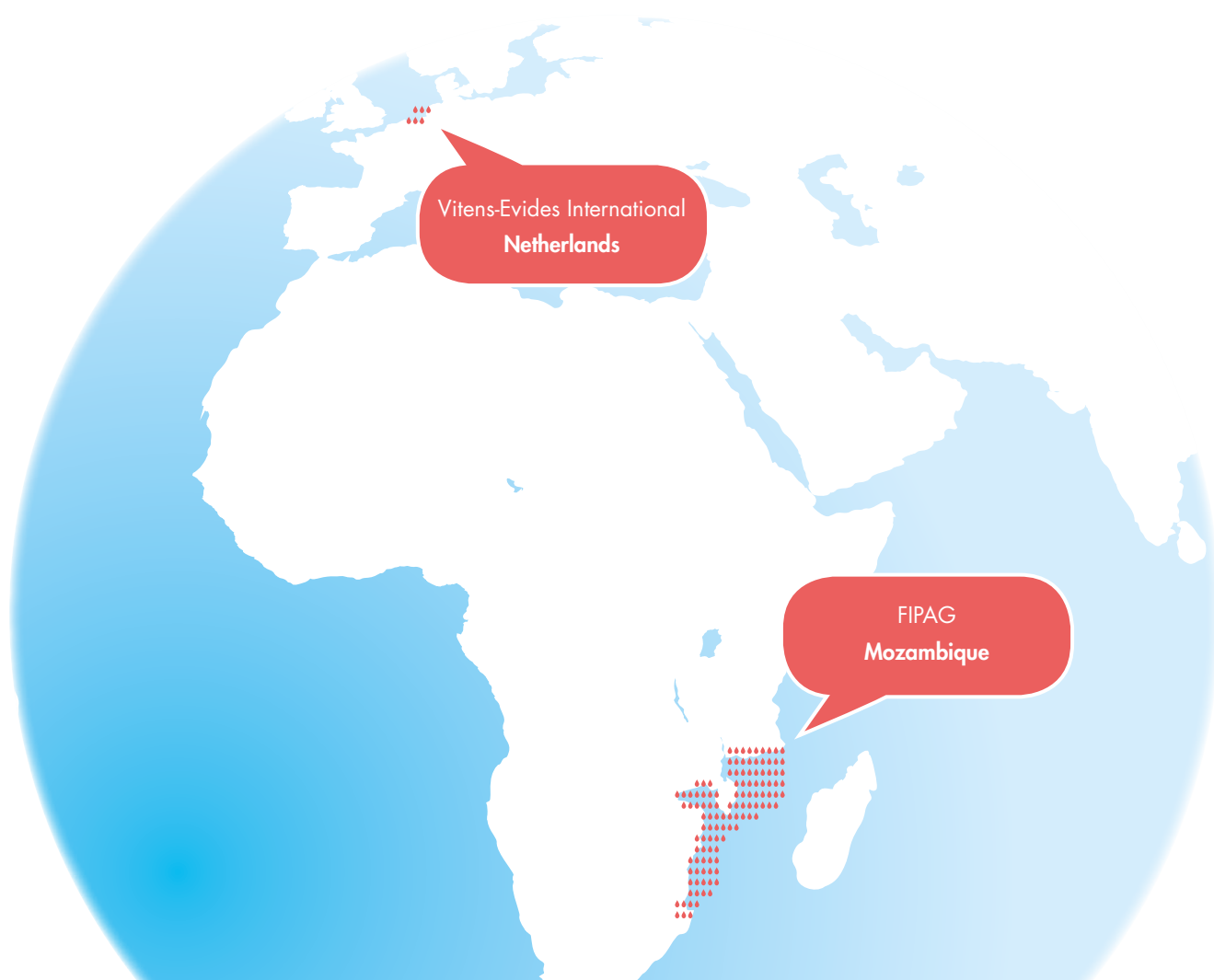


Water Operators' Partnerships in Africa

Case Study I

GWOPA
Global Water Operators' Partnerships Alliance

UN HABITAT
FOR A BETTER URBAN FUTURE

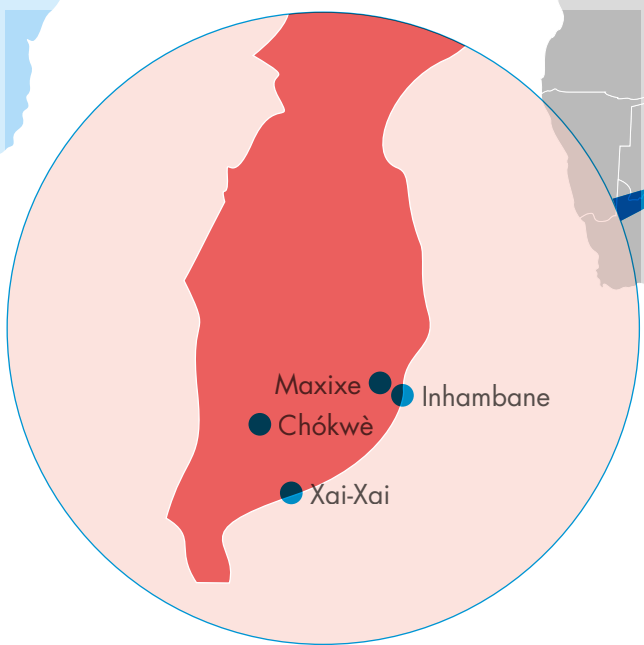


Vitens-Evides International
Netherlands

FIPAG
Mozambique

Water Operators' Partnerships in Africa

Case Study 1



Maxixe ● Inhambane
● Chókwè
● Xai-Xai



◀ **Vitens-Evides International** (Netherlands)

◀ **FIPAG*** (Four Cities in South Mozambique)

** Fundo de Investimento e Património do Abastecimento de Água –
the Mozambique water sector asset holder formed 1998.*

Key facts



Partners

VEI (Vitens-Evides International)

The Netherlands.

FIPAG (the Water Supply Investment and Asset Holding Fund)

Mozambique.



Cost

EUR €8.0 million – of which EUR €2.7 million approx. (2005–08) + EUR €5.3 million (2008–12) includes small infrastructure investments in sources, distribution, etc.



Facilitator

The Netherlands Ministry of Foreign Affairs through its Directorate-General for International Cooperation (DGIS).



Investment

EUR €24.65 million (up to 2008) + EUR €3.65 million from 2008 in a second phase parallel infrastructure investment by the African Development Bank (AfDB).



Duration

8 years. Initially, 2005–2008, extended to December 2012 and still ongoing.



Aim

To help develop and improve sustainable water supply services in Chókwè, Inhambane, Maxixe and Xai-Xai.



Long-term outlook

Some autonomy has been achieved but long-term sustainability remains a challenge. Wastewater service improvements are also still needed.



Approach

Exchange visits and demonstration, formal and on-the-job training, joint planning and standardization of operating procedures, provision of materials and services.



Success indicators

Excellent relations between partners, continuation of partnership, transfer of trained Mozambican staff to serve in other water utilities, improvement in key performance indicators.



Results

Greater coverage and improved water quality due to investment, accompanied by improved service levels and increased commercial viability.

Introduction

A water operators' partnership (WOP) is a collaboration between two or more water or sanitation operators, conducted on a not-for-profit basis, in the aim of developing their capacity. These partnerships are being used as a way of helping the world's public operators to sustainably deliver adequate water and sanitation for all.

This is the first in a set of four Case Studies on WOPs in Africa, which follows a set of three Cases on WOPs in Asia published in 2012. The aim of the Case Studies series is to provide readable and accessible reports on WOPs in practice. The author has looked at how the partnerships were set up, implemented and monitored, the changes and improvements they brought about in the partner utilities, and their impact – both achieved and anticipated – on service delivery, future investment, and replication.

