#### SUMMARY

At present, more then one billion people in the world lack access to a sufficient and safe water supply. This was one of the main reasons for the UN to formulate the Millennium Development Goals (MDG). The MDGs present an arranged course of action with specified targets for actors at all levels and sections in society, both in the developed as well as developing countries. In this research specific attention is given to seventh MDG. The tenth target of the seventh MDG is to cut in half, by 2015, the proportion of people without sustainable access to sufficient safe drinking water.

The Dutch government committed themselves to achieving this target, and therefore implemented the 50 million people programme. This programme holds the quantitative goal of generating sustainable access to a sufficient safe water supply for at least 50 million people by the end of 2015. In order to achieve the MDG, as well as to implement Dutch policy, the Dutch government choose to support the methodology of Public-Private Partnerships (PPP). It is expected that this particular methodology will make development cooperation and providing public services more efficient and effective. This paper examines the application of the PPP method in providing development cooperation and translating the MDGs.

The main research question is: What is a Public-Private Partnership (PPP), how is this concept implemented by Dutch water supply companies in developing countries and to what extent do they translate the Millennium Development Goals (MDG) and Dutch policy within the drinking water projects? Very first, in this research a PPP is defined as "a spectrum of possible relationships between public and private actors for the co-operative provision of, in this case, water supply services". As aforementioned the Dutch government supports the PPP method for the implementation of the MDG. The implementation of the PPP and the translation of the MDGs are examined by means of two case studies i.e. the Water for Indonesia project of Waterleidingmaatschappij Drenthe (WMD), and the drinking water projects Mozambique of Vitens.

Following the assessment of the two key concepts – the MDGs and the PPP method – the research continues with unfolding the main features of the two case study projects in Indonesia and Mozambique. The main objective within the projects of the two Dutch water supply companies was to rehabilitate local water supply companies. To attain this objective, the WMD and Vitens implemented two very different types of PPPs i.e. the joint venture-model and the service contract-model. Consequently, the extent to which they were able to translate the MDGs and Dutch policy in the two projects was miscellaneous.

The analysis of the actual application of the PPP method in the two cases verified that the MDGs and Dutch policy were broadly translated throughout the projects. Consequently, by means of the two different types of PPPs, Dutch water supply companies were able to make a significant contribution in achieving the MDGs and providing development assistance. However, because a lack of information on the actual impact of both projects, and the difficulties of measuring quantitative accomplishments, no tangible statements could be made on the actual enhancement in effectivity or efficiency of offering development cooperation and achieving the MDGs. The research thus concludes that, even though within these cases the PPP method clearly proved to have an encouraging outcome on implementing the MDGs and Dutch policy, further studies on the application of this method is recommended.

#### LIST OF ACRONYMS

- CSR Corporate Social Responsibility
- DGIS Directorate General for International Cooperation of the Dutch government
- DSA Dream Sukses Airindo water supply company Ambon
- FIPAG Fundo de Investimento e Partimonio do Abestecimento de Agua
- GNP Gross National Product
- MDG Millennium Development Goals
- MOU Memorandum of Understanding
- NGO Non-Governmental Organisation
- NRW Non-Revenue Water
- NWP Netherlands Water Partnership
- P3SW Partnership Publiek-Private Samenwerking Programme
- PDAM Perusahan Daerah Air Minum Regional Water Supply Company
- PPP Public-Private Partnership
- PT Limited Company by shares
- PvW Partners for Water programme
- SWOI Foundation Water Projects East Indonesia
- TDG Tirta Drenthe Group
- UN United Nations
- UNDP United Nations Development Programme
- WMD Waterleidingmaatschappij Drenthe
- WSSD- World Summit on Sustainable Development

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## **1** INTRODUCTION

No one can survive without access to a sufficient and safe water supply. Water is indispensable in securing health, well being, social and economic development. Water is life. Nonetheless, at present more then one billion people in the world lack access to a sufficient and safe water supply. If not acted appropriately and in time, this number will evidently increase in the forthcoming years. Therefore, by means of one specified target within the Millennium Development Goals (MDG), the United Nations (UN) have indicated that the international community need to half the number of people that do not have sustainable access to an adequate water supply by the end of the year 2015.<sup>1</sup>

This target now has become an essential guideline in contemporary development cooperation. The Dutch government also committed themselves to the MDGs, and in accordance initiated a variety of projects to find a solution for the lack of access to a sufficient safe water supply. An evident method to increase the number of people with sustainable access to a sufficient safe water supply, in particular in the urban areas, is to provide water by means of extending the services of water supply companies.

Currently the water supply companies in many developing countries are however facing major challenges. The population is increasing, cities are expanding rapidly, and more and more people will need to be supplied with adequate safe water supplies. In addition, many water supply systems are in a deplorable state, and water utility services in many countries are characterized by unreliable and inadequate services, overstaffing, poor cost recovery, as well as insufficient upkeep of infrastructure<sup>2</sup>.

There is thus a clear call for reforming the traditional schemes of water supply services. A widespread alternative for securing adequate financing, management and operation of infrastructure in developing countries is to liaise with the private sector by means of a Public-Private Partnership (PPP). In unison the UN is referring to the application of the PPP concept as a promising alternative for traditional methods for implementing the MDGs as well. To perform their task in implementing the MDGs, Dutch development cooperation is therefore supporting a variety of initiatives of PPPs in the water sector.

However, even though the Dutch government supports and stimulates initiatives of PPPs, the forms of implementation, as well as the impact of these partnerships are commonly not examined in more detail. There is a large variety of translations for the PPP-tool. And, albeit popularity for the use of the PPP concept is still increasing, there are numerous issues raised for using this concept in infrastructure and public services. Parkin and Sharma (2004) for example have listed a number of objections invoked by social groups against the private financing of public infrastructure (see chapter 4).<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> UNDP (2002)

<sup>&</sup>lt;sup>2</sup> Blokland, M. (1999), and Haarmeyer, D. (1997)

<sup>&</sup>lt;sup>3</sup> Parkin, J, & Sharma, D. (1999) pp 163

In addition there are many illustrations for failures in applying the PPP concept in water supply services in the developed as well as in the developing countries.<sup>4</sup> Large European based companies like e.g. Lyonnaise de Eaux from the Suez group (Fr), Thames Water (UK), Vivendi (Fr), Saur (Fr), Northwest Water (UK) and RWE (Germany) have competed with each other in the privatization trend of water supply services in numerous cities in developing countries. But, in many of these instances they did not succeed in supplying sufficient safe drinking water to the people.<sup>5</sup>

In particular the Suez group (Fr) has experienced severe criticism in their role of privatizing water supplies in e.g. the Philippines, Bolivia, and Indonesia. The Suez group is one of the world's largest water companies with energy, water and wastewater operations in 130 countries. "While Suez rewards its shareholders handsomely – US\$1.6 billion in dividends in 2005 – the company has refused to make the required investments in water and wastewater systems in the developing world."<sup>6</sup> This of course led to vast public upheaval, demonstrations and the formations of activists groups.

