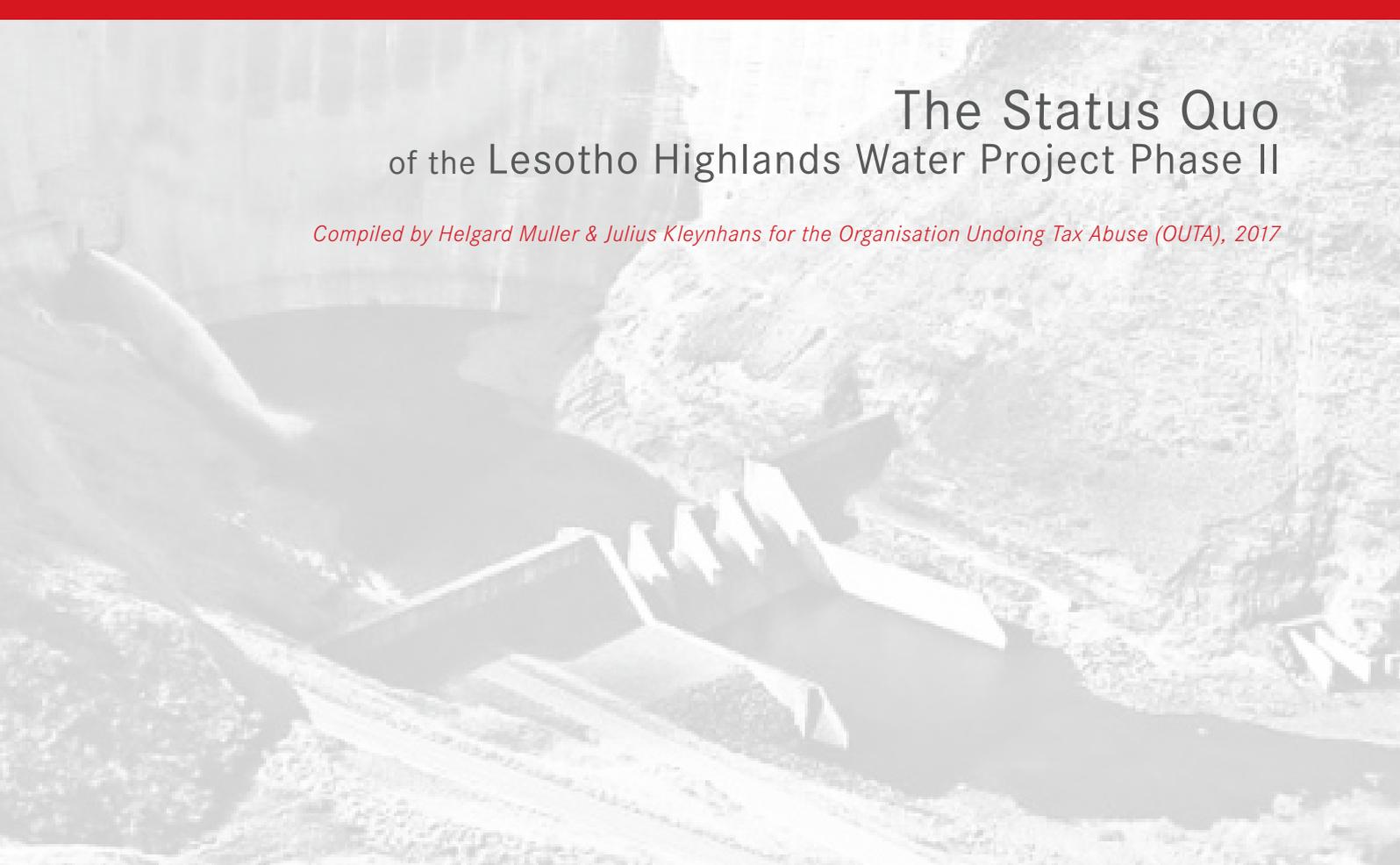




**OUTA**

Effective Civil Intervention



## The Status Quo of the Lesotho Highlands Water Project Phase II

*Compiled by Helgard Muller & Julius Kleynhans for the Organisation Undoing Tax Abuse (OUTA), 2017*

***“All procurement processes shall foster competitiveness, transparency, cost effectiveness and quality”***

- Article 10 (a) of the Agreement signed between the Kingdom of Lesotho and the Republic of South Africa on the Lesotho Highlands Development Project Phase II.

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**The Organisation Undoing Tax Abuse (OUTA) is a proudly South African Non-profit Civil Action Organisation, comprising of and supported by people who are passionate about improving the prosperity of our nation.**

The Status Quo of the Lesotho Highlands Water Project Phase II

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in Water Policy, Regulations and Institutions

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2017

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## **Abbreviations and acronyms**

DWS - Department of Water and Sanitation South Africa (previously DWA and DWAF)

LBWSRS - Large Bulk Water Supply Reconciliation Strategy

LHDA - Lesotho Highlands Development Authority

LHWC - Lesotho Highlands Water Commission

LHWP I - Phase one of the Lesotho Highlands Water Project

LHWP II - Phase two of the Lesotho Highlands Water Project

NAY- Nominal Annual Yield

NERSA - National Energy Regulator of South Africa

NWA - National Water Act

OUTA - Organisation Undoing Tax Abuse

PMU - Project Management Unit

PWC - Price Waterhouse Coopers

RFP - Request for Proposal

RSA - Republic of South Africa

SAICE - South African Institute of Civil Engineers

TSC - Technical Sub-Committee

# 1. Introduction

## 1.1. The purpose of this discussion document:

To provide the supporters of the Organisation Undoing Tax Abuse (OUTA), as well as the general public, with the following:

- An objective and critical evaluation of the current status of Phase II of the Lesotho Highlands Water Project (LHWP II).

To report on:

- The International Treaty, Protocols, and Agreement for the LHWP I and II;
- The institutional framework and governance structure for implementation of the LHWP II;
- Construction of LHWP I and the corruption trials following phase I;
- The engineering elements of LHWP II;
- The Lesotho Highlands Development Authority (LHDA) policy on corruption;
- Planned contracts for the execution of LHWP II;
- Progress with tendering and the awarding of contracts for LHWP II;
- Areas of concern identified in implementation LHWP II; and
- Water supply and risks for Gauteng.

This is in order to:

- Understand the critical role of LHWP II in water security for Gauteng;
- Provide background on the institutional and governance arrangements for LHWP II as well as the measures taken to prevent corruption;
- Provide detail of all the tenders to be awarded during the implementation of phase II as well as delays in the awarding of contracts and areas of concern;
- Identify aspects where the parties are contravening the stipulations of the Treaty, Protocols and/or Agreement; and
- Take actions to ensure water security, eliminate the risk of corruption and wasteful expenditure and promote the optimal use of income generated from water sales.

The Lesotho Highlands Water Project (LHWP) is a phased, multi-billion Maloti/Rand, bi-national development and is the largest interstate water transfer project in the world. It comprises of water transfer and hydropower generation components, as well as ancillary developments. The water transfer component entails the construction of dams and tunnels in Lesotho for the purpose of enhancing the use of water from the Senqu (Orange) River and its tributaries by storing, regulating, diverting and controlling the flow of water, to deliver specified quantities to South Africa. In addition, it aims to utilise the delivery system to generate hydro-electric power in Lesotho.

The major works of Phase I included the construction of the Katse Dam, water transfer and delivery tunnels, the Muela Dam, the Muela Hydropower Plant (Phase 1A) and the Mohale Dam (Phase 1B). Section two (2) of this report will provide details of the corruption trials stemming from LHWP I, including anti-corruption actions resulting from these investigations.