These studies were conducted for the Global Water Operators' Partnerships Alliance (GWOPA), hosted by UN-Habitat, under our obligation as the United Nations city agency to help the world meet the water and sanitation target of the Millennium Development Goals.

It also forms part of our remit to share and promote knowledge and understanding of water operator partnerships. By shedding light on how the partnerships are currently carried out and drawing lessons about what works and what doesn't, the Case Studies are meant to contribute to improved practice and wider adoption.

The WOPs presented here are not meant to be taken as prototypes or best practices, but as a sampling of the diversity of not-for-profit partnerships possible between water and sanitation operators. It is our fervent hope that they will inspire more operators to take up the practice, and also help financial supporters and facilitators build more effective partnerships.

Acknowledgements

The main author, Digby Davies, is grateful to many kind people in Mozambique and the Netherlands who helped in the preparation of this case study and provided documents. He wishes to express thanks especially to Mary-Ann Sandifort, VEI Communications Advisor, as well as Peter van den Horn, Wiebe Berkhout, Astrid van Haren, all the Dutch short-termers he spoke with and all members



of the Mozambican water community. Thanks also go to Gabriel Patron Coppel and Carolina Ocampo Salgado, authors of recent UNESCO-IHE MSc theses on WOPs. Advisory Panel members Nancy Barnes and David Milnes receive special gratitude for their expert inputs and comments on drafts. Finally, Anke van Lenteren and Jared Farrell are to be thanked for their creative design.

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The background

Mozambique is a large tropical country in south-east Africa with a land area about twice that of California, a population of 24 million and an Indian Ocean coastline of 2,470 kilometres. The country was a Portuguese colony until 1975. Independence was followed by a civil war lasting until 1992. Since then, the country has made slow but encouraging economic progress. Its main trading partners are Portugal, China and South Africa, with which it has a shared border of 491 kilometres. The country is highly dependent on donors.

Mozambique has very low coverage levels for water supply and sanitation. During the 1990's with the help of donors, especially the World Bank, the government started to address these problems with some key sector reforms and policy initiatives. These included the National Water Policy (1995), the National Programme of Water Development (1997) and the Delegated Management Framework (1998).

The new policies separated asset management of urban water systems and the operation of water supply services. The plan created a new entity – Fundo de Investimento e Património do Abastecimento de Água (FIPAG) which means the Water Supply Investment and Asset Holding





Fund. It was aimed at holding and managing the assets and to use the legal arrangements of the Delegated Management Framework to contract out service provision under management, lease or concession contracts to private sector international and local operators. A Water Supply Regulatory Council was set up at the same time as FIPAG in 1998, to oversee and regulate water service provision, tariffs, consumer protection and to resolve contractual issues with operators.

In 1999, after a competitive bidding process, a hybrid lease/management contract for several cities, including the capital Maputo, was awarded by the government to an international consortium Aguas de Mocambique led by Saur (France), with approximately equal shares held by Aguas de Portugal and a local holding company Mazi of Mozambique. By 2001 the operator was already facing difficulties. Saur withdrew and sold its shares to Aguas de Portugal. There was some re-negotiation and the operator continued but with increasing lack of success. The consolidated management contract ended in 2008 and by 2010, four years before the end of the lease contract, the private operator had withdrawn completely. The Mozambique government bought the shares through FIPAG.

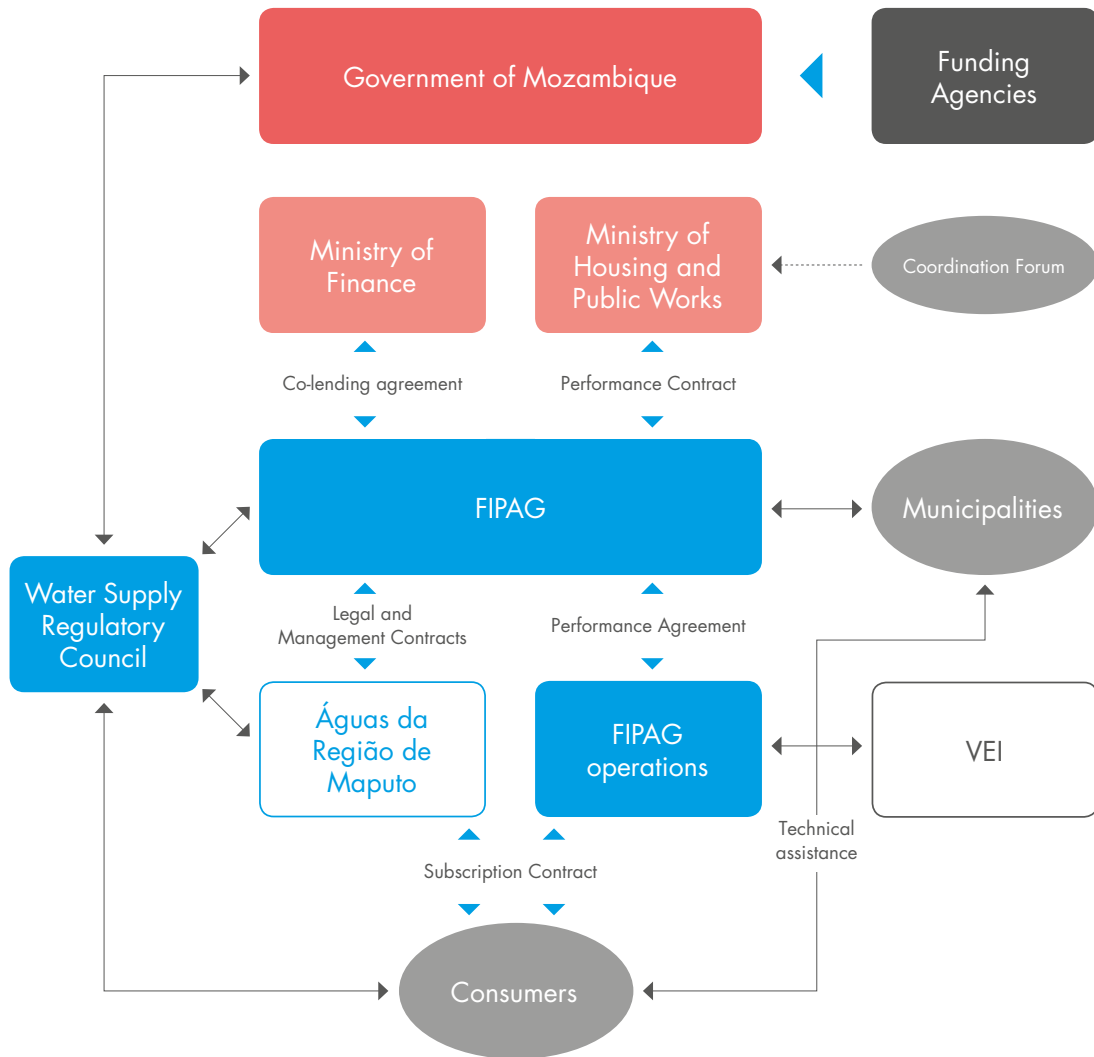
In the meantime, things had not significantly improved in the Mozambique water sector. In 2004, access to safe water was estimated at about 38% and UNICEF reported one of the highest child mortality rates in the world (246 per 1,000 live births) with many of these deaths caused by lack of clean drinking water and poor sanitation. Non-revenue water in Maputo increased during this period from 38% in 2002 to 62% in 2005. Collection efficiency in Maputo was 20% below target in 2004.