There is thus a clear and intensifying concern as regard the successes of involving the private sector and applying the PPP concept in development cooperation. In addition there is a growing fear that we might fixate too much on one particular concept, while neglecting far more promising alternatives.<sup>7</sup> Whereas policy on constructing PPPs is widespread there are still many uncertainties as to the actual performance of this particular concept in practice. Thus raising the question by what means a PPP actually contributes to implementing the goals set in Dutch policy. This stresses the importance and clear need for exploring the types and performance of PPPs in addition to implementing the MDGs in terms of development cooperation in the water sector.

For the most part this study aims to provide discernment on a range of issues concerning the application of the PPP concept in development cooperation. A particular issue as regards PPPs in this study is for example the lack of information on the roles played by the various actors involved, as well as the coordination of the objectives and goals in a partnership. It is assumed that the stakeholders regularly have many different roles and interests. Therefore it is often difficult to realize the overall objective or a communal goal (in this case implementing the MDGs). For that reason a comprehensible stakeholder analysis is performed. In addition an attempt is made to make an evaluation of the possibilities of extending and implementing policy by means of assembling PPP.

The research will concentrate on two cases of private sector investments initiated by Dutch water supply companies (private) in collaboration with the Dutch government (public) and the local water supply companies (public) in developing countries. These particular cases are widely discussed in the media and are the first of its kind in offering development cooperation by means of applying the PPP concept in the water sector, in the Netherlands. By evaluating how the PPP has been implemented in these two cases, efficient and effective use of the instrument along with the objective of implementing the MDGs in future projects is examined in more detail.

<sup>&</sup>lt;sup>4</sup> Vandana, S. (2002) and Blokland, M. (1999)

<sup>&</sup>lt;sup>5</sup> Hall & Lobina (2004) pp 272

<sup>&</sup>lt;sup>6</sup> Website 'Stop Suez"

<sup>&</sup>lt;sup>7</sup> Hirsch, D. (2005)

<sup>- &</sup>lt;u>http://www.stopsuez.org/page.aspx</u>

It needs to be noted that, effectively implementing policy is not simply evaluated by means of examining if the given goals are achieved, but also by evaluating the manner in which policy is implemented by the Dutch stakeholders in the trajectory of the project.<sup>8</sup> Therefore this study should evaluate the translation of the MDGs within the goals and decisions made throughout the course of the project. The results of this research should eventually contribute to the continuing discussion of applying the methodology of PPPs in development cooperation, the possibilities of translating the MDGs therein and applying the PPP concept in the water services of developing countries.

The next chapter will first address the methods and theories applied as well as the objectives of this research. After a short summary on the content of the MDGs and the application of these goals in Dutch development cooperation, the subsequent chapter will examine what a PPP is, which different forms of PPPs there are, as well as the wide-ranging motivations for assembling PPPs. This will be followed by a description of two cases in which PPPs are constructed by Dutch water supply companies in projects in Indonesia and in Mozambique. The last two chapters will analyse the application of the PPP concept and the extended use of the MDGs in these two cases, followed by an overall conclusion.

<sup>&</sup>lt;sup>8</sup> de Lange, M. (1995)

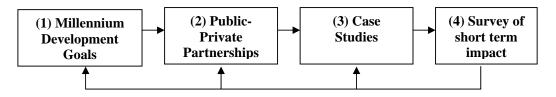
## **2 CONCEPTUAL FRAMEWORK**

Following the short introduction, this chapter will initially introduce the conceptual framework and the methods applied in the research. A conceptual framework essentially defines the variables that will be looked at. After a short description of the research stages and the variables, the research objective is illustrated. The chapter goes on to introduce the research questions and the methods employed to answer these questions. Last but not least the subsequent chapters will provide an in-depth examination of the MDGs and the concept of PPPs.

## 2.1 RESEARCH STAGES

In this research four general stages can be identified (see figure 1). By means of extensive literature research, the MDGs and their objectives (step 1) as well as the different forms of PPPs (step 2) will be thoroughly delineated. The MDGs are depicted as a key element in the strategic policy adopted by DGIS and the Dutch government. The PPP concept is the method applied to implement this policy. After the introduction of these two key concepts the research will focus on the two cases of PPPs in development cooperation i.e. Water for Indonesia, a project initiated by water supply company Drenthe (WMD), and the drinking water projects Mozambique of the Dutch water supply company Vitens (step 3).

Figure 1: Research stages



In these two case studies both the interests of the public and the private sector, as well as the third party involvement e.g. the community and civil society will be examined in more detail by means of a stakeholder analysis. In addition the two cases will be explored on account of their objectives in applying the PPP concept, the type of PPP and by what means the policy i.e. the MDGs are extended within the course of the project's implementation. The extension of the MDGs in these PPPs will be thoroughly evaluated by means of a survey of the short term impact as well as the goals and decisions made throughout the trajectory of the project (step 4). The next chapter will first introduce the main research objective and the main research question.

## 2.2 **RESEARCH OBJECTIVE**

The central goal of this research is to survey the experiences in implementing the concept of Public-Private Partnerships (PPP) – initiated by the Dutch water supply companies – for the purpose of development cooperation in the water sector. The objective is to make a qualitative evaluation of translating and implementing the Millennium Development Goals (MDG) by means of two case studies of PPPs. Eventually the results of these evaluations will be correlated to the goals set in Dutch Policy on development cooperation and the specified MDG concerning water supplies i.e. goal number seven, the tenth target.

### The main research question is:

# What is a Public-Private Partnership (PPP), how is this concept implemented by Dutch water supply companies in developing countries and to what extent do they translate the Millennium Development Goals (MDG) and Dutch policy within the drinking water projects?

The sub-questions concerning the implementation of the PPP concept in the cases are:

- > What are the incentives to initiate a Public-Private Partnership?
- > Which type of Public-Private Partnership is applied in the project and why?
- > Who are the participants, and what are their roles?
- > What is the objective of the project, and how is this objective pursued?
- > What are the current achievements of the projects?
- Is there an extended use of the MDG and Dutch policy in the goals within the PPP?

This research will illustrate that there are large differences in applying the PPP concept in providing development cooperation. There is thus no general formula for implementation. The PPPs will differ as to e.g. incentives to assemble, the level of participation of stakeholders, management of risks and interests, resource contribution, time of commitment, objectives, goals, deliverables and impact of the PPP. This will be exemplified by the two case studies in which Dutch water supply companies have applied the PPP concept in drinking water projects in developing countries.

The general expectation is that the application of the PPP concept by the Dutch water supply companies is predominantly directed by the motive of achieving the MDGs in addition to their commitment to corporate social responsibility (CSR). The translation of the MDGs within the PPPs however is likely to be of limited value to the private sector initiator. Therefore, the rationale for applying the PPP concept i.e. increasing the effectivity and efficiency of providing development cooperation will not clearly be attained.

This also means that the application of the PPP concept as a means to implement the seventh MDG – increasing access to sufficient safe drinking water supplies for households in developing countries – is of limited value. However, the results of the projects are expected to be largely in line with policy set by the Dutch government. By sharing the private sector's knowledge on management and operation of water supply services, the PPPs thus probably *will* increase the effectivity of water supply services in developing countries, as well as providing development cooperation. Therefore it is thus assumed that the short term impact of the projects ultimately do play a distinctive role in achieving the MDGs. The next paragraph will continue with the research methods.