Phase II of the LHWP, discussed in detail in Section three (3) of this report, comprises two main components: a water transfer component to augment the delivery of water to South Africa and a hydropower component which will increase the electricity generation capacity in Lesotho. In addition, each country has the opportunity to undertake ancillary developments in its territory. The Phase II water transfer component includes a planned dam at Polihali and a gravity tunnel that will connect the reservoir at Polihali with the existing Katse Reservoir. The hydropower component will include the Kobong Pumped Storage Scheme or a similar scheme (the implementation of the Kobong scheme is still subject to agreement on the outcome of a joint final feasibility study.)

The advance infrastructure works include the demarcation of the reservoir, geotechnical studies and the design and construction of roads, bridges, housing and the telecommunications infrastructure as well as the professional services pertaining to the environmental, social and public health aspects of the project. These separate contracts will be discussed in detail in Section three (3).

## **1.2. Institutional and governance structures**

### **1.2.1. The Department of Water and Sanitation (RSA)**

The Minister of Water and Sanitation is the public trustee of the nation's water resources (in terms of article 3(1) of the National Water Act (No 36 of 1998). She is also the regulator of water services in terms of the Water Services Act (No 108 of 1997). The Minister, and for practical implementation, the Department of Water and Sanitation (DWS) is responsible for overall planning of water resources and water services. In this particular case, it means the responsibility for water supply to the Province of Gauteng as stated in article 3(1) of the National Water Act (No 36 of 1998). She is also the regulator of water services in terms of the Water Services Act (No 108 of 1997), she *"must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons and in accordance with its constitutional mandate"* National Water Act (No 36 of 1998). In executing this planning function the DWS had identified several projects to augment water supply to Gauteng including further water transfers from KwaZulu-Natal and Lesotho. Feasibility studies had subsequently shown that the most viable option would be the implementation of LHWP II. The DWS was then instrumental in negotiating an agreement with the Government of Lesotho on behalf of the South African Government.

### **1.2.2. Ministry of Energy, Meteorology and Water Affairs (Lesotho)**

The counterpart of DWS in Lesotho is the Ministry of Energy, Meteorology and Water Affairs who then represent the Kingdom of Lesotho on the Lesotho Highlands Water Commission (LHWC).

### **1.2.3. The Lesotho Highlands Water Commission (LHWC)**

In terms of the international treaty signed in 1986 between Lesotho and South Africa, hereafter referred to as the "Treaty" (Lesotho Highlands Development Authority, 1986), the two countries have established certain institutional structures (See figure 1) to harness the water from Lesotho for mutual benefit. The Lesotho Highlands Water Commission (LHWC) functions as the coordinating body

between the respective governments whilst the Lesotho Highlands Development Authority (LHDA) acts as the implementing agency for the LHWC in Lesotho and the Trans-Caledon Tunnel Authority (TCTA) as the implementing agency for those works in the RSA. Each country nominates its own representatives to represent it in the LHWC which is then responsible and accountable for the Project. It acts on behalf of and advises the two governments and it is the channel of all government inputs relating to the Project.



**Figure 1: High-Level Structures for LHWP (Lesotho Highlands Development Authority)**

Following the corruption trials stemming from Phase I of the LHWP (as will be discussed in detail in section two (2) of this report), the Treaty had been amended by means of six protocols. Most important for this report is Protocol VI (Protocol VI to the treaty on the Lesotho Highlands Water Project, 1999) dealing with Governance and the implications of these changes such as the Technical Sub-Committee (TSC) of the LHDA Board and the Project Management Unit (PMU). These structures will be further explained in sections 3.5 and 3.6 of the report.

#### **1.2.4. The Lesotho Highlands Development Authority (LHDA)**

The Lesotho Highlands Development Authority (LHDA) is the implementing authority for all infrastructure in Lesotho. That means the awarding of construction contracts as well as the ongoing operation and maintenance of the entire infrastructure in Lesotho, for the full duration of the project after construction has been completed. The LHWC appoints a Board of Directors for the LHDA which in turn appoints the Chief Executive. For the day to day running of the organisation, the Chief Executive is assisted by a team of executive members (EXCO) and Branch Managers.

Protocol VI (Protocol VI to the treaty on the Lesotho Highlands Water Project, 1999) amended the Treaty with the purpose to strengthen Governance, amongst other aspects, to provide absolute clarity of roles and responsibilities and establish institutions to foster good governance.

Article three (3) of this Protocol dealt with the restructuring of the functions, powers and obligations of the LHDA (Protocol VI to the treaty on the Lesotho Highlands Water Project, 1999) by stating:

*“Article 7 of the Treaty is hereby amended by deleting paragraphs (37) and (40) and by substituting the following paragraphs for the corresponding paragraphs in the Treaty and adding paragraphs (41) to (44):*

*The Board shall be accountable to the Lesotho Highlands Water Commission, shall give it its full cooperation and give full effect to the applicable provisions of Article 9.*

*Section (33) reads as follows:*

*“(a) states that The Lesotho Highlands Development Authority shall be managed and controlled by a Board which shall be appointed by the Lesotho Highlands Water Commission **and shall comprise executive and non-executive members appointed on merit and for such skills as may from time to time be determined by the Lesotho Highlands Water Commission provided that at least one non-executive board member shall be appointed from the public at large by virtue of his or her prominence or stature.***

*(b) The non-executive members shall be appointed from nominations submitted by Lesotho and the executive members from nominations submitted by the Chairman of the Board.*

*(c) The Chairman and Vice-Chairman of the Board shall be appointed by the Lesotho Highlands Water Commission from among the non-executive members of the Board.*

Section (34) (a) further notes that “[t]he Board shall in accordance with the provisions of the Treaty establish the operational policies of the Lesotho Highlands Development Authority on all matters with which it is entrusted.”

Although no formal notice could be traced on the LHDA website, informal inquiries indicated that the term of the LHDA Board ended on 31 March 2016. After a six-month lapse, the previous board was reappointed from 1 October 2016 to 31 May 2017 as an interim arrangement. It meant that the LDHA was without a governing board from 1 April 2016 until the end of September 2016- resulting in a delay of six months at a critical stage in the implementation of the LHWP II. The other vital implication is that the Technical Sub-Committee (TSC) also stopped to function after 1 April 2016. The TSC and PMU will be further discussed in sections 3.5 and 3.6 of the report.

### **1.2.5. The Trans-Caledon Tunnel Authority (TCTA)**

The Trans-Caledon Tunnel Authority (TCTA) was created in terms of the Treaty and the Agreement as the implementing agency for those components of LHWP that are in the Republic of South Africa. In Phase I, this meant the delivery tunnel between Muela and the Ash River outfall. TCTA is now fully accountable for the debt management and funding of the water transfer portion of the project as well as the operation and maintenance of the Delivery Tunnel North.

The Minister of DWS is accountable for oversight of public water entities created in terms of legislation such as water boards, catchment management authorities and in this case the TCTA.

## 2. Corruption during LHWP Phase I

### 2.1. Construction of phases 1(A) and 1 (B)

The major works of LHWP I included the construction of the Katse Dam, water transfer, and delivery tunnels as well as the Muela Dam and Muela Hydropower Plant (Phase 1A). In Phase I (B) the Mohale Dam and a tunnel were built connecting the Mohale reservoir with Katse.



Figure 2: Katse Reservoir with Katse to Ash River tunnel intake tower in background (Photo Aurecon)

The Katse Dam is a massive double curvature concrete arch dam on the Malibamat'so River that was completed in 1998. From the Katse reservoir, water is transferred under gravity via a concrete lined transfer tunnel of 45 kilometres to the Muela Hydro Power Station, from which the water discharges into the Muela Dam and from there into a second tunnel. This delivery tunnel is 37 km long and releases water at the Ash River outfall near the town of Clarens in South Africa. Water released then follows the natural water course down to the Vaal Dam.