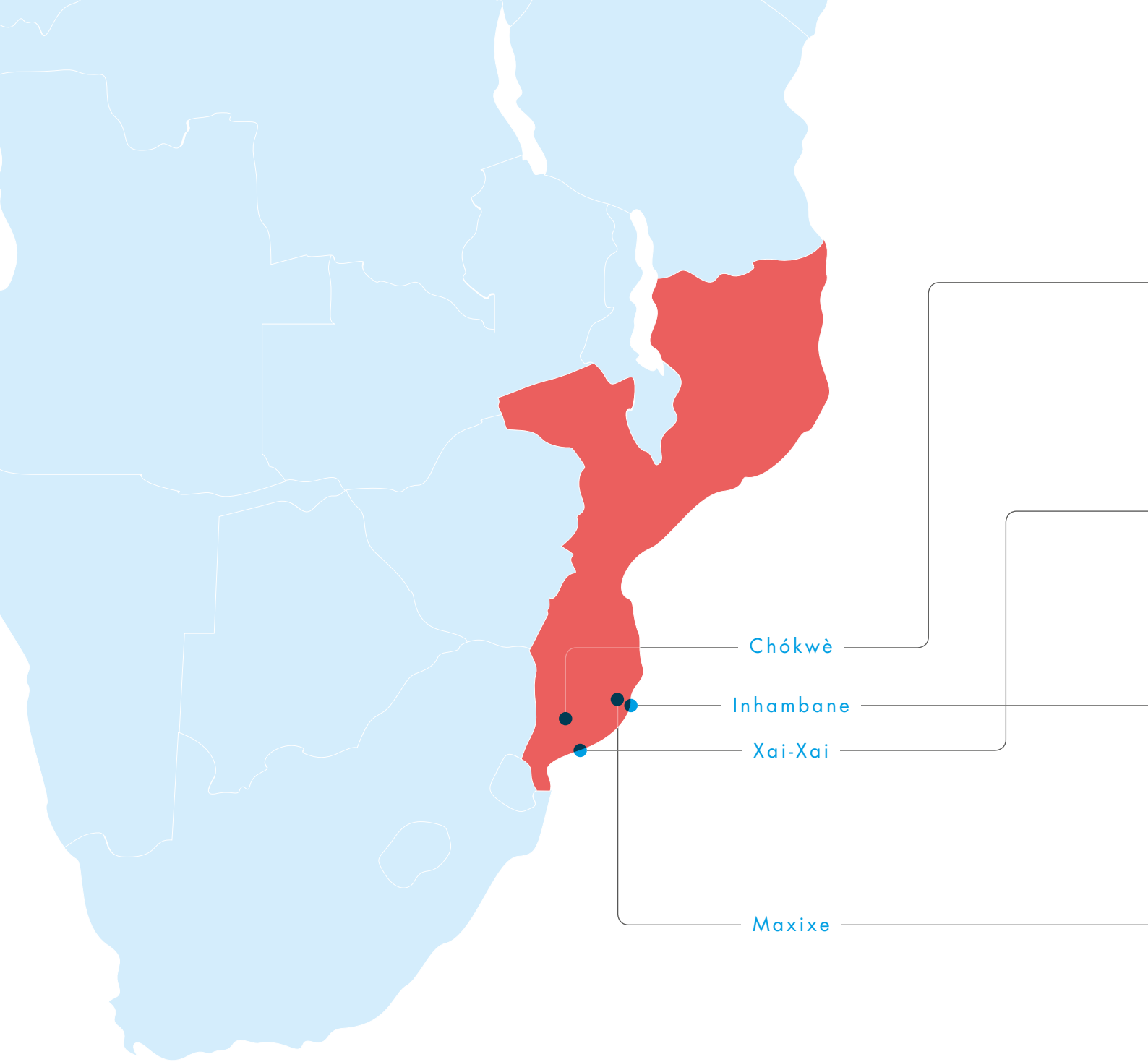
The partners

Vitens Evides International (VEI) is the international joint venture of the two largest public water companies in the Netherlands – Vitens and Evides. Both companies have over one hundred years of operational experience and provide affordable and reliable water services to approximately 7.7 million people in the Netherlands. Vitens Evides International provides knowledge and expertise to water utilities in developing and transition countries. Over the past ten years, they have helped to improve water services to over 30 million people in 15 countries, including Ethiopia, Ghana, Kenya, Malawi, Mongolia, Mozambique, Uganda, Vietnam and Zambia. Parent companies Vitens and Evides make annually a limited percentage of their turnover available to Vitens Evides International. This budget is leveraged through water operators' partnerships with grants and subsidies from development partners, such as the Ministry of Foreign Affairs of Netherlands, the World Bank, the European Investment Bank (EIB) and the Asian and African Development Banks. Vitens and Evides have also formed the independent Water for Life foundation. This was set up in 2007 and enables their customers to donate through their water bill to development cooperation water projects. These are usually small-scale practical projects in the countries where VEI is active.

FIPAG was formed in 1998 by the government as part of an overall package of water sector reform policies. The declared mission of FIPAG is “to provide drinking water to the urban population through effective management of the private sector while ensuring the financing and development of water supply infrastructure sustainably and with a positive return on investment and social equity” (translation from mission statement on FIPAG.co.mz website).

FIPAG's institutional role in the Mozambique water sector framework is shown opposite (source FIPAG web site).





Chókwè

Inhambane

Xai-Xai

Maxixe

The four small cities of Chókwè, Inhambane, Maxixe and Xai-Xai



Chókwè, lying 235 kilometres north of Maputo, is the capital of Chókwè District in Gaza Province. There has been substantial inward migration from outlying rural areas in recent years. The local economy is agricultural and the area is famous for tomatoes.



Xai-Xai, 200 kilometres from Maputo, is the capital of Gaza Province and was once a thriving port. This flood-prone city is home to approximately 160,000 people.



Inhambane, 470 kilometres from Maputo, is an old coastal settlement and port that was visited by Vasco da Gama in the late 15th century. It has a growing tourist trade and some light industry.



Maxixe, on the other side of the bay from Inhambane, also has some light industry.

The partnership

The beginnings of the VEI-FIPAG WOP date from 2003 when, on the encouragement of the Royal Netherlands Embassy in Maputo, Vitens started discussions with FIPAG about potential assistance to the four small southern cities of Chókwe, Inhambane, Maxixe and Xai-Xai. The talks centred on the need for preparation, management and technical support to the four cities arising from an impending investment project funded by the African Development Bank to improve the access, quality and sustainability of water supply and sanitation services in the cities. The African Development Bank project first phase loan and grant was an amount equivalent to approximately EUR € 24.65 million.

The partnership between FIPAG and Vitens began with the signing of a Letter of Intent in July 2003, which set out some basic principles of cooperation. Soon afterwards, Vitens staff visited the four small cities and started to draw up a Business Plan, laying out tasks and responsibilities for the proposed support. A 3-year Technical Assistance Contract was then prepared by VEI (Vitens had by this time become Vitens Evides International) and FIPAG and agreed upon in February 2005. A further Memorandum of Understanding was also signed by FIPAG and the Royal Netherlands Embassy in Maputo (representing DGIS) and VEI on 1 July, 2005.

The funding for the project came from three sources. Initially, VEI brought its own funds to the initiative, and FIPAG also contributed substantially. In 2005, VEI and FIPAG were able to leverage their contribution by successfully responding to a call for proposals by the Dutch Directorate-General for International Cooperation (DGIS) for projects to help meet the Dutch Government's commitment to the Millennium Development Goals. The project received another EUR € 1.04 million through this public-private partnership funding window (although the partnership was not-for-profit, VEI's international legal status was as a private entity, making it eligible for funding through this window).