## 2.3 **RESEARCH METHODS**

The majority of the information required for the writing of this thesis can be collected by means of literature review. The main resources of literature are the publication of the UN, DGIS, World Bank, NGO's and specialists' journals. In particular the data as regards Dutch development policy in the water sector, the MDGs and the fundamental elements of the PPP-concept can be thoroughly evaluated via analyzing key publications. In addition several publication of the Dutch water supply companies i.e. strategic business plans; plan of approach; project proposals etcetera will provide the necessary factual information on the two case studies.

Another key method applied in this research is the open interviews with key informants at the two water supply companies Vitens and the WMD. These informants should provide discernment on the objectives for initiating a partnership as well as the translation and implementation of the MDGs by the stakeholders. Following the collection of data, a comprehensive value can be given to the performance of the PPP concept, applied by a Dutch water supply company, and implementing Dutch policy for development cooperation.

A main element within the study of the PPP method will be the analysis of stakeholders. The rationale for carrying out a comprehensible stakeholder analysis is the widespread perception that there are frequently uncertainties on the roles played by the stakeholders within a PPP. The stakeholders will be assessed on their roles in participation, as well as their objectives within the partnership. Specific attention is given to the question of whose interests and objectives are being promoted under the headings of the PPP concept, in addition to the implementing the MDGs. The stakeholder analysis will complement the examination of the project design and the translation of the MDGs throughout the project.

Assessing and valuating the performance of policy is not an easy task. It is recognized by researchers and government institutions alike that there is no unassailable way of measuring performance by means of for example a causal relation. A useful alternative would be the measuring of plausible relations and qualitative analysis.<sup>9</sup> The value given to the performance and implementation of the MDGs in the chosen case studies therefore will be based on the translation of policy throughout the trajectory of the projects as well as the short term impact.

The definition for translating policy applied in this research is based on the extension of policy, or the use of the policy into the goals and decisions made throughout the project. This would denote that the evaluated decisions made and the results coming from these decisions are expected to be in line with the initial policy i.e. the MDGs. This assessment will be made in the last chapters of this research. The following chapter will first provide a short examination of the MDGs and their appliance in Dutch policy.

<sup>&</sup>lt;sup>9</sup> BUZA (2004)

### **3** THE MILLENNIUM DEVELOPMENT GOALS

At the United Nations Millennium Summit in New York, September 2000, a collective of 189 heads-of-states adopted the MDG's. The millennium goals represent an arranged course of action for national and international development cooperation. Eight goals were drawn up, representing a set of clear, numerical and time-bound targets. The targets in turn are designed to be applied by the international community to reach tangible and measurable results. These goals and their targets have proven to be very ambitious. They nevertheless have become important guidelines for policy makers around the world. This chapter will examine the main features of the MDGs and the appliance of these goals in Dutch development cooperation policy. The emphasis of this chapter is on the seventh MDG, the tenth target i.e. to cut in half, by 2015, the proportion of people without sustainable access to safe drinking water.

### 3.1 THE SEVENTH GOAL – DRINKING WATER SUPPLY

In this research specific attention is given to the seventh MDG. This particular goal consists of three targets, and is laid down to ensure environmental sustainability (see box 1). First and foremost the tenth target within the seventh goal is of importance in this research. This target is specifically directed at increasing access to a sustainable drinking water supply. In addition to the importance of this seventh goal in itself, its targets are an important element in reaching other objectives set in the MDGs, including "…eradicating extreme poverty and hunger; achieving universal primary education; promoting gender equality and women's empowerment; reducing child mortality; improving maternal health; and combating major diseases."<sup>10</sup> Consequently, the seventh goal has become a highly important facet in policy and development cooperation programmes.

Box 1: Millennium Development Goal number seven

- Target 9: To integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. (Indicator 30)

- Target 10: To cut in half, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation. (Indicator 31)

- Target 11: By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers. (Indicator 32)

Source: UN, 2000

At the Johannesburg World Summit for Sustainable Development (WSSD), August 2002, a plan of implementation for the MDGs was constructed. In this plan of implementation the UN proposed several strategies and actions to meet the challenges within the seventh MDG, target ten.<sup>11</sup> For example, they propose to "prioritize water and sanitation in national sustainable development strategies and in poverty reduction strategies, where they exist."<sup>12</sup> In addition they stress to "mobilize international and domestic financial resources at all levels, transfer technology, promote best practice and support capacity-building for water and sanitation infrastructure and services meet the needs of the poor and are gender-sensitive."<sup>13</sup>

<sup>&</sup>lt;sup>10</sup> Lenton, R & A. Wright (2004) pp 10

<sup>&</sup>lt;sup>11</sup> Lenton, R & A. Wright (2004)

<sup>&</sup>lt;sup>12</sup> WSSD (2002) pp 3

<sup>&</sup>lt;sup>13</sup> WSSD (2002) pp 11

Furthermore the UN would like to introduce measures to improve the efficiency of water infrastructure, promote hygienic usage, reduce losses and endorse full-cost recovery of water services, without the cost recovery objectives becoming a barrier to access to safe water by poor people.<sup>14</sup> These objectives could well be realized by introducing affordable, socially and culturally acceptable technologies and practices, as well as developing innovative financing and *partnership* mechanisms. In particular the aspect of developing innovative partnership mechanisms is of importance for this research.

The 'plan of implementation' stimulated governments to develop policies on how to bring about progress towards implementing the MDGs. However, there remained difficulties on how to actually implement the MDGs, and how to accomplish the target: to cut in half, by 2015, the proportion of people without sustainable access to safe drinking water. As aforementioned these goals are very ambitious. Several authors for instance claim that by means of the MDGs the issues and solutions to these issues are oversimplified.<sup>15</sup> In addition there are still uncertainties on the operational meaning and use of terminology, as well as disagreements on survey instruments and indicators for assessing progress towards the targets.<sup>16</sup> At present there is no general agreement about the instruments, methodologies or definitions that should be used for monitoring the MDGs at local, national and global level.<sup>17</sup>

Before continuing the research, several issues therefore need to be dealt with. Fist of all there is a need to identify the operational meaning and use of terminology regarding improved access to safe drinking water in the MDGs. This research will explore water supplies provided by drinking water supply companies i.e. piped water supplies through a household connection or standpipe. In line with definitions given by the UNDP, this type of water supply is generally acknowledged as "improved".<sup>18</sup> The numbers of household connections (as well as yard connections and standpipes) thus are an important indicator for assessing progress towards the targets in line with providing piped water supplies.

In addition there is the need to define the concept of sustainable development. The Brundtland Commission (1987) defined this concept as "a development that meets the needs of the present, without compromising the ability of future generations to meet their own needs."<sup>19</sup> The commission also identified the triple bottom-line or the three P's as important elements in sustainable development.<sup>20</sup> Further use of the concept of sustainable development in this research will thus refer to the aforementioned definition.