**Figure 3: LHWP Phase 1 (A) Katse Dam Wall (Photo Aurecon)**

The implementation of Phase I (B) resulted in the completion of the Mohale Dam in 2002 as a very large rockfill dam, located on the Senqunyane River. At the same time, a 32-kilometre transfer tunnel was built between the Mohale and Katse Dams. The system is interconnected in such a way that water may be transferred in either direction for storage in Mohale or ultimate transfer to South Africa through the Katse reservoir. An additional component of Phase I was the Matsoku diversion weir transferring water to Katse reservoir.



**Figure 4: LHWP Phase I (B) Mohale Dam (photo from Wikipedia)**

The published Nominal Annual Yield (NAY) of Phase I is 24.7 cubic metres per second ( $\text{m}^3/\text{sec}$ ) or 780 million cubic metres per year (million  $\text{m}^3/\text{annum}$ ). Although the Katse Dam has a power generation capability for local use, the primary purpose is the storage reservoir for Phase IA, and to provide water

for discharge into the transfer tunnel. The first water was delivered to South Africa in January 1998 (Lesotho Highlands Development Authority, n.d). By the end of April 2016, a total of 12 850 million cubic metres of water have been supplied to South Africa through Phase I with the income so generated totalling close to R 7 billion Rand (Lesotho Highlands Development Authority, n.d).

## **2.2. Corruption trials following Phase I**

The five corruption trials following the implementation of Phase 1 of the LHWP draw tremendous international and local attention media attention for the following reasons:

- Government officials who received bribes went on trial as well as the private sector companies providing the bribing funds.
- Several well-known international companies were involved such as Acres (a large engineering consultancy firm from Canada, Lahmeyer (German engineering consultants), Spie Batignolles from France and a major Italian construction company.
- Certain individuals from Lesotho and South Africa played key roles as “middle men” for transfer of funds.
- It was a first time for a prosecution of this type and magnitude in Africa.
- It was also the first-time multinational companies were fined outside their home country for corruption.
- The top employee of the LHDA was sentenced to jail and the private companies fined for substantial amounts.

During the Stockholm Water Week in 2005, a paper on the LHWP Corruption Trials was delivered by Anton Earle and Tony Turton (Researchers from the African Water Issues Research Unit [AWIRU] at the University of Pretoria). The following is a summary of that presentation (Earle and Turton, 2005):

Mr. Masupha Sole was the key personality in the corruption trials who joined the Lesotho public service in 1972 and progressed to position of Senior Engineer, Water Affairs by 1986. From there he moved on as a seconded official to the LHDA as its first Chief Executive into a position of great power and responsibility. Questions were raised about his management style, specifically about staff appointments and finances. When a democratic government came to power in Lesotho in 1993 they took steps towards good governance and resulting from that the Minister of Natural Resources called for an audit of the LHDA affairs.

Investigations and an audit identified several irregularities related to Mr. Sole’s affairs. These included abusing of the housing scheme, charging personal expenses to work accounts, nepotism etc. These “irregularities” prompted the Lesotho Minister to launch a full-scale disciplinary inquiry at the end of 1994. Mr. Sole was so defiant that he challenged, in court, the Ministers’ right to hold an inquiry. He lost the case as well as the subsequent appeal resulting in the termination of his position at the LHDA.

During these proceedings, it became clear that Mr. Sole was living beyond his means showing the classic “red flags” of corruption such as expensive cars, gifts, and travel expenses. These investigations also revealed that substantial additional costs to the LHDA were incurred by Mr. Sole through the improper awarding of two specific contracts. During the civil action trial,

Mr. Sole's bank records were exposed showing the movement of substantial amounts of money whilst his bank manager testified that Mr. Sole had an undeclared bank account in South Africa. This South African account showed large and regular payments from a Swiss bank account also believed to be Mr. Sole's.

With the assistance of the Swiss authorities, the Lesotho prosecution team gained access to the Swiss banking accounts early in 1999. This was a breakthrough in the case and in October 1999 the court ruled that damages of more than R 8 million should be paid by Mr. Sole to the LHDA. This ruling led to Mr. Sole being criminally tried for the common law offense of bribery. At the criminal trials in July 1999, several charges of bribery and fraud were brought against 19 accused individuals and companies; the latter group included some international engineering firms. Judge Brendan Cullinan of Ireland (an ex-Chief Justice of Lesotho) was brought out of retirement for the cases. This was done to have a person with sufficient experience to handle the complex issues of the trials speedily and to counter any allegations of bias.

During the trials, it became evident that payments were typically made from a company to a representative agent (middle man) and then to Mr. Sole. A forensic audit of the accounts of the accused was carried out by PWC which showed movements of funds from the companies to the agents which were then promptly followed by another transfer, this time to Mr. Sole's accounts.

Mr. Sole was sentenced to 18 years which was later, after appeal, reduced to 15 years. Acres was found guilty of bribing a public official and subsequently fined close to R 15 million. This was the first multinational company to be successfully tried outside of its home country for bribery. Lahmeyer consultants were also sentenced and fined. Following the successful prosecution of Acres, the company was debarred in July 2004 for a period of 3 years from tendering for World Bank contracts. The LHDA has demanded that the bribes be paid back into the project funds. [This has been done by Spie Batignolles but interesting to note that in an article in 2004 it was reported that Acres had not yet paid] (Khuzwayo, 2004).

Earle and Turton (2005) found several factors influencing the trials that promoted the prosecution of bribery in the Lesotho case. These included changes to the Swiss banking law allowing some access to banking records. The World Bank made their records and outputs of their 2001 investigation into Acres available. The French government cooperated in the Spie Batignolles case. Fortunately, there was political support within Lesotho for the trials and no interference in the work of the prosecution team. Despite the lack of funding from the international community the LHWP provided bridging finance for the Impregilo trial.

Earle and Turton (2005) further noted factors that hindered the prosecution of bribery in the Lesotho case such as company name changes. There was also a World Bank letter requesting that Sole's suspension is lifted during his initial disciplinary investigation. Lack of financial support for the trials from the international community slowed the process down. The crime of "bribery" is not well defined in common law and most disturbing of all to find that "until recently bribery of a foreign official was

not a crime in most OECD countries". The prosecution was also held up by the complicated and opaque banking arrangements of the accused (Earle and Turton, 2005).

The following conclusions from the trials were drawn by the Earle and Turton (2005):

- Demand side, as well as supply side measures, need to be instituted against bribery;
- Much can be achieved when the political will to fight corruption is in place;
- The trials have improved governance in the Lesotho country; and
- Debarment from future internationally funded work is a credible threat.

The valuable lessons learned from these trials led to amendments through Protocols of the original Treaty signed in 1986 as will be discussed in the next section. Furthermore, an anti-corruption policy had to be adopted by the LHDA. In South Africa, the TCTA have added a specific section to their prequalification and final contracts dealing with bribery. For example firms must declare that if they have been accused of bribery anywhere in the previous 10 years that they have not and will not engage in bribery on this project. If the above is contravened the company may lose its profits on the contract (deemed to be 5% of the project cost).

## 3. Treaty on LHWP and Agreement on Phase II of the LHWP

### 3.1. Signing of Treaty (1986) and Protocols

The Government of the Kingdom of Lesotho and the Government of the Republic of South Africa concluded a Treaty on the Lesotho Highlands water Project on 24 October 1986 and then implemented Phase I. Since then a total of six protocols were negotiated and concluded after the signing and ratification, of the 1986 Treaty on the LHWP namely:

- Protocol 1 to the Treaty - Royalty Manual (1988).
- Protocol 2 to the Treaty - SACU Study (1988).
- Protocol 3 to the Treaty - Apportionment of Liability for Costs (1991).
- Protocol IV to the Treaty - Supplementary Arrangements (1991).
- Protocol V to the Treaty - Supplementary Arrangements - Project Tax (1999).
- Protocol VI to the Treaty - Supplementary Arrangements - Governance (1999). This protocol is of special importance as it provided for certain key measures to prevent a recurrence of the corruption during LHWP I.