Contributions

The Phase I funding breakdown is as follows:

FIPAG	EUR 255,350	Goods & Services, Training
VEI	EUR 1,407,682	Human Resources, Goods & Services + Auditing Costs
DGIS	EUR 1,040,000	Goods & Services, Operational Costs, Training Courses



Implementing the WOP agreement

Overall Objective

The overall objective was always clear – to help create sustainable and autonomous water service providers who would provide safe and affordable water supplies. This was considered a contribution to Millennium Development Goal 7 which aims to “halve by 2015 the proportion of the population without sustainable access to safe drinking water and basic sanitation”.

VEI also mentions additional objectives such as creating a planning cycle of annual investment plans and small works programmes, raising awareness of public health links and improving the social and economic conditions for women and children by, for example, improved water quality.



Targets and Indicators

In Phase 1 the following targets were set:

- Increase water coverage from 37% to 65%
- Reduce non-revenue water from 55% to 30%
- Achieve full cost-recovery (presumably operation and maintenance)
- Implement private sector participation

These strategic targets were set by FIPAG to promote a commercial focus, deemed necessary at this stage of service development since operations and maintenance costs were expected to rise with the acquisition of new assets. The results were expected to come from the combination of AfDB investments and the partnership.

In Phase 2 of the WOP from 2008, the focus moved to institutional development. A new objective was agreed to consolidate the water supply organizational units in the four cities into a single regional operating entity. WOP targets were aligned with national targets:

- Increase service levels up to 20 hours supply (World Health Organization norms)
- Reduce non-revenue water by 3% annually
- Increase collection rate to 90%
- Increase metering ratio to 95% by 2012

A Logical Framework Analysis was prepared for Phase 2 and that is shown in Annex A.

Activities

There were four main groups of activities:

- Capacity Building and Knowledge Transfer
- Improvement Plans and Standard Operating Procedures
- Providing the Means and Resources to Manage
- Project Monitoring and Managing Investments

Activity Group 1

Capacity Building and Knowledge Transfer

Capacity building and transfer of knowledge are central themes of the WOP. A core set of activities was the training and development of the water utility staff in the four cities, involving both formal and informal, on-the-job training. Some FIPAG staff also went on study tours to other countries including South Africa, Vietnam, the Philippines and Tanzania.

Formal Training and Courses – During both phases of the WOP, the partners organized a number of formal courses and workshops in Mozambique, in the Netherlands and in South Africa. These covered every level from basic operator training up to part-time and full-time degrees in engineering and management and were usually provided by external institutions both in Mozambique and abroad. Courses generally lasted from one to three weeks. Several courses were also

funded by the African Development Bank and the Dutch Government.

Informal Training, Workshops and Coaching – Much of the training was implemented while Mozambicans were on overseas work experience attachments to the Netherlands. In Mozambique, informal training was delivered mostly by short-term VEI staff and covered a range of subjects including Project Management, Water Quality, Customer Service, Geographic Information Systems, Human Resources Management, Telemetry etc. These local training events usually lasted 1–5 days.

Activity Group 2

Improvement Plans and Standard Operating Procedures

A second set of activities dealt with improvement plans, programmes and the development of standard operating procedures which included the three elements of Methods (what to do and how to do it), People (employees trained – knowledge + skills + attitudes) and Means (resources required to implement the methods).

VEI helped develop 33 improvement plans and programmes during Phase 1. These covered most areas of business activity – water production, distribution and commercial procedures as well as

strategic business planning. Some of these plans and programmes continued into Phase 2, e.g. environmental planning and occupational health and safety.

Activity Group 3

Providing the Means and Resources to Manage

Improving water supply services in the four cities required significant investments of materials and equipment. A third set of activities focussed on the provision of materials and equipment needed for operation and maintenance of the plant, pumps, etc. and the implementation of the improvement plans. These activities also included Management Information Systems (MIS), commercial and accounting software and associated training. VEI started early in Phase 1 using both its own and Water for Life funds to make some infrastructure investments. These were mostly for small works, repairs and equipment as well as for some larger projects such as installing 120 kms of piped network and drilling 8 boreholes. The “quick wins” from these inputs – like the six months “crash programme” in 2005 and the “small works programmes” which had a Phase 1 budget of EUR €410,000 – improved service delivery in the cities, gave credibility and helped build trust.

Activity Group 4

Project Monitoring and Managing Investments

A fourth set of activities involved the management and planning of the construction and other work financed by the African Development Bank investments. A prime need was to ensure coordination. A database was set up and studies conducted to make certain that the water sources were adequate and that planned distribution systems were fit for purpose.