Finally it is noteworthy that this research will not try to make use of indicators, nor try to quantify the progress towards the targets in the MDGs. It will be a qualitative assessment of experiences in the application of a particular methodology or tool – Public-Private Partnerships (PPP) – for the implementation of the MDGs and Dutch policy. In the aforementioned 'plan of implementation', the UN gave their support to the application of the PPP concept for achieving the MDGs.<sup>21</sup>

<sup>&</sup>lt;sup>14</sup> WSSD (2002) pp 12

<sup>&</sup>lt;sup>15</sup> Harcourt, W. (2004) and J. Gronden, van de (2005)

<sup>&</sup>lt;sup>16</sup> Lenton, R & A. Wright (2004)

<sup>&</sup>lt;sup>17</sup> Schordt et al., (2004)

<sup>&</sup>lt;sup>18</sup> UN (2002)

<sup>&</sup>lt;sup>19</sup> VROM (2004) pp 7, and WCED (1987)

 <sup>&</sup>lt;sup>20</sup> Triple-bottom line or the three P's: People (socio-cultural capital), Planet (ecological capital) and Profit (economic capital)
 Parkin, J, & Sharma, D. (1999) pp 24

<sup>&</sup>lt;sup>21</sup> WSSD (2002) pp 12

The PPP methodology thus is often applied by international organisations to bring about progress towards the tenth target in the MDGs, and is decidedly supported by Dutch development cooperation as well. The subsequent part of this chapter will continue exploring the interpretation and application of the MDGs in Dutch development cooperation policy, followed by the key characteristics of the PPP methodology in the next chapter.

### 3.2 DUTCH DEVELOPMENT COOPERATION AND THE MDG'S

The main objective of Dutch development cooperation is sustainable poverty reduction. The MDGs represent important means for achieving this main objective within policy assembled by the Directorate General for International Cooperation (DGIS) of the Dutch government. To carry out the MDGs the Dutch government plans "to make everyone more involved in meeting the MDGs by 2015; boost the quality and effectiveness of development cooperation; and make Dutch efforts and results more visible."<sup>22</sup>

This research will mainly focus upon a methodology applied for the objective to boost the *quality and effectiveness* of development cooperation, and making everyone involved in meeting the MDGs. In particular MDG number seven – the tenth target, which refers to sustainable access to drinking water supplies – is of relevance to this research. The subject of water is also one of the five main themes of Dutch development cooperation.<sup>23</sup> Roughly 0.1 percent of Dutch GNP is diverted to development cooperation which is sited under the heading of environmental sustainability and water projects.<sup>24</sup> This is in accordance to the "input target" for stimulating and intensifying Dutch support in water programmes.<sup>25</sup>

The quantitative objective of the Dutch government in contribution to implementing the tenth target of the seventh MDG is to ensure that 50 million people will attain sustainable access to safe drinking water by 2015. The Dutch government is one of the first to come with a quantitative objective. Currently running projects within the 50 million people programme already aim to serve at least 28 percent of the totality (see appendix 1). In addition the Dutch government is trying to increase this number by means of support to an assortment of projects. The projects assembled in line with the 50 million people objective will be evaluated on the following basic approaches:<sup>26</sup>

- 1. The plan of approach has to focus on results;
- 2. The programs should entail a mechanism to ensure continuation after the gradual secession of support i.e. technical, financial and institutional independence;
- 3. The programs need to be social, economical and environmental sustainable;
- 4. The planning, financing and implementation require the participation of local users, local governments and institutions, as well as international parties as to improve "ownership";
- 5. Capacity building, education and awareness building of local parties are essential elements for the long term effectivity;
- 6. Public and private parties need to cooperate, in the Netherlands as well as in the receiving country;
- 7. Projects should be focussed on rural areas as well as slums in the peri-urban areas;

<sup>&</sup>lt;sup>22</sup> DGIS (2006) pp 7

<sup>&</sup>lt;sup>23</sup> The five main themes are: Education; *Environment and water*; AIDS prevention; and Reproductive health care

<sup>&</sup>lt;sup>24</sup> DGIS (2006)

<sup>&</sup>lt;sup>25</sup> DGIS (2006)

<sup>&</sup>lt;sup>26</sup> DGIS (2006) – <u>http://www.minbuza.nl/</u>

Dutch development cooperation projects are mainly carried out through three central channels. The first means for providing development cooperation is performed via the embassies, often with a direct link to the national governments. This is termed bi-lateral cooperation. Bi-lateral cooperation is currently the main method applied in Dutch development cooperation. Secondly there is the cooperation with international organization e.g. the World Bank, United Nations (UN), European Union (EU) etcetera. This type of cooperation is termed multi-lateral cooperation. Third and last is the development cooperation by way of partnering with companies and NGOs i.e. the private sector. This type of partnering can also be embedded within bi-lateral and multi-lateral cooperation.

The focus of this research is mainly on the latter form of development cooperation. The formation of partnerships between the public and the private sector is also of significant importance to the 50 million people objective. <sup>27</sup> It is established that state funding within PPPs act as a lever to release private investment in drinking water supplies.<sup>28</sup> This particular methodology thus would boost the quality and effectiveness of development cooperation. In 2005 the department of development cooperation therefore initiated a '*Call for Proposals*' for PPPs. Since then several indicative partnerships in the field of drinking water supply were assembled. Approximately 27 percent of the currently running projects in the drinking water supply sector are PPP's.<sup>29</sup>

This research will explore two distinct cases which have applied the PPP concept in more detail for the purpose of surveying how this concept is implemented and by what means the MDGs are translated within the projects. The first case is a project initiated by the Waterleidingmaatschappij Drenthe (WMD) in Indonesia. The second case is a project initiated by the water supply company Vitens in Mozambique. These cases will be further examined in chapters five and six. This chapter will first conclude with a short summary.

#### 3.3 SUMMARY

The MDGs represent an arranged course of action for national and international development cooperation. In addition to the MDG, the UN assembled a 'plan of implementation' at the Johannesburg World Summit for Sustainable Development (WSSD), August 2002. Governments widely draw on these goals and the 'plan of implementation' in modern-day development cooperation. This is also the case in the Netherlands, where the MDGs currently play a significant part in policy developed by the Dutch ministry of foreign affairs through the Directorate General for International Cooperation (DGIS).

In this research specific attention is given to the seventh MDG, the tenth target i.e. to cut in half, by 2015, the proportion of people without sustainable access to safe drinking water. In correspondence to this target the Dutch government laid down a quantitative objective i.e. the 50 million programme. Contemporary Dutch policy thus aims to increase sustainable access to drinking water supply for large groups of people in several key countries. This research will focus on two exemplar cases in two of these countries i.e. Mozambique and Indonesia. A popular method applied by the Dutch government to implement the MDGs is the concept of Public-Private Partnerships (PPP). The following chapter will now further introduce the basic features of this particular concept.

<sup>&</sup>lt;sup>27</sup> DGIS (2006)

<sup>&</sup>lt;sup>28</sup> DGIS (2006)

<sup>&</sup>lt;sup>29</sup> DGIS (2006)

#### 4 **PUBLIC-PRIVATE PARTNERSHIPS**

This chapter will provide an in-depth assessment of the concept of Public-Private Partnership (PPP). In the last couple of decennia this particular concept has been highly popularized by governments and businesses alike. There are however many different forms and ways of implementing a PPP. In this research we applied the PPP model which is derived from the UNDP Public-Private Partnership Programme i.e. "a spectrum of possible relationships between public and private actors for the co-operative provision of water supply services."