Phase II did not follow automatically after completion of Phase I. Some alternative water supply projects to augment the Vaal River System (e.g. further transfers from the Thukela River) had to be considered and evaluated. The resulting feasibility studies were done on such alternative projects as well as an achievability study on Phase II of the LHWP then proved the latter to be the preferred project. Since the Treaty of 1986 did allow for the further implementation of LHWP an agreement on Phase II was negotiated. This Agreement on the LHWP II was signed on 11 August 2011 between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (Lesotho Highlands Development Association, 2011).

Although the Phase II Agreement was signed by the two Parties in August 2011, it was not automatically ratified and implemented once signed. The reason for this was that the constitutional requirements for entry into force needed to be complied with first. The Government of the RSA ratified the Agreement in November 2012 and the Government of Lesotho did so in May 2013.

The 1986 Treaty, today, remains valid as it deals with various aspects that are not covered in the Phase II Agreement. Hence, the two documents need to be read together. Figure 5 below provides a graphic presentation of the sequence of events.

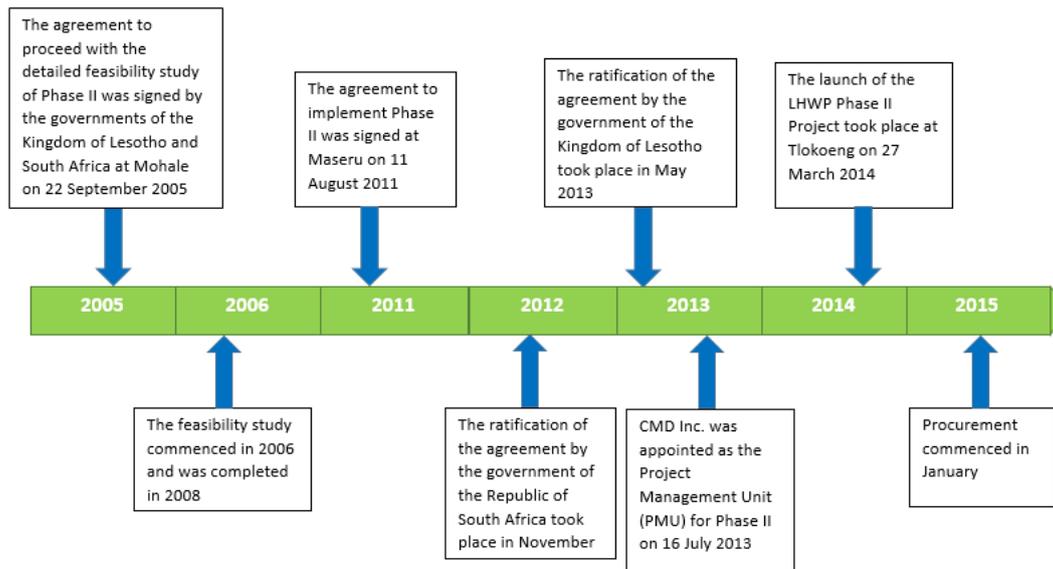


Figure 5: Diagrammatic representation of agreements and approvals leading to start of LHWP II

### 3.2. Main Contents of Agreement (2011)

The articles in the Agreement make provision for implementation, institutional arrangements and governance, operational and hydropower arrangements, cost allocations, and financing arrangements. There are specific clauses on the procurement of goods and services and anti-corruption measures. The annexure to the Agreement provides more detail on the project as well as a cost apportionment schedule (LHDA, 2011). For this report, the following discussion will be restricted to a brief description of the project and later more focus placed on the procurement and anti-corruption measures.

### 3.3. LHWP II Project Description

Annexure 1 of the Agreement provides the following description of the main components of Phase II: *“The Polihali Dam will be constructed downstream of the confluence of the Senqu and Khubelu Rivers and will be 163,5 metres high concrete faced rock-fill embankment dam wall. The crest length will be 915 metres with a full supply level of 2075 metres above sea level. A 49,5 metres high saddle dam will also be constructed as well as a side channel spillway.”* (Lesotho Highlands Development Association, 2011)



Figure 6: Map indicating main components of LHWP II. (From LHDA website)

It further states: “The Polihali to Katse Tunnel will be constructed to transfer water from the Polihali Reservoir to Katse Dam. The tunnel will be 38,2 kilometres long, with a diameter of 5,2 metres and sized to convey a peak power generation flow of 35 cubic metres per second.”

Other works described are a proposed pump storage hydro power scheme (dependent on feasibility studies) and access roads, electricity supply and accommodation for construction workers as well as upgrading of community facilities.

In the feasibility reports the cost of the project was estimated as (cost as on December 2011 and no escalation applied) (AHK):

Water Transfer Cost:	R 9,280 billion
Hydropower component:	R 8,092 billion
Total cost (2011) for LHWP II:	R 17,372 billion

Just taking the annual price inflation into account since 2011 the estimated cost has risen to R22,913 billion in 2016 (Frankson, 2016). At the annual tariff consultation done in August 2016 for major water users of the Vaal System, the TCTA used an **estimated capital cost of R 25,1 billion for LHWP II** but clearly stated that the actual costs will only be known once the construction tenders had been awarded (TCTA, 2016).

### 3.4. Procurement and Anti- Corruption Measures

The procurement of goods and services are covered in article 10 of the Agreement whilst article 16 deals specifically with anti- corruption measures (LHDA, 2011).

Sub-articles 10(a) and 10(b) read as follows:

*“The Lesotho Highlands Development Authority shall, in the procurement of all goods and services, apply and give effect to the following procedures:*

- (a) All procurement processes shall foster competitiveness, transparency, cost effectiveness and quality,**
- (b) Preference shall be given to suppliers of goods and services, including consultants and contractors, in Lesotho, South Africa, the Southern African Development Community member states and then internationally, in that order; Provided that the provisions of paragraph (a) shall always be satisfied;**

Section 16 that deals with anti-corruption measures stipulated as follows:

(1) *“The Lesotho Highlands Development Authority shall develop and adopt a comprehensive anti-corruption policy for the project, having regard to the experiences of Phase I and the worldwide best anti-corruption practices developed for major international projects” (LHDA, 2011).*

The LHDA subsequently compiled an anti-corruption policy pursuant to Article 16 of the Agreement on Phase II that was adopted in 2011 and states: (LHDA, Oct 2011)

- “6. All persons or entities involved in the project must observe the highest standards of ethics.*
- 7. The Project Authority shall take all appropriate measures to combat corruption in all its forms.*
- 8. All contracting parties or entities and persons otherwise involved in the Project shall take all appropriate measures to prevent and combat corruption and to refrain from engaging in corruption in connection with their involvement in the project.”*

Note: Both the LHWC and the LHDA are included in the definition of “Project Authority”.

The policy then proceeds in describing corruption by defining a “corrupt practice, a fraudulent practice, a collusive practice, a coercive practice” as well as an “obstructive” practice.

Sections 14 to 16 of the Anti- Corruption Policy deals with the exclusion at the sole discretion of the Project Authority of any contractor, or any employee or former employee or any individual, that “was previously involved or implicated in corruption” from involvement in the Project. (Lesotho Highlands Development Association, 2011)

Section 20 has as its aim to ensure that all involved are held personally accountable whilst section 21 targets the protection of whistle-blowers.

*“20. All contractors and consultants as well as their employees and agents, as well as employees of the Project Authority (i.e. employees of the LHWC and the LHDA) involved in the project, shall commit themselves to taking all appropriate measures to prevent corruption and shall immediately report to the Project Authority any corruption that comes to their attention, and any failure to report shall be deemed to constitute corruption. (Lesotho Highlands Development Association, 2011)*

*21. The Project Authority shall do everything in its power to protect the identity of employees who act in terms of their aforesaid obligation to report instances of corruption. In addition, the Project Authority shall seek to ensure that such employees are not victimised or otherwise discriminated against as a result of their so reporting” (Lesotho Highlands Development Association, 2011).*

### **3.5. Technical Sub-Committee of the LHDA**

Article 6 of the Agreement of 2011 specifies the Technical Sub-Committee (TSC) and the Project Management Unit (PMU) as two key structures to ensure efficient and effective execution of the LHWP II by the LHDA.