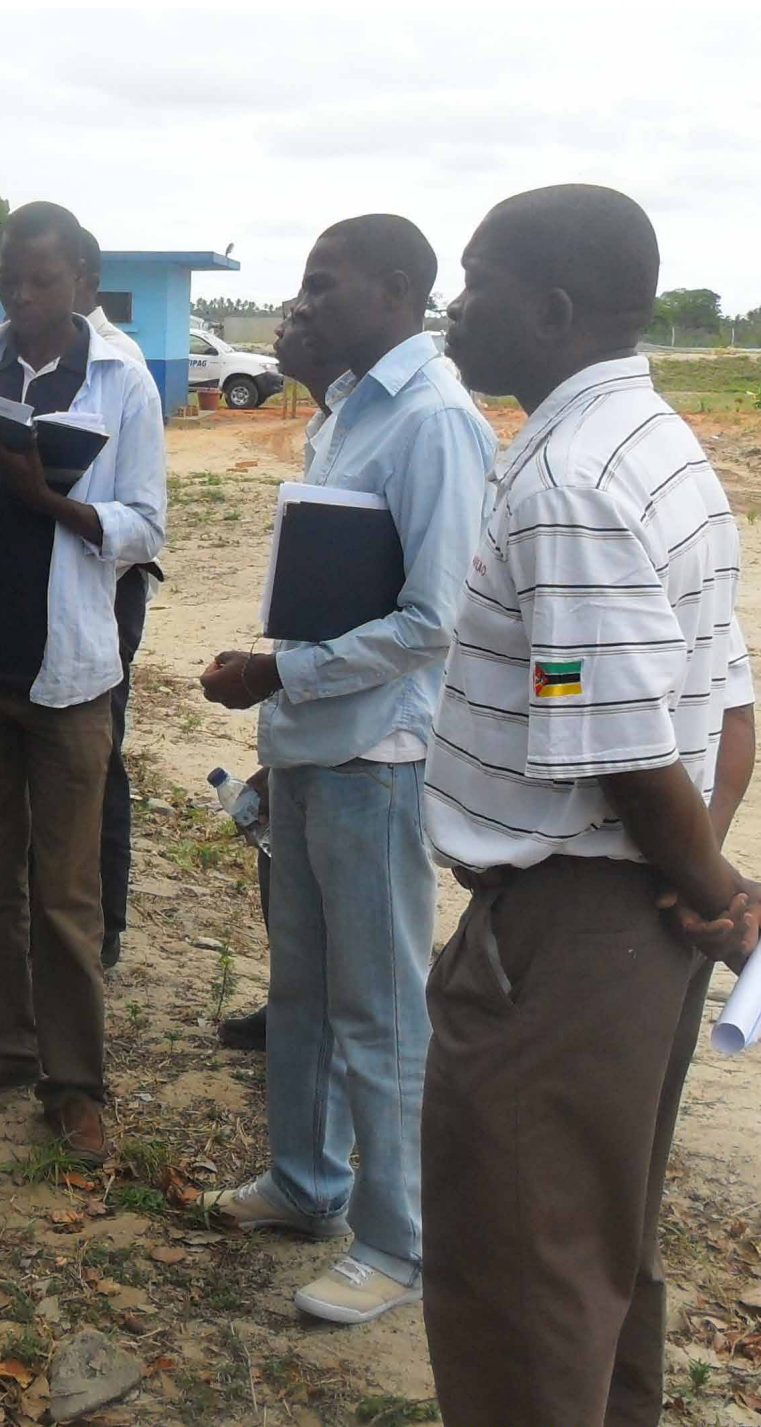


Mobilizing the VEI Team

The Resident Manager and Short-Term Experts

The WOP benefitted from the very beginning from the presence of a VEI Resident Manager, a VEI staff member based in Mozambique and dedicated to the WOP management. The WOP was punctuated by a series of missions by visiting short-term experts from the Netherlands. More than 55 such short-term missions, mostly of three to four weeks each, took place in Phase I (2005-2008). In addition to the Resident Manager, the Phase 1 contract allowed for one other long-term expert and five short-term experts in the fields of organization, operations, production, distribution and financial/commercial issues. Phase 2 provided for only the Resident Manager with six short-termers across the fields of production, distribution and financial/commercial.





The Technical Assistance Team

The incoming Dutch short-termers were assisted by a team of seven young Mozambican professionals recruited and hired directly by VEI. This local Technical Assistance Team covered technical specialities as well as financial, commercial and human resource areas. The Technical Assistance Team supported the short-term VEI staff in their training, monitoring and other activities. The format worked well for the most part though there were issues of acceptance on the part of some employees of the utilities who saw the team as outsiders. The Technical Assistance Team provided a useful bridge for the short-termers into the local language, culture and working environment and enabled quicker learning by the short-termers.

Partnership outcomes

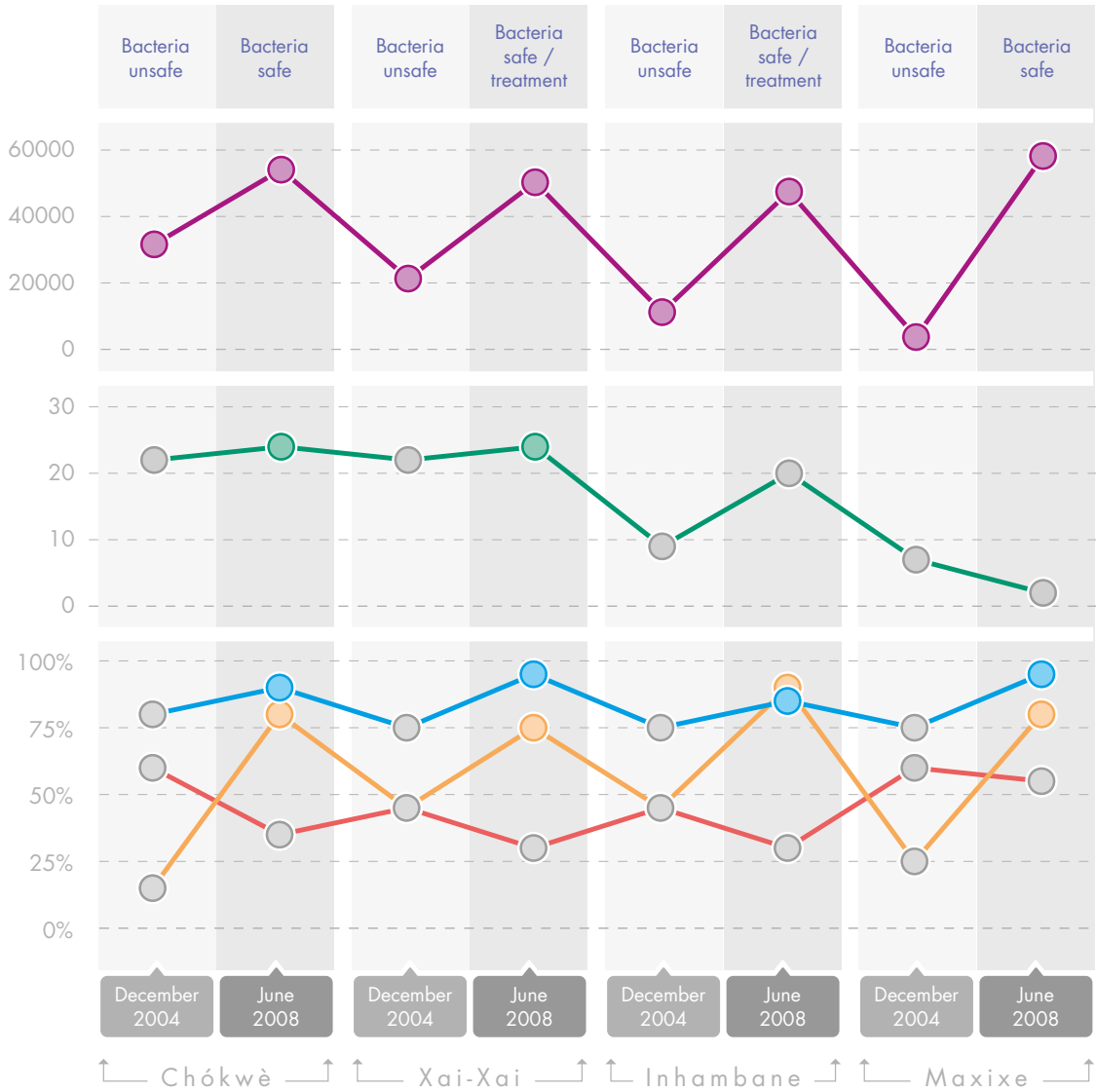
As a combined outcome of the WOP and the African Development Bank investment project, the Key Performance Indicators showed dramatic improvements.

Most of the results are attributable largely to the AfDB investment project which secured the improved coverage, water availability and quality.

The impact of the WOP itself will be measured by how sustainable the system proves to be. This was clearly explained in the VEI 2008 Narrative Report at the end of Phase 1:

“While the [WOP] mainly focuses on the sustainability of the water supply services, the African Development Bank investment program will secure the water availability and improved water quality. These aspects are inter-linked: targeted performance improvement through investments in physical infrastructure needs to go hand in hand with improved operational management procedures and improved human resources (capacity building). Or said otherwise, as an example: the rehabilitation of the infrastructure will not bring about the envisaged performance improvement unless accompanied by the introduction of relevant improved operation and maintenance procedures executed by adequately qualified staff.” A. van Haren and P. van den Horn, September, 2008.

Water quality Population served Hours water supply Collections rate Non-rev. water (NRW) Water metering



○ Approximate value

The recognition of the need for strong capacity support to sustain investments led to the institutional focus of Phase 2 and the aim of consolidating the water supply units in the four small cities into a single regional operating entity. The rationale was that consolidation would increase efficiency which, together with affordable water tariffs, would enable cost recovery and repayment of the loan.

In 2012 the water supply units in the four cities, according to the 2012 Narrative Report, achieved a positive operational cash-flow as a result of their O&M efficiency. This means that they were covering the O&M costs but could not yet allow for depreciation of their assets. This represents a considerable achievement in itself. However it is uncertain if full cost-recovery is feasible in the Mozambican context. Many observers, including Jan Hoffer, the former VEI Director involved in initiating the WOP, have expressed doubt that cost-recovery in Mozambique is a realistic goal, given affordability considerations, among others.