This definition is in accordance to the type 2 project initiatives as defined at the World Summit on Sustainable Development (WSSD) in Johannesburg 2002.<sup>30</sup> The concept of type 2 projects in turn is provided by the UN in addition to the 'plan of implementation' of the MDGs (which is part of the type 1 projects).<sup>31</sup> The same definition for PPPs is also applied by the Directorate General for International Cooperation (DGIS) of the Dutch government. After introducing the basic understandings of a partnership, this chapter will explore the drive behind constructing PPPs as well as the pros and cons for assembling PPPs in providing development cooperation (in public services) and the implementation of the MDGs.

#### 4.1 HISTORICAL BACKGROUND OF PUBLIC-PRIVATE PARTNERSHIPS

Since the 1990s the world has seen a rapid growth in popularity for creating partnerships between the public and the private sector in the management, operation and financing of infrastructure in developed as well as developing countries. It is assumed that this thrive was a reaction upon the hold of the privatization bug in the 1980s. There is however nothing new about the partnerships between the public and the private sector. The private sector has long been involved in the provision of infrastructure and water supplies. Take for example the French water company Générale des Eaux (Vivendi) which won contracts to supply water to cities such as Lyon, Paris and Venice already in the 19<sup>th</sup> century."<sup>32</sup>

The focus of this research is mainly on the formation of partnerships between the public and the private sector in developing countries. In accordance with the popularity of constructing PPPs in the 1990s and the general support for the application of this tool by the international organisations as the World Bank, many PPPs were assembled in developing countries. A substantial part of these private investments flows were directed at the infrastructure sector. For example, in between 1990 and 2001 the private investment flows in developing countries was estimated at a total of 331 billion in the telecom, and 213 billion in the electricity sector.<sup>33</sup> In that same period the water sector has seen a total private sector investment of approximately \$40 billion, an average of \$4 billion per annum.<sup>34</sup>

<sup>&</sup>lt;sup>30</sup> Type 2: is a voluntary instrument for achieving specified targets set at the Rio summit i.e. bridging the gap of governance; facilitation of innovative thinking; conflict resolution; and the changing roles of stakeholders. (WSSD, 2002)

<sup>&</sup>lt;sup>31</sup> Type 1: are initiatives, which are negotiated by the UN Member States e.g. the MDG (WSSD, 2002)

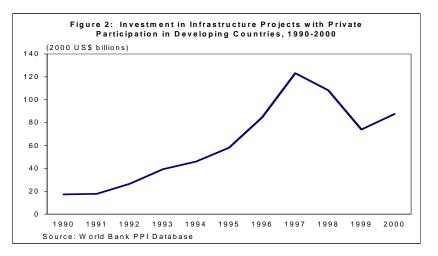
<sup>&</sup>lt;sup>32</sup> Wettenhall R. (2005) pp 34

<sup>&</sup>lt;sup>33</sup> Harris C. (2003)

<sup>&</sup>lt;sup>34</sup> Winpenny J. (2003)

The current total private sector investments are not nearly enough to cover the costs for reaching the MDGs on access to drinking water supply. These costs are estimated at a total of \$13 billion per annum<sup>35</sup>. The private sector however remains to be a minor contributor compared with public sector finance in infrastructure and implementing the MDGs.<sup>36</sup> The public sector however does not have the capacity to finance these costs on its own accord either. And, even though the public sector already invested large amounts of money in the water sector, budgets are limited, and it still turns out to be considerably under the required levels for implementing the MDGs.<sup>37</sup> There is thus an apparent need for increased financing from the private sector.





Source: World Bank (2006) PPI Database

Historically there have also been large differences in infrastructure investments in between the urban and rural areas in developing countries. As regards private investments in the water sector, traditionally focus has been mainly on the urban areas. Of the 715 public-private partnerships for infrastructure development reported since 1989, approximately 60 percent were to be found in the urbanized parts of the world<sup>38</sup>. And, albeit the lack of access to a sufficient and safe water supply is often most stringent in the rural areas, there remains a clear urban bias.

The private sector investments in infrastructure peaked in 1997, and since then have declined noticeably (see figure 2). Growing doubts on investment returns, public hostility as regard the involvement of the private sector and a growing risk of investing in unstable economies have made private investors hesitant.<sup>39</sup> Up to now the focus of this historical background has been mainly on the financial motives for constructing PPPs. However, this is not the only key-element of drive for constructing PPPs. There are many different motives which could explain the recent growth in popularity of applying the PPP concept. These motives will be discussed in the third paragraph of this chapter. The next paragraph will however first explore the key elements of a PPP.

<sup>&</sup>lt;sup>35</sup> Winpenny J. (2003)

<sup>&</sup>lt;sup>36</sup> Hall, D. & E. Lobina (2004) pp 268

<sup>&</sup>lt;sup>37</sup> Seldon J. (1998)

<sup>&</sup>lt;sup>38</sup> Mehrotra S. & E. Delamonica (2005)

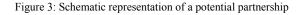
<sup>&</sup>lt;sup>39</sup> World Bank (2006)

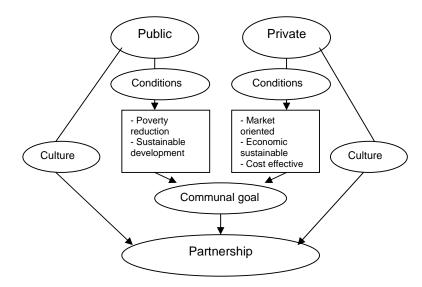
#### 4.2 WHAT IS A PUBLIC-PRIVATE PARTNERSHIP?

The main subject of this study is the congregation of a partnership between the public and the private sector in contemporary development cooperation. There are however several conceptual problems as regards defining a partnership. A partnership is principally defined as "a relationship between two or more entities which is characterized by mutual cooperation and responsibility, as for the achievement of a specified communal goal (see figure 3)."<sup>40</sup> In this case, the entities which have a relationship for mutual cooperation and responsibility are the public and the private sector.

However, there continue to be numerous different definitions of the PPP concept, ranging from short, medium to long-term commitment; even partition of risks; sharing of benefits and provision of resources; as well as levels of cooperation. Some authors yet claim that, now that the realms of the public and the private sector are blurring it seems that "...almost any modern organizational innovation in which public and private elements are found can be described as a PPP."<sup>41</sup> Others however assert that "only the private funding of public infrastructure can be headed under the PPP concept."<sup>42</sup>

In examination of how partnerships between the public and the private are organized Gentry (1997) identified three basic components i.e. parties, roles and form. As aforementioned, there are often several different parties – in the public as well as the private sector – with various interests involved in a partnership. Some of these parties fall in- or outside the boundaries of what is characterized as the "public sector" or the "private sector". The three fundamental parties most often identified are categorized as government, businesses and civil society (NGOs, CBOs etcetera).<sup>43</sup> For this research these three parties are divided into two parties i.e. the public (government), and the private (NGOs and businesses).