The TSC is constituted in Article 6 (1) (a) of the Agreement of 2011 as:

*"The Board of the Lesotho Highlands Development Authority shall establish a Technical Sub-Committee to advise and assist the Board with regard to technical, engineering, environmental and social matters relating to the implementation of Phase II. The Technical Sub-Committee shall be chaired by a member of the Board and comprise members of the Board and external specialist members appointed by the Board in consultation with the Lesotho Highlands Water Commission."*

When the term of the TSC ended in March of 2016 a new TSC could not be appointed because of the gap in the Board itself so the TSC stopped functioning. Only in October 2016, after half a year of standstill, the previous TSC was re-appointed for an interim period up to end of May 2017.

### **3.6. The Project Management Unit of the LHDA**

Article (2) (a) and (c) of the Agreement of 2011 specifies the PMU as follows:

*2(a) The Lesotho Highlands Development Authority shall establish, as part of its institutional arrangements, a Project Management Unit to oversee and manage the implementation of Phase II and shall delegate to it the powers necessary for this purpose.*

*(c) The Project Management Unit shall be staffed by professionals with experience in the construction and implementation of large water resource and hydropower projects, who shall be competitively procured through an open tendering process.*

In October 2013, the LDHA issued a press release, which provided, amongst others:

*"The Lesotho Highlands Development Authority has successfully implemented Phase I of the Lesotho Highlands Water Project. This comprised the construction of the Katse and Mohale Dams as well as the 'Muela Hydro Electric power station. The social and environmental programmes are on-going.*

*The preparations for the implementation of Phase II of the Project (LHWP) are underway. Commencement of the work on Phase II was marked by the appointment of CDM International Inc. as the Project Management Unit (PMU) for Phase II on the 16th July 2013. The PMU started its assigned work on the 19th of August 2013.*

*Based at the LHDA Headquarters in Maseru, the PMU is responsible for the day-to-day management, coordination, monitoring, and delivery of LHWP Phase II works and related social and environmental programmes. The PMU is a multidisciplinary service provider with extensive expertise in managing the implementation of large water transfer schemes involving dams and tunnels and the associated infrastructure.*

*The programme has already commenced with the implementation of baseline studies and planning of advanced infrastructure which will lead to the construction of access roads to the project area, including site camps, power lines, telecommunications, water, and sanitation services."*

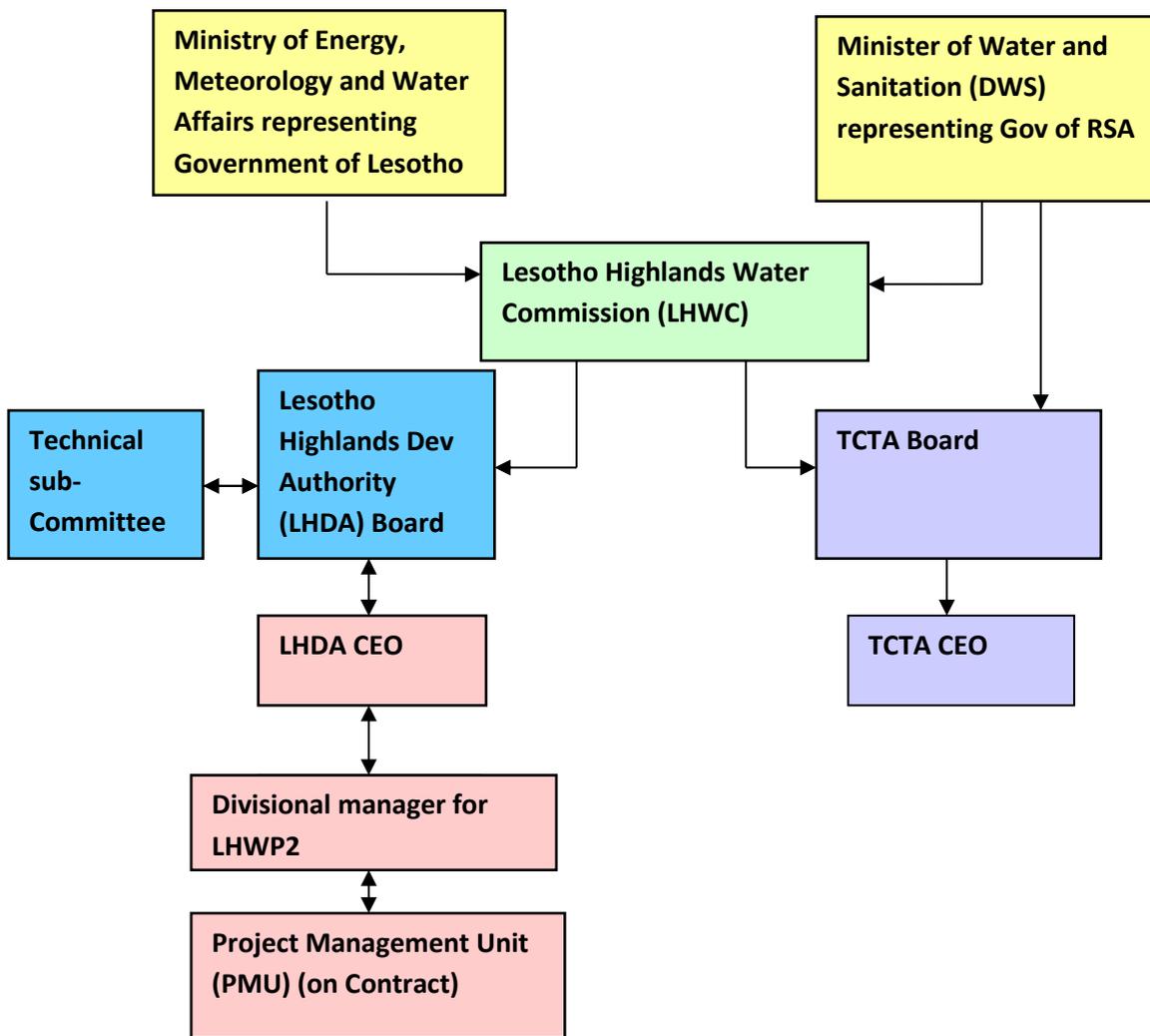


Figure 7: Graphic interpretation of the entities and structures for LHWP II based on the Agreement of 2011. (H Muller)

### 3.7. Planned contracts for LHWP II

According to the Master Programme version 10.7 on the LDHA website, there will be a minimum of 35 contracts to be concluded during the implementation of LHWP II.