In 2013, ten years down the road from the beginning of the WOP, there is an excellent set of service delivery outcomes. Water supply coverage of average 97.5%, 24 hours water supply in all cities, non-revenue water in the range 15%-25% and collection rates in the range 93%-98% are totally remarkable by African standards and very good anywhere in the world.

However, as noted above, the test of the WOP is whether enough has been done on the capacity development front to ensure sustainability. Many people have been trained – 233 people participated in various training programmes in 2012 – many new plans and procedures have been introduced and the new regional office structure is up and running. The coming five years will be critical and efforts need to be maintained.



What the partners say

“In the beginning it was VEI that told us what we needed and what to do about our problems. Now things have changed; we are telling VEI what the problems are and the sort of help we need.”

FIPAG Employee – February 2013

“We are all responsible for the protection and normal functioning of the water systems inaugurated today.”

Former Mozambique Prime Minister Aires Ali –
2010–2012 – speaking in 2010 at the inauguration
of the new water systems in Inhambane and Maxixe.

“Some people were used to working by heart and following their guts and not on following procedures.”

FIPAG Employee quoted by Coppel – 2009

“The FIPAG people now have much more self-esteem, they are proud to be one of the best operators and asset holders in the region and that is a great tribute to VEI.”

Dutch Directorate-General for Development Cooperation – 2013





"In the beginning they really didn't trust us. They thought we had commercial motives, looking for management contracts etc. It took quite some time before they saw we could be trusted."

VEI Employee – 2013

"I learned a fantastic amount [more than I had expected]. These guys are often very good at dealing with problems we don't any more have in Holland. I want to go on doing these kinds of visits maybe also in other countries."

VEI Short-Term expert – 2012

"Vitens was working together with us, and then when we grew and learned and created more capacity we started seeing we could do things for ourselves...the Vitens role should be reduced gradually and that was the agreement."

FIPAG Staff quoted by Salgado – 2011

Success factors

All partners regard the WOP as a success story. There is no doubt that progress has been made in transferring knowledge and creating increased efficiency and service-orientation in the utilities. Some of the factors that have made this possible are:



Enabling Environment

The 1990's reforms by the Government of Mozambique may have over-estimated the potential for the private sector to ride to the rescue of the struggling water and sanitation sector. But at least they provided a clear institutional and legal framework, with the Water Supply Regulatory Council as an independent regulator and FIPAG as an influential and energetic asset-holder, in which the WOP could function.

Long-term Commitment

It was fortunate that VEI was willing and able to make a long-term commitment to the WOP at a relatively early stage. The commitment went well beyond utilising staff resources to the partnership and there was significant financial commitment as well.

Flexible Contractual Arrangements

The contractual set-up was flexible enough to allow for changes in line with emerging events in the utilities and to cope with the changing nature of the partnership as it matured over the years. It was recognised early on that this flexibility depended in turn upon trust between the partners.

Trust, Roles and Responsibilities

VEI always stressed the importance of trust as a factor in a successful WOP. FIPAG on the other hand talked more of the initial reluctance to trust VEI due, perhaps, to earlier negative experience with overseas operators. Since roles and responsibilities inevitably change over time, trust is essential. Trust levels increased during the WOP.

Mobilization of Mentor's Human Resources

The way in which VEI decided to organize the work with a Resident Manager and short-termers visiting regularly for 3–4 weeks worked well immediately and continued to work well. The set-up allows for continuous, dedicated management support to the project, while allowing specific sets of expertise to be drawn in as the need for them arises. Around the world various WOPs have done things differently but the model used in Mozambique is outstandingly successful.

Parallel Investment Programme

The role of the simultaneous external finance from the Dutch Ministry and the African Development Bank was a key success factor. The combination of investment and capacity building helped secure the benefits. Sustainable improvements to the water supply services depend on the complementarity of capacity development and investment.

Observations and recommendations

The major gains in coverage and service delivery were due mostly to external finance during the WOP. However there is no doubt that the partnership was instrumental in raising the capacity of water utilities to manage and sustain these gains. This is true not only of the water supply units in the small cities but also, to some extent, of FIPAG itself, as three senior FIPAG staff pointed out during interviews.

It is also beyond doubt that the WOP is a rich source of lessons and ideas for other potential WOP practitioners. Compared with other WOPs elsewhere, this case has been well documented and studied by several outside observers. There are two sets of frequently discussed issues here. The first centres on sustainability: when VEI withdraws, will the utilities be able to keep up and improve on the standards that have been reached? The second concerns replicability: can it be replicated in other places and with other actors?

Sustainability

VEI has been involved in this WOP for over ten years. There are few decade-long WOPs on record. In Asia, the Yokohama (Japan) and Hue (Vietnam) partnership which celebrated its tenth anniversary

in September 2013, is one example. However, the water supply business is essentially long-term. Assets are depreciated over 20 or more years, staff tend to be less mobile than in other sectors and water supply is less liable to technological variation than, say, transportation or power supply. This quality means that operator performance changes tend also to come slowly, making the sustainability of WOPs like this one difficult to observe and predict over short horizons.

Nevertheless, there are factors that have been built into the WOP that bode well for its long-term sustainability. One has been its explicit focus on capacity development – particularly at staff and organizational levels – and the efforts to embed know-how within plans and standardized procedures. While many WOPs consider capacity development as an implicit objective, making it an explicit one may have advantages. Such a focus can direct resources to ensure that capacity is well-anchored amongst local staff for future use, increasing the chances that the utilities will ride out the departure of the mentor and ably tackle any new challenges.



A challenge to sustainability has however come from the actual success of the WOP in capacity building. FIPAG has started to transfer trained well-performing staff from the cities to other Mozambican water utilities, thereby weakening capacity within the cities. This form of local ‘brain-drain’ could potentially be averted in future phases of VEI support by strengthening FIPAG’s wider human resource development and knowledge management capacity. This would help broaden the learning benefits and make the success of the WOP less dependent on specific individuals.

Replicability

It has been commented that the partners and promoters of this WOP got the timing absolutely right. It came at a time when VEI was able to start putting in its own funds, when DGIS was actively looking for projects to fund and when the private operator in Mozambique was starting to leave the rails. It also happily coincided with the arrival of major project finance from the African Development Bank. How likely, it may be asked, is it that other utilities in other places can find such opportunities?