Source: Coninck et all, 2003

<sup>&</sup>lt;sup>40</sup> Oxford English Dictionary Online - <u>http://www.askoxford.com/</u>

<sup>&</sup>lt;sup>41</sup> Wettenhall R. (2005) pp 22

<sup>&</sup>lt;sup>42</sup> Wettenhall R. (2005) pp 22

<sup>&</sup>lt;sup>43</sup> Gentry B. (1997)

In addition to the basic components of organization Gentry identifies distinctive roles in partnerships i.e. providers, users and regulators. The provider supplies the services, users customarily pay for the services being provided and the regulators ensure that the service is offered by an acceptable quality and price. In general the public sector has the role of regulator, while the stakeholders in the private and public sector can be both the user and provider.<sup>44</sup> In most cases the public sector is also given the role of facilitator, though recently NGOs, citizens- and users organisations are increasingly being involved in regulating and facilitating the services as well.

The last component identified by Gentry is the form or type of a partnership. There is no single type of PPP's, seeing that a partnership can take many forms. One particular definition of a PPP is given by the UNDP. The UNDP defined a PPP as "a spectrum of possible relationships between public and private actors for the co-operative provision of water supply services" (see figure 4).<sup>45</sup> This definition thus provides us with a spectrum of relationships. This spectrum of possible relationships will be used in this research to identify the types of PPPs in the two case studies according to the roles and interests of the private and the public stakeholders.

The aforementioned spectrum identifies a so-called "maximalist-minimalist" continuum. According to Aye (2003) this continuum contains "at the one end systems based on pure community or user self-provision or private firms competing in the market, leaving only a minimal role for the state; and at the other end arrangements which still largely rely on public sector responsibility and funding, with only particular elements of services contracted out."<sup>46</sup> Some examples of assorted forms of PPPs within this continuum are: Public contracting; Build Own Operate (BOO); Concessions; Joint Ventures etcetera (see also appendix 2).<sup>47</sup>

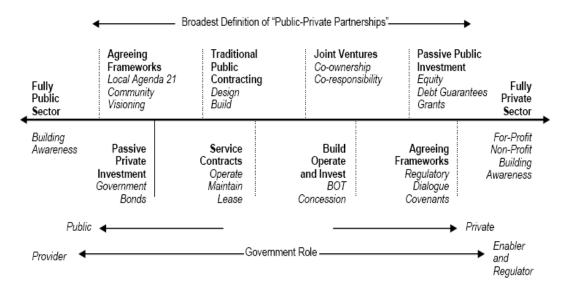


Figure 4: Spectrum of possible relations between the Public and the Private.

Source: Public Private Partnership Urban Environment programme (PPPUE) UNDP website

- <sup>45</sup> UNDP (2000)
- <sup>46</sup> Ayee, L. (2003) pp 2

<sup>&</sup>lt;sup>44</sup> Gentry B. (1997)

<sup>&</sup>lt;sup>47</sup> Hodge G. & C. Greve (2005)

To classify the two case studies within this continuum of possible relationships it is necessary to identify the factions involved. Secondly the roles and interests of each faction will need to be specified. Focus is given to e.g. the goals and motives of various stakeholders within the partnership (whose interests and objectives are being promoted). This will require a thoroughly performed key-stakeholder analysis.

Other key components as regard the application of the PPP method within the two case studies are predominantly impact and objective related e.g. increasing the availability and access to a sufficient and safe water supply (expanding the service area); effectively reducing waterborne diseases (improving water quality); creating local public support (involving users); stimulating initiatives from the local private and public sector; changing discourse as regards private involvement; indicating the alteration in operations and management of the water utility; increased benefits for the poor etc.

These characteristics eventually will be of value in creating a spectrum of engagement and measuring the level of interdependence of the stakeholders.<sup>48</sup> These aforementioned elements all thus complement the final analysis of applying the PPP concept and translating the MDGs and Dutch policy within the two cases. The following paragraphs will continue with the motivation in support of and against the application of the PPP concept as well as the private involvement in providing development cooperation in public services.

### 4.3 THE RATIONALE OF CONSTRUCTING PUBLIC-PRIVATE PARTNERSHIPS

As already cited in the previous paragraph the public sector can have a diverse set of reasons for constructing partnerships with the private sector. A clear motive for assembling a PPP is the lack of finance. These financial motives are derived from a general lack of public funds in developed and developing countries alike for meeting the growing demand of public services. In many cases the private sector can therefore play an important role in meeting the financial needs. By means of constructing PPPs the public bodies are thus increasingly trying to reduce the risks of public dept and direct investments by redistributing the costs as well as profits.

On the other hand there is the need for the public sector to motivate the private sector parties in initiating projects in developing countries. Currently a clear motive for the private sector is the concept of Corporate Social Responsibility (CSR).<sup>49</sup> This concept is also expected to make a considerable contribution towards meeting the MDGs.<sup>50</sup> In many cases the private corporations however does not want to risk investing in infrastructure projects in developing countries because they are not profitable. When the public sector will streamline financial support, these projects become more feasible thus attractive for the private sector. In short, by offering financial support for assembling PPPs in developing countries, the public sector makes development projects more feasible.<sup>51</sup>

<sup>&</sup>lt;sup>48</sup> Kostwinner, E. & R. van Tulder (2006)

<sup>&</sup>lt;sup>49</sup> The purpose of CSR is "to act as prerequisite for investment in developing countries; to help overcome market inefficiencies and gaps in governance; and to provide a means for public and private sectors to cooperate in order to overcome social challenges." Fox, T. & D. Prescott (2004) pp 3

<sup>&</sup>lt;sup>50</sup> Kaźmierkiewicz, P & J. Kling (2006) pp 78

<sup>&</sup>lt;sup>51</sup> WMD (2006) - <u>http://www.wmd.nl/english/projects/Indonesia/</u>

In addition to the financial motives, Harris (2003) noted that "the public sector monopolies tend to be plagued by *inefficiency* and fail to expand services to meet rapidly growing demand"<sup>52</sup>. The inefficiency and failure to meet rapidly growing demand is thought to be caused by the fact that the public sector often does not have sufficient access to knowledge of technologies, manage systems effectively or show entrepreneurial spirit. "The essence of applying the PPP concept is that the public sector does not buy an asset; it is purchasing a stream of services under specified terms and conditions."<sup>53</sup> Therefore, involving the private sector is due to increase efficiency in management and operation of water utilities, as well as improved access to new technology.

The Dutch government also anticipates that, by assembling PPP the efficiency and effectivity of development cooperation is strengthened. As stated in the previous chapters the private sector is also playing an increasingly important role in realizing sustainable development and implementing the MDGs. In light of this it is considered that an additional drive behind assembling PPPs is in fact that governments can no longer realize sustainable development on their own accord.<sup>54</sup> Therefore, governments increasingly look for private sector partners, specifically in the segment of water supplies, infrastructure development and in development cooperation.