These contracts are summarised as follows with a few critical contracts highlighted: (detail from the LDHA website, LDHA, 2016)

**Table 1: Summary of main contracts for LHWP II. (From LDHA Website as on 22 July 2016)**

Contract description	Contract number	Closing date	Contract awarded	Successful contractor or service provider
<b>Group 1: Engineering Services</b>				
Survey and Construct Beacons – Demarcation of the Polihali Reservoir	3017		24-04-2014	Maleka, Ntshilele, Putsoa Joint Venture
Geotechnical Engineering Services (Professional Services for the Evaluation, Optimisation and Site Supervision of Geotechnical Investigations)	3015		28-04-2015	Jeffares and Green in association with GWC Consulting Engineers
Design and Supervise Polihali North East Access Road (NEAR)	3014		28-04- 2015	SMEC-FMA Joint Venture
Design and Supervise Polihali Western Access Road (PWAR)	3004	8 -06 -2015		
Design and Supervise Bulk Power Supply & Telecommunications	3008			
Design and Supervise Town Planning, Housing & Infrastructure	3009		26-11-2015	Polihali Infrastructure Consultants- Mott MacDonald PDNA and Khatleli Tomaene Moteane JV
Phase II Hydropower feasibility	3010	10-08-2015	03-03-2017	Unknown
Design and Supervise Katse Lodge Upgrade	3019			
Design and Supervise Roads and Major Bridges	3020	06-03-2017		
Design and Supervise Feeder Roads & Bridges	3005			
Design and Supervise Polihali Diversion Tunnel	3022	11-5-2015	7-10-2016	Critical contract. MSKC Joint venture, with Mott McDonald PDNA (RSA), Gibb (RSA), Tractebel Engineering SA (France) and Lyma Consulting Engineers (Lesotho) as members
Design and Supervise Polihali Dam	3006	14-09-2015	Delayed	Critical contract. Final revised bids received December 2016 and program estimates award by June 2017
Design and Supervision of Polihali Transfer Tunnel	3007	12-10-2015	Delayed	Critical contract. Revised bids were

				received on 9 January 2017 and are currently being considered, Program estimates award by late June 2017.
<b>Group 2: Environmental, Social and Public Health</b>				
Health Impact Assessment & Public Health Action Plan	6018	18-04-2017		
Resettlement Planning and Implementation (RAP - Western Facilities Resettlement & Compensation)	6017	17-08-2015		
RAP - Polihali Western Access Corridor	6006	22-06-2015		
Professional Services for Safety, Health Environment and Quality Framework (SHEQF)	6010		28-10-2016	
RAP - Polihali Reservoir Area	6015		2-09-2016	
RAP - Feeder Roads & Minor Bridges	6012			
Environmental and Social Impact Assessment (ESIA) - Western Facilities	6016	20-07-2015	21-10-2016	
ESIA - Polihali Western Access Corridor	6004	18-05-2015		
ESIA - Project Housing, Dam Site & Basin	6014		22-08-2016	
ESIA - Feeder Roads & Minor Bridges	6019			
Professional Services for the development of a cultural development plan	6025	12-12-2016		
Professional Services relating to principal controlled insurance	9004	18-01-2016		
<b>Group 3: Construction contracts</b>				
Geotechnical Investigations for Polihali Dam and Transfer Tunnel	4016		11-11-2015	
Construction of PNEAR (Polihali North East Access Road)	4012			
Construction of PWAR (Polihali West Access Road)	4017			

Construction of Bulk Power Supply & Telecomms	4005			
Construct Housing, Camps, Services, Roads	4018			
Construction of Refurbishment (Katse lodge?)	4010			
Construction of Major Bridges	4019			
Construction of Feeder Roads and Bridges	4022			
Construction of Polihali Diversion Tunnel	? not listed			
Construction of Polihali Dam	4020			
Construction of Polihali Transfer Tunnel	4021			

### 3.8. Delays in the awarding of critical contracts

There are at least three critical contracts (pre-actual construction) in the Engineering Services group (highlighted in table 1 above) namely:

- The contract for the **engineering design and supervision of the Polihali Diversion Tunnel- contract no 3022**: This diversion tunnel should have been designed, built and completed by 2019 to enable full-scale construction work on Polihali Dam. (Lesotho Highlands Development Association, 2016). The bypass tunnel is a critical component as it will divert the flow of the Senqu river through the mountain flank to enable construction of the main dam at the site without interruptions by river flows. After some delays the consultants have been appointed in October 2016 namely: MSKC Joint venture, with Mott McDonald PDNA (RSA), Gibb (RSA), Tractebel Engineering SA (France) and Lyma Consulting Engineers (Lesotho) as members
- The contract for the **engineering design and supervision of the Polihali Dam- contract no 3006**: It is clear that the sophisticated design work on the dam wall should proceed to such a point that tenders can be invited for the bidding process on the construction of the dam wall. Although bids closed on 14-09-2015 and awarding of the tender to the successful consultants was planned for mid-2016 (Lesotho Highlands Water Development Association, 2016) there were substantial delays and political interference in the process with the result that the consultants have not been appointed yet. Final revised bids were received in December 2016 and latest estimates aim at award by June 2017- therefore one year later as per revised plan.
- The contract for the **engineering design and supervision of the Polihali Transfer Tunnel- contract 3007**: It should be evident that a completed Polihali Dam will be of no value to Gauteng if the Polihali transfer tunnel is not completed to take water to Katse Dam and from there to the Vaal River System. Although bids closed on 11-05-2015 and awarding of the tender to the successful consultants was planned by mid-2016 (Lesotho Highlands Water Development Association, 2016) there were also, in this case, substantial delays and political interference in the process with the result that the consultants have not been appointed yet. Final revised bids were received in January 2017 and latest estimates aim at award by June 2017- therefore one year later as per revised plan.

The procurement process for these sophisticated large engineering services involves a process that must “ensure integrity and foster competitiveness, transparency, cost-effectiveness and quality. (LHDA, 2015). The total process including advertising, request for proposals (RFPs), two envelope bid submissions (technical and financial), technical bid evaluation, shortlisted bidders and the financial evaluation can take between 24 to 30 months. According to the latest Master Programme (version 10.7 obtained from the LHDA website) (LHDA, 2016), the pre-qualification process for the professional services on contracts 3006 and 3007 started as early in 2014 and was scheduled for awarding in the 3<sup>rd</sup> quarter of 2016. Due to the delays in the process imposed by the Minister of DWS it will be highly unlikely if these contracts are awarded before the middle of 2017.

### 3.9. Implications of the delays on LHWP II

All this will mean that the actual engineering design work on the Polihali Dam and Tunnel will only start in the second half of 2017. Then realistically assume another 12 months before designs are at such a stage that work can be put out to tender. The program allows for another 15 to 18 months of tender design and the tender period before a contractor can be on site. Add all this up and it is clear that the actual construction may not start until the middle of 2019. **Based on the current progress in the awarding of tenders and applying realistic timelines for such a complex project it is not foreseen that the first water could be delivered before the third quarter of 2025. This will be seven years later than planned.**

According to the glossy booklet that was made available at the WISA Conference in May 2016 “*Flagship Projects 2016/17-Department of Water and Sanitation*” (RSA, 2016) the LHWP is also listed as a major bi-national flagship project with status “*completion projected for 2018*” (page 28, RSA, 2016) It is clear that this is either a gross printing error or an indication of a Minister of DWS totally out of touch with the LHWP II.

Delays will have serious implications for the Province of Gauteng including:

- Risk of water shortages
- Cost overruns
- Economic restraint on development
- Social implications
- Royalties paid to Lesotho more than benefit
- 

These delays are being recognised by individuals, and entities, not directly involved in the implementation of the Project. When noting articles in the media one such person is Professor Mike Muller, a visiting adjunct professor at the University of the Witwatersrand, a former Director-General of Water Affairs and Commissioner on the National Planning Commission. He is also an international recognised professional in water engineering.