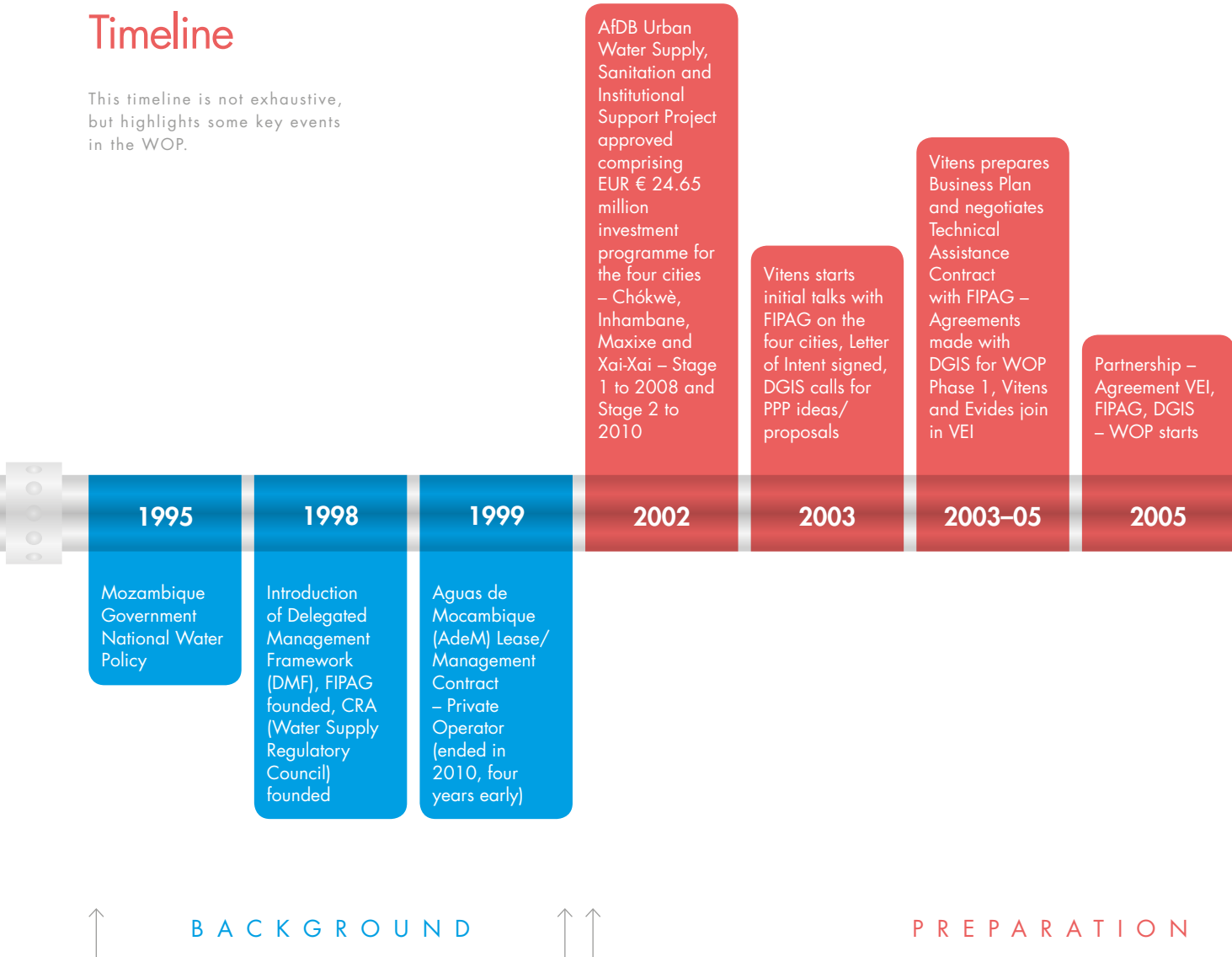


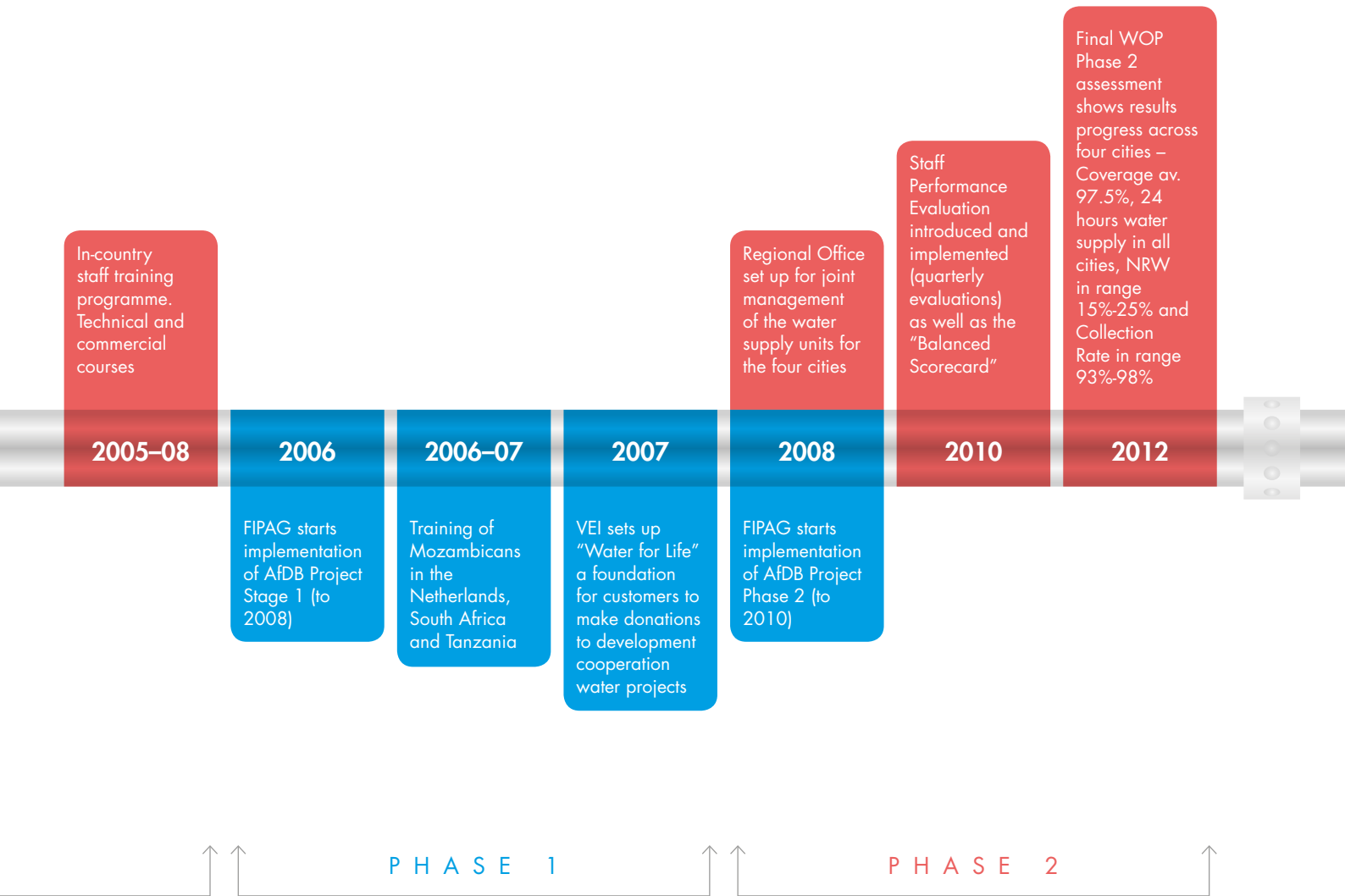
Even though the convergence of exact circumstances may not be easily replicable, some aspects of the model can be intentionally reproduced. The Mozambique case brings to light the value of actively applying identified good WOPs practice – such as the way VEI’s human resources were mobilized with a Resident Manager, short-term experts and a Technical Assistance Team, “quick wins” to demonstrate early success, and the long-term mindset – to capitalize on opportunities, such as sector reforms and funding windows, that present themselves.

Moreover, external funding agencies such as development banks are always looking for ways to make their investments more effective and sustainable. Since all the indications are that this WOP has been a valuable accompaniment to the African Development Bank investment, there is a strong case for investment banks and others to look for ways of incorporating parallel or integrated WOP arrangements into their programmes.

Timeline

This timeline is not exhaustive, but highlights some key events in the WOP.