In addition to these predominantly voluntary factors for constructing PPPs there is the aspect of increased pressure on developing countries to liberalize the national economy.<sup>55</sup> There are several direct coercive methods for transferring policy to liberalize economies, often laid down by supra-national institutions (e.g. IMF and the World Bank). These institutions retain "an important role in the spread of Western policies to third world countries" among which the concept of PPPs.<sup>56</sup>

In line with theories concerning the PPP concepts, governments in developing countries are therefore feeling pressured to implement particular policies. These direct coercive methods, as well as several other aspects and consequences of the changing role of the private sector in public services have also led to fast public discontent as regard the private involvement in infrastructure and water supply services. The next paragraph will continue to examine these objections against private intervention in more detail.

#### 4.4 CRITIQUE TO PRIVATE INTERVENTION IN PUBLIC SERVICES

In the previous chapter several motivations in favour of constructing PPPs have been delineated. Irrespective to the diverse motives in favour of constructing PPPs there are several authors which have explicitly expressed their objections against the private involvement in public services and infrastructure development. The Indian author Vandana Shiva, a renowned environmental thinker and activist, is one of these persons. She has articulated her objections against the global trend of privatization in several of key publications, and advocates that water privatization threatens cultures and livelihoods worldwide.<sup>57</sup>

<sup>&</sup>lt;sup>52</sup> Harris C. (2003) pp 2

<sup>&</sup>lt;sup>53</sup> Grimsey D. (2004)

<sup>&</sup>lt;sup>54</sup> Gentry B. (1996)

<sup>&</sup>lt;sup>55</sup> Mehrotra S. & E. Delamonica (2005)

<sup>&</sup>lt;sup>56</sup> Dolowitz D & D. Marsh (1996) pp 3

<sup>&</sup>lt;sup>57</sup> Shiva V. (2002)

In her book "Water Wars" Shiva (2002) states that the powerful label of PPPs is being used as a means to push privatization by the World Bank and aid agencies. She also claims that the PPP-arrangements "usually entail public funds being made available for the privatization of public goods."<sup>58</sup> And, in the long run these privatizations "affect people's democratic right to water, and it affects the livelihoods and employment right of those who work in municipalities and local water and sanitation systems."<sup>59</sup> In addition, the argument in favour of private involvement i.e. improving the poor performance of public sector utilities does not stand as strong as believed to, as there is no track record of success, and it does have a track record of risks and failures.

There are many other objections raised by several critics against the private sector involvement in the financing of infrastructure and public services. For example Parkin and Sharma (1999) have summed up a set of objections raised by social groups against the private financing (see box 3). It is also argued that there are the large risks being taken by privatizing a natural monopoly.<sup>60</sup> "Water utilities are unique among public utilities and represent perhaps the clearest form of a natural monopoly."<sup>61</sup>

The argument against private ownership of natural monopolies dates back to the 19<sup>th</sup> century and was provided by economist J.S. Mills. In short it is asserted that the conditions of a natural monopoly would lead to private sector companies engaging in wasteful competition. Several other negative effects of public-private partnering in development cooperation and the water sector are for example "unnecessary price hikes, lack of investment in extending networks to the poorest, 'cherry picking' the most profitable customers and services, and ultimately relying on government hand-outs."<sup>62</sup> These arguments and negative effects stress the importance of cautious use of the PPP concept in development cooperation and implementing the MDGs.

#### Box 3: Objections against private financing of public infrastructure

1 - The use of private financing skews resource allocation firmly towards projects that can provide short term gains for the investor and away from those that may be socially more desirable but produce a marginal short term surplus

2 - Because a substantial cash income stream is required by investors, the projects which attract interest tend to be in locations used by the wealthier members of society. Poorer areas are neglected.

3 - Private developments may generate benefits for the private investor but considerable public disbenefits can be created as a result.

4 - Public owners tend be risk averse, but owners of private utilities may be forced to design in a higher degree of risk if profits are to be made. This can be of concern when, for example public health is involved.

5 - When private investment creates private monopolies, the public interest may be neglected.

6 -The most lucrative infrastructure investment opportunities ten to be taken up first and the less attractive later.

7 - Because some degree of commercial confidence is involved in many private financial contracts with government, there is often a public perception that shady deals have been made.

Source: Parkin and Sharma (1999), pp 163

<sup>58</sup> Shiva V. (2002) pp 89

<sup>&</sup>lt;sup>59</sup> Shiva V. (2002) pp 91

<sup>&</sup>lt;sup>60</sup> Natural monopoly is defined as an industry where the fixed cost of the capital goods is so high that it is not profitable for a second firm to enter and compete. There is a "natural" reason for this industry being a monopoly, namely that the economies of scale only require one, rather than several firms.

<sup>&</sup>lt;sup>61</sup> Kostwinner, E. & R. van Tulder (2006), pp 12

<sup>&</sup>lt;sup>62</sup> Joy C. & P. Hardstaff (2005)

Private sector involvement has often been portrayed as being the solution to financial problems of water and sanitation in developing countries. However, the same private sector often does not have the indispensable financial requirements needed to solve the current problems in development cooperation either. And, even though PPPs are now increasingly being assembled with the rationale of an alternative approach to traditional development cooperation, in many cases it has failed to meet the required levels of achievement.<sup>63</sup> This research will therefore tempt to provide discernment on the advantages and disadvantages of applying the PPP concept in development cooperation and the public services for achieving the MDGs. The next paragraph will continue with a short summary of this chapter.

#### 4.5 SUMMARY

In general, PPPs are considered to be an important means to bring together the "strengths, capacities, approaches, skills, and methods of different actors, thereby creating powerful synergies to overcome barriers to sustainable development."<sup>64</sup> In particular sustainable development, which is the main objective of the seventh MDG, is a valuable reason for policy makers in the public sector to involve the private sector in development cooperation.

The main goal of the Dutch government and the Directorate General for International Cooperation (DGIS) is to reduce poverty and support sustainable development. Therefore they strongly believe that partnerships with the private sector can deliver outcomes in these two goals, which otherwise could not be realised.<sup>65</sup> In addition the private sector participation could provide economic incentives, as well as offer the technical and managerial knowledge needed to recuperate water supply companies in developing countries.

The PPPs thus offer to be of added value in the goal of reducing poverty and sustainable development in developing countries<sup>66</sup>. Cautious use of the PPP concept in development cooperation and implementing the MDGs is recommended, however. The question thus remains if the goals set in the partnerships are also in line with the goals set in development cooperation (see chapter 3.3). To explore by what means the PPP concept is implemented; if the MDGs are actually translated in the PPP's; and to find out if there are tangible objections against the application of the PPP-tool, this report goes on with the evaluation of two cases which are exemplar in the application of the PPP-method in the subsequent chapters.

<sup>&</sup>lt;sup>63</sup> Hall D. & E. Lobina (2003)

<sup>&</sup>lt;sup>64</sup> GA 58 session: A/58/227 Enhanced cooperation between the United Nations and all relevant partners, in particular the private sector, 18 August 2003.