A recent article in Engineering News reflects on a speech made by Professor Mike Muller, and some of the key parts of the speech, according to Oliviera (2016), have been included below:

*“Speaking at this week’s South African Institution of Civil Engineering Civolution conference, the former Department of Water Affairs director-general emphasised the need for concern about the water resources that underpin water supply. ‘We need the Minister to explain why her department is reducing Gauteng’s water security and what she is going to do about it.’”*

*Muller outlined how Gauteng faced challenges with the construction of the second phase of the **Lesotho Highlands Water Scheme**. **“That project is already six years late,”** he said, adding that it was supposed to be completed by 2018. However, the design of the dam and tunnel had not even begun.*

*Although the Cabinet had authorised the procurement of consultants months ago, tenders had still not been issued, he decried. While Lesotho was ready to proceed, South Africa was holding up the process. **“What is the problem? Is somebody trying to do a deal with this vital project? We cannot afford to put the security of Gauteng’s economy at risk like this,”** said Muller.*

*He conceded that the Lesotho project’s process was “complicated, delicate and nuanced” involving two governments, a treaty, an estimated R10-billion capital cost and Lesotho running the procurement process and South Africa providing the funding at a time of significant financial stringency.*

*South Africa’s Trans-Caledon Tunnel Authority (TCTA) and the Lesotho Highlands Development Authority were required to work together to decide how to proceed and then to implement that decision.*

*The two governments had to study the implications and consumers in South Africa would need to start paying immediately once the contract was signed to avoid a sharp rise in water tariffs, as has taken place with electricity.*

***“I venture to say because we keep changing Ministers, I don’t think the Ministers actually even understand what needs to be done.”** He urged that Ministers be challenged to explain why they were taking so long. “Ask them to explain why the Lesotho government has asked South African parliamentarians to come and discuss the delays, which I believe has just happened,” Muller said, adding that he found it interesting that Lesotho should have to “very politely” call the South African government to account for the delays.*

*That the water crisis can only be expected to worsen is clear when considering another article, on 26th November 2015, by Ms. Liesl Frankson of *Infrastructure News*, indicating that the Republic of Botswana had all but secured an agreement with the Kingdom of Lesotho, and the Republic of South Africa, to utilise waste from the Lesotho Highlands Water Project, such development are to worsen the impact of project delays, presently being encountered, the article titled:*

***“Botswana has finalised a deal with South Africa and Lesotho to tap some of the water from the Lesotho Highlands Water Project.***

*According to a report by the Africa News Agency Botswana’s Minister of Mineral, Energy and Water Resources Minister, Onkodame Kitso Mokaila confirmed this at a conference in Gaborone on the diamond industry. The aim of the conference, organised by the diamond giant De Beers, London’s Chatham House think tank and the Botswana government, is to discover how Botswana can diversify its economy beyond the diamond industry which is the mainstay of the economy today. Mokaila said*

*that one of the constraints on diversification and beneficiation of the economy with new industry was the country's water shortage.*

*He described various projects which were being explored or undertaken to address the problem, including tapping water from the Zambezi River. And another was the three-nation deal to tap into the Lesotho Highlands Water Project which is a joint venture between Lesotho and South Africa through which Lesotho sells excess water to South Africa.*

*Mokaila stressed that the agreement was a "done deal" and it was now just a matter of drawing up a plan and a design to implement the agreement. A pre-feasibility study was now being conducted. He said that all three countries were part of the Orange River system "and so we all decided to work together". Asked how soon Botswana would tap the water, he said "as soon as possible" was the message which the three governments involved had told their officials who met last week to negotiate the deal. The next steps were to come together to draw up a plan and design and look at the impact on the communities along the route, and the environmental impact. "So that's as fast as we can move, making sure all that is done."*

The DWS Minister should be challenged on how this agreement with Botswana will affect the LHWP II, water security in South Africa as well as the cost to water consumers in Gauteng.

## 4. Conclusion

### 4.1. Findings of this report

#### 4.1.1. LHWP II at least 7 years late

Whereas the original intention at the signing of the Agreement was that water delivery from LHWP II will commence in 2019 the latest LHDA programme indicates it may only take place in late 2024 (Lesotho Highlands Development Association, 2016). Now in 2017, six years after the signing of the Agreement on LHWP II, the fact is that critical design contracts for Polihali Dam and Tunnel have not been awarded yet. (As discussed above- section 4.2). Taking note of realistic timelines for the actual design, tendering and construction of major structures the author is of the opinion that the first delivery of water from Polihali Dam can only happen in the third quarter of 2025. This is seven years later than planned. Every new delay in awarding of a subsequent contract will just further extend these target dates.

#### 4.1.2. LHWP II is of critical importance

Water supply from LHWP II is critical to the security of water provision for the Vaal River System and therefore in the economic and social development of not only Gauteng Province as the economic powerhouse of the nation but also the total South Africa. Water experts are warning that water shortages are expected long before 2024 as the flattening of the water demand curve is not happening. Excessive water losses and unaccounted for water can lead to water shortages within the next few years. **Therefore the project forms a critical component for water supply which is essential to ensure sufficient access to water as required by the Constitution.**

The water security of Gauteng is further compromised by poor management of the strategic Vaal River system. This is a complex water supply system and huge when compared on a global scale. It comprises of many dams, pump stations and inter-basin transfers from catchments such as Usuthu, Thukela and Orange Rivers to the Vaal as well as exports to the Crocodile and Olifants Rivers. Instead of the correct decisions based on scientific studies and evidence, it seems as if the operating rules are now determined by inexperienced managers under political pressure as the article from Engineering News quoted in section 4.3 above testified.

This article reported that Professor Mike Muller (2016) told the SAICE conference the following:

*“... for some reason, Water Affairs Minister **Nomvula Mokonyane** and her officials decided to release 10% of the water in Sterkfontein, the strategic water reserve of the province of Gauteng. “That is enough to keep Rand Water working for two months. They promised to replace it rapidly,” he explained. Six months later, the dam was still 10% lower than it should be. “We need the Minister to explain why her department is reducing Gauteng’s water security and what she is going to do about it.”*

The recent drought has put Gauteng businesses and residents under severe pressure and water constraints. The Minister applied water restrictions throughout Gauteng, increased water tariffs and fines were issued to those who did not comply. Yet, no action was taken against the Minister and her team for the negligent decisions they made and for her delaying the LHWP II in 2016.

#### **4.1.3. Legal framework in place to prevent corruption**

As discussed in section three (3) above the hard but valuable lessons learned from the corruption trials following LHWP I were well incorporated into Protocol VI as well as the Agreement for LHWP II signed in 1986. This was also followed by the adoption of an Anti-Corruption Policy by the LHDA (Lesotho Highlands Development Authority, 2011). All the proper mechanisms are therefore in place and it remains the obligation of the parties to “... *implement all measures, including reviewing and expanding existing legislation, to prevent, uncover and prosecute any corrupt practices in respect of the Project*” as stated in Article 16(2) (LHDA, 1986)

#### **4.1.4. Interim LDHA board and lack of continuity.**

Informal inquiries indicated that the term of the LDHA Board as provided for in the Agreement of 2011 ended on 31 March 2016, the previous board was reappointed as an interim board after a gap period of six months. This lack of continuity would be a direct contravention of article 3 of Protocol VI assigned in 1999.

#### **4.1.5. Technical sub-committee was not functioning**

The TSC including the external experts as provided for in the Agreement of 2011, it stopped functioning for half a year until the previous TSC was re-appointed as an interim arrangement until May 2017. This is an untenable situation during such a critical phase of LHWP when key contracts need to be awarded. This is a contravention of article 6 (1) (a) of the Agreement.

#### **4.1.6. PMU in place staffed with well qualified and skilled professionals**

The establishment of the Project management Unit (PMU) is prescribed in article 2 (a) of the Agreement of 2011: “*The Project Management Unit shall be staffed by professionals with experience in the construction and implementation of large water resource and hydropower projects, who shall be competitively procured through an open tendering process.*”

Soon after signing the Agreement in 2011 the LHDA commenced with the prequalification process for the PMU. The process to procure the PMU was made public through a press statement released by the Lesotho Highlands Development Association (2015):

*“Twenty companies responded to the invitation for Expression of Interest and in November 2011 a short list of 6 entities was approved. The Request for Proposal (RFP) was issued to the shortlisted companies in December 2011. The closing date for the tenders was 30 January 2012. The evaluation process was concluded in August 2012. However, the contract was not awarded pending ratification by the respective governments. Ratification took place in May 2013 and the PMU Contract was awarded to CDM International Inc. in July 2013. “*

It is a reasonable assumption to accept that the PMU contract was awarded in full compliance with procurement procedures as stipulates in the Agreement of 2011. It can, therefore, be taken as a

positive step that the PMU is staffed with suitable qualified and skilled professionals who are in line with the provisions of Article 6 of the Agreement.