Annex A: logical framework

Strategy	Indicators	Verification Source	Risks / Assumptions
<p>Project Objectives (outcome)</p> <p>Create and consolidated autonomous water company for Chókwè, Inhambane, Maxixe and Xai-Xai that is able to sustain these services based on efficient use of water (low Unaccounted for Water) and affordable tariffs, related to the level of service, that cover at least the cost of operation and maintenance and enable meeting the financial obligations of existing loan agreements.</p>	<p>Impact Indicators</p> <ul style="list-style-type: none"> • Increased levels of service up to 20 hours supply according WHO-norms; • Increased coverage up to 65% in 2012 (national objective 70% in 2015). Additional 10.000 new consumers by investment of the PPP-project; • Improved (financial) sustainability of local water units according to following targets: <ul style="list-style-type: none"> • Cost recovery of O&M cost from 2010 (average of water units); • Repayment (partly) loan-agreement starting at the end of 2012. 	<ul style="list-style-type: none"> • Final project report water units; • Reporting requirements within existing P&C-cycle of FIPAG; • Investment project proposals submitted to financing institutions. 	<ul style="list-style-type: none"> • Macro-economic and political stability in Mozambique; • GOM's commitment towards approved policies for the urban water sector (e.g. the National Water Policy, the Delegated Management Framework and the Water Tariff Policy); • GOM's commitment towards the creation of a regional water supply entity in future. However at present FIPAG has the power to create such a regional unit that acts as an operating unit on a de facto (and not on a de jure) basis; • GOM's ability to attract financing for medium and long-term investment needs; • Approval of Vitens'; involvement through Direct Contracting; • Insufficient revenues caused by inflation of Metical.
<p>Results (output)</p> <p>Performance Standards between FIPAG and the water supply units translated in strategic performance targets.</p>	<p>Output indicators</p> <p>Efficiency of service delivery related to the following FIPAG (strategic targets);</p> <ul style="list-style-type: none"> • Yearly UfW reduction of 3%; • Collection rate of 90% (yearly base); • Metering Ratio of 95% in 2012. 	<ul style="list-style-type: none"> • Project progress report (including financial reporting); • Reporting requirements related to the Performance Standards, Annual Reports of the water supply units. 	<ul style="list-style-type: none"> • Insufficient funds to achieve all envisaged infrastructure improvements; • Complex/time consuming tendering procedures for procurement of goods and works; • Too high expectations from stakeholders regarding infrastructure and operational improvements.

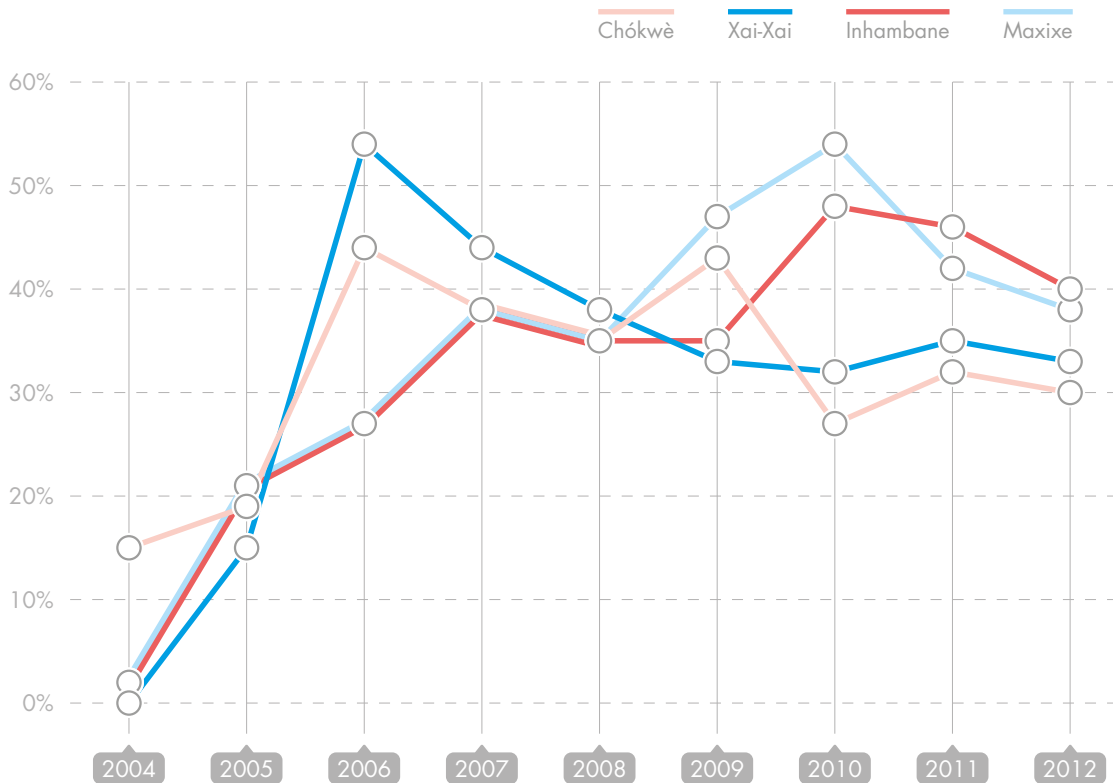
Strategy	Indicators	Verification Source	Risks / Assumptions
<p>Activities (throughput)</p> <ul style="list-style-type: none"> • Preparation and implementation plans and programs for improved water supply service; • Preparation and implementation procedures and manuals; • Coaching and training management and staff of local water units; • Provision of means and materials. 	<ul style="list-style-type: none"> • Implementation of services according to contractual arrangement. A list of services regarding the required improvements, procedures and manuals is appended in Annex B. • Yearly 20% of the staff of the water units will be trained. 	<ul style="list-style-type: none"> • Narrative reports grant recipient (yearly). 	
<p>Means (input)</p> <p>Management Support</p> <p>Subtotal €2.727,5 k</p> <p>Operational improvement</p> <p>Goods/services €2.065,0 k Operational costs €217,5 k Training costs €262,5 k Other costs €62,5 k Subtotal €2.607,5 k</p> <p>Total €5.335,0 k</p>	<p>Progress indicators</p> <ul style="list-style-type: none"> • Breakdown provided for project components and distinguished cost centres; • Progress assessment based on depletion of required means based on aforementioned breakdown. 	<ul style="list-style-type: none"> • Narrative report versus Activity plan grant recipient (yearly). 	

Annex B: details of training activities

Training activities

In 2012, 233 persons participated in the various training opportunities on offer, 20% above target. Over the whole period of the WOP, training both formal and informal was the central theme.

Percentage of staff receiving training 2004–2012





Key references

1. A. van Haren and P. van den Horn: Public-Private Partnership – Water Supply in Chókwè, Inhambane, Maxixe and Xai-Xai (Mozambique) VEI Narrative Report, January 2005 – June 2008, September 2008.
2. Gabriel Patron Coppel: Water Operator Partnerships (WOPs) in Mozambique, Case Study on the cities of Chókwè, Inhambane, Maxixe and Xai-Xai, UNESCO-IHE MSc Thesis (draft), November 2009.
3. Carolina Ocampo Salgado: Water Operators' Partnerships and Capacity Building, Case Study Mozambique – UNESCO-IHE MSc thesis, May 2011.
4. Gabriel Patron Coppel and Klaas Schwartz: Water operator partnerships as a model to achieve the Millennium Development Goals for Water Supply, Lessons from four cities in Mozambique, Article in Water SA, October 2011.
5. W. Berkhout: Public-Private Partnership – Water Supply in Chókwè, Inhambane, Ma-xixe and Xai-Xai (Mozambique) VEI Narrative Report, January – December 2012, April 2013.

Water Operators' Partnerships (WOPs) are peer support relationships between two or more water or sanitation operators, carried out on a not-for-profit basis in the objective of capacity development. This is one of a series of four impact-oriented case studies conducted on WOPs in Africa. It is intended for water and sanitation service providers, governments, development banks, donors, WOPs facilitators and all who are interested in gaining a better understanding of this solidarity-based approach to helping public operators improve their capacity to sustainably deliver water and sanitation services for all.



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