#### **4.1.7. Contracts awarded to date**

It was out of the scope of this brief to determine if all contracts awarded to date for LHWP II had been done free of corruption and in full compliance with article 12 of the Agreement that stipulates that: *“All procurement processes shall foster competitiveness, transparency, cost effectiveness and quality”*, (LHDA, 2015).

**The conclusion was drawn that since the technical sub-committee was in place up to 31 March 2016 and the PMU properly staffed that all contracts awarded up to that date were fully compliant.** This was further enforced by the following statement released in April 2015 by the Lesotho Highlands Development Association (Lesotho Highlands Development Authority, 2015):

*“LESOTHO HIGHLANDS DEVELOPMENT AUTHORITY CLARIFIES TENDER PROCESS FOR BIDDERS  
Maseru, 01 April 2015 – In light of questions posed around the Phase II bid process, the LHDA would like to clarify the tender process for all interested parties. The LHDA is committed to the delivery of Phase II of the Lesotho Highlands Water Project in accordance with the LHWP Anti-Corruption Policy.*

*The LHDA’s mandate as defined by the 1986 Treaty and the Phase II Agreement (August 2011) is to implement the successful delivery of the Lesotho Highlands Water Project. This mandate includes putting in place procurement policies and procedures that ensure the integrity of the procurement process which shall foster competitiveness, transparency, cost-effectiveness and quality. The procurement process for LHWP Phase II has been approved by the Lesotho Highlands Water Commission.*

*The procurement process ensures the fairness of bid evaluations, prevents potential interference with these processes and protects the integrity of the Project. It is followed rigorously and includes the following steps:*

- *Advertising of Requests for Proposals (RFPs) in local and South African media and on the LHWP Phase II website -Compulsory pre-bid meetings and site visits for all interested bidders;*
- *A two-envelope bid submission comprising a technical proposal and a financial proposal;*
- *The technical bid evaluation is based upon the evaluation criteria detailed in the RFP;*
- *Bids meeting the minimum threshold proceed to the financial evaluation; and*
- *The firm with the highest combined score is submitted for approval to the LHWC as the preferred bidder on the recommendation of the LHDA Board.*

*No disclosure is made prior to the completion of the bid evaluation and negotiation processes. On completion of the bid evaluation process and successful negotiations with the preferred bidder, an award is made. The financial bids of those bidders who did not meet the minimum threshold requirements in the technical evaluation are returned to them unopened. Unsuccessful bidders are formally advised after the award is made.*

*The LHDA is committed to open and frank communication with key stakeholders to ensure complete transparency. Public announcements on the awards are made on completion of the tender award process”.*

#### 4.1.8. Cost escalation expected due to delays

In the feasibility reports the cost of the project was estimated as R 17,372 billion (cost as on December 2011 and no escalation applied). At the annual tariff consultation done in August 2016 for major water users of the Vaal System, the TCTA used an **estimated capital cost of R 25,1 billion for LHWPII** but clearly stated that the actual costs will only be known once the construction tenders had been awarded (TCTA, 2016).

**Implementation delays will make the project even more expensive- and eventually cost water users and taxpayers much more. Cost overruns can become a heavy burden on consumers in Gauteng and make the water from LHWPII 2 unaffordable.** In a similar pattern, as had been seen in the case of Eskom's Medupi and Khusile power stations, the cost of such mega projects can escalate out of control unless very tight project management is in place at all times.

The lack of an independent water and economic regulator for water pricing in South Africa means that unlike electricity where NERSA is doing its best to contain electricity prices it remains unclear how the LHWPII tariffs will be controlled and regulated.

#### 4.1.9. Higher royalty payments due from 2019 and no benefit to SA

The concept of paying a royalty to Lesotho was developed as the most convenient method for this project and documented by a complex set of formulae and financial models documented in Protocol I to the bilateral Treaty, which itself took many years of negotiations to conclude. In terms of Article 12 of the Treaty (Agreement on Phase II of the Lesotho Highlands Development Authority, 2011) the RSA undertakes to share with Lesotho, by way of royalty payments, the benefits of the LHWPII. *The net benefit has been computed in accordance with the procedure set out in the Royalty Manual on the basis of 56% on the part of Lesotho and 44% on the part of RSA (AHK, unknown). The net benefit can in simplified terms be described as the difference between: "the cost, at its Present Value, of least cost estimate (Lesotho Highland Water Project) and the cost, at its Present Value, of the alternative or second least cost estimate water project with delivery capacity of 70m<sup>3</sup> (Orange-Vaal Transfer Scheme (OVTS))"* (AHK, unknown). **In South Africa, the project is funded by charging a levy to water users in the Gauteng region.** *"In Lesotho, the country's natural water resource is now referred to as 'liquid or white gold'. Under the Treaty the royalties consist of fixed and variable components. These are paid monthly and will go on until the Lesotho share of benefit has been fully paid (AHK, unknown)."* This is in addition to paying for the construction and on-going maintenance and operation of all structures required to facilitate the delivery of water including those in Lesotho.

Article 7 (3) of the Agreement (Agreement on Phase II of the Lesotho Highlands Development Authority, 2011) stipulates:

*"Royalty payments shall be calculated in accordance with Article 12 of the Treaty, but where the actual water deliveries are less than those stipulated in Annexure V to this Agreement, the quantities stipulated in Annexure V shall be used for the calculations.*

Table 2 below is an abstract of the volumes provided for the years 2016 to 2025 in Annexure V of the Agreement of 2011. Table setting out the “Minimum Quantities of Water for the Calculation of Royalties” (Agreement on Phase II of the Lesotho Highlands Development Authority, 2011).

**It is clear from this table that the minimum royalty payments will start to increase from 2019 which will have the implication that even though the LHWP will be unable to deliver more water to SA the Lesotho Government can claim higher royalty payments. South Africa may, therefore, be forced by the Agreement of 2011 to pay higher royalty payments for 5 to 6 years without enjoying the benefit of such additional costs.**

<b>Minimum Quantities for payment of royalties’ (Abstract from table in Annexure V of the Agreement 2011)</b>	
<b>Year</b>	<b>Minimum quantity (million cubic metres per year)</b>
2006 to 2018	780
2019	899
2020	913
2021	927
2022	941
2023	954
2024	968
2025	982
2026	996
2027 to 2044	1010 up to 1245 by 2044.

#### **4.1.10. Involvement of Mr. Sole in LHWP II**

According to the article in the City Press on 10 July 2016 (City Press, 2016) Mr. Masupha Sole has been appointed as an adviser to the Minister of Energy, Meteorology and Water Affairs who represent the Kingdom of Lesotho in dealings on LHWP II. The mere fact that Mr. Sole was found guilty in corruption trials following LHWP I and now apparently functions in another key role on LHWP II should be the reason for concern.

As mentioned in section 3.4 above the anti-corruption policy adopted by the LHDA is very clear on ethical standards for all persons involved (Agreement on Phase II of the Lesotho Highlands Development Authority, 2011):

*“6. All persons or entities involved in the project must observe the highest standards of ethics (LHDA, Oct 2011).*

*7. The Project Authority shall take all appropriate measures to combat corruption in all its forms (LHDA, Oct 2011).*

*14.. Where...any individual was previously involved or implicated in corruption.... such individual may be excluded from any involvement in the Project (LHDA, Oct 2011).*

Note: Both the LHWC and the LHDA are included in the definition of “Project Authority”.

**OUTA has developed a comprehensive action plan, as mandated by its supporters, to take the necessary steps as to ensure transparency, progress and that the statutory obligations of the Custodian for Water in South Africa adhere to.**

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