<sup>&</sup>lt;sup>65</sup> BUZA (2006)

<sup>&</sup>lt;sup>66</sup> BUZA (2006)

#### 5 WATER FOR INDONESIA PROJECT - WATERLEIDINGMAATSCHAPPIJ DRENTHE (WMD)

The first case presented in this research is the Water for Indonesia project of the Waterleidingmaatschappij Drenthe (WMD) and the Partners for Water (PvW) programme.<sup>67</sup> The Water for Indonesia project is a rehabilitation and extension of infrastructure project of local Indonesian water supply companies (PDAM's) in the eastern parts of Indonesia i.e. the Moluccan Islands, Papua/Irian Jaya and Sulawesi (see figure 5). The project is one of the only two initiated PPPs which are supported by the 2002 P3SW programme of the Dutch Ministry of Foreign Affairs through the Directorate General for International Cooperation (DGIS), Partners for Water and the Ministry of Transport, Public Works and Water management.<sup>68</sup>

In Indonesia many people still lack sustainable access to a sufficient and safe water supply. Only 35% percent of the public have access to piped drinking water services, while the majority still depends on alternative drinking water supplies.<sup>69</sup> These alternative drinking water supplies are often very unreliable, and can cost up to 40-70 times more than the water coming from a faucet.<sup>70</sup> Additionally, due to the population growth and rapid urbanization, the demand for piped drinking water supplies is growing significantly.

At present the local water supply companies or PDAM's in the eastern parts of Indonesia perform under standard, or not at all. They are habitually in arrear with their maintenance and the percentage of non-revenue water (NRW) runs as high as 60 to 70 percent. "The local authorities in these Indonesian cities regularly lack the financial resources and expertise to carry out a thorough reorganisation."<sup>71</sup> By means of the Water for Indonesia project the WMD eventually aims to initiate a reorganisation and create viable and autonomous water supply companies.



Source: website WMD

<sup>&</sup>lt;sup>67</sup> The programme "Partners for Water" is a programme meant to strengthen Dutch international activities in the field of water management and supply by combining knowledge, expertise and financial resources.

<sup>&</sup>lt;sup>68</sup> The P3SW project and the Netherlands Water Partnership

<sup>-</sup> www.nwp.nl/gfx/content/P3SW\_doc.doc

<sup>&</sup>lt;sup>69</sup> WMD (2005) Plan van Aanpak pp 21

<sup>&</sup>lt;sup>70</sup> WMD (2005) Plan van Aanpak

<sup>&</sup>lt;sup>71</sup> Vewin (2006) Holland WaterAid pp 44

This chapter will introduce the key elements of the Water for Indonesia project, starting with the goals and motivations. The second part of this chapter will explore the choice of applying the PPP concept, the type of PPP applied and a stakeholder analysis. This will be followed by a paragraph with the currently accomplished results of the project. The seventh and last chapter will analyse the application of the PPP concept and the translation of the MDGs in the projects in more detail.

#### 5.1 MOTIVATIONS FOR INITIATING THE WATER FOR INDONESIA PROJECT

The WMD proclaimed several motivations for initiating the Water for Indonesia project. An apparent rationale for initiating a project in a developing country is the support of the Dutch government. The Dutch government acknowledged the importance of the PPP method for achieving the MDGs. By means of a "call for ideas" in 2002 they requested the private sector to get more involved in international activities. Via the support of the Dutch government – P3SW programme – the WMD was one of the first to apply the PPP method. The Water for Indonesia project is primarily focussed on the commercially not feasible water utilities. Thus, without support of the Dutch government, the Water for Indonesia could not have been realized.

At present, more and more private corporations are committing themselves to what has been termed Corporate Social Responsibility (CSR). The WMD also felt that it was part of their social responsibility to make a contribution to solve the problems concerning drinking water supply in the developing countries.<sup>72</sup> And, as they had the know-how and experiences required, they were the apparent institution to assist the Dutch government in finding a suitable and sustainable solution for the international water crisis and reaching the MDGs.

The main reason why the WMD has chosen for a project in Indonesia is because they have previous experiences with water supply projects in Indonesia. Already in 1994 they initiated a twinning project with a water supply company in Ambon.<sup>73</sup> This experience has also provided them with the necessary knowledge on a suitable way of assembling PPPs. Accordingly they are able to extend their experiences and knowledge by means of the Water for Indonesia project.<sup>74</sup> This knowledge can be passed on to, as well as strengthen their relationship with Dutch partners as well.

The Water for Indonesia project additionally offers a great new challenge for the WMD. The water supply services in the Netherlands have reached a certain level of performance, and there are no apparent challenges ahead. Initiating a project like this could put a halt to the continuing threat of detriment of knowledge and obsolescence within the organisation. The project would provide new opportunities for the staff e.g. to give and be given training. The Dutch costumers of the WMD will also experience an indirect advantage as a result of the Water for Indonesia project.<sup>75</sup> All things considered the Water for Indonesia project will broaden boundaries, provide new opportunities leading to a win-win situation. The next chapter will continue describing the goals of the Water for Indonesia project.

<sup>&</sup>lt;sup>72</sup> WMD (2005) Plan van Aanpak pp 10

<sup>&</sup>lt;sup>73</sup> WMD (2005) In close cooperation pp 4

<sup>&</sup>lt;sup>74</sup> WMD (2005) Plan van Aanpak pp 10

<sup>&</sup>lt;sup>75</sup> Interview H. Brink

#### 5.2 GOAL OF THE WATER FOR INDONESIA PROJECT

The objective of the Water for Indonesia Project is to improve the water supply services in 11 cities in the eastern parts of Indonesia. These cities have a combined total of 1.8 million residents of which 35% are presently served with piped drinking water supply. By means of the Water for Indonesia project the WMD eventually aims to serve at least 85% of the residents within 15 years. Taking into account the population growth, this comes down to no less then 2.3 million people which will need to be served with sufficient safe drinking water by the year 2020.<sup>76</sup> This however is not an easy task.

To accomplish this outcome, the first priority in the Water for Indonesia project is to guarantee that the current customers of the water utility companies are properly served with sufficient safe drinking water.<sup>77</sup> The WMD approach will be primarily aimed at financing, reconstructing infrastructure and technical support to the existing PDAM's. The necessary renovations will ensure that the loss of water will be minimized (25% or less) and the treatment as well as monitoring of the water supply will be improved. The improved services are expected to increase the 'willingness to pay', as well as change perceptions.<sup>78</sup> Secondly the management will need to be re-organized seeing that the utility need to operate more efficient.<sup>79</sup> Along with the aforementioned measures the employees will be re-educated in order to perform their tasks accordingly.

The WMD does not aim to make a profit with their participation in the water supply companies in Indonesia. The investments made are not commercially and will be based on the "no profit, no loss" principle.<sup>80</sup> The preliminary investments will come from a revolving fund. In case profits are made, these will be directly invested in the water utility. In addition the water companies will need to implement the full-cost-recovery principle. This is expected to lead to financial sustainability of the water supply company. Already after five years they need to be able to attract funds from the financial market for the potential expansion of the service area.<sup>81</sup> In the long run the companies will need to operate independently and be financially vigorous.

The main goal of the Water for Indonesia project is thus creating viable and sustainable local water companies which should be able to produce and distribute sufficient and safe drinking water 24 hours a day, seven days a week within a given service area. This goal will have to be reached within 15 years. After these 15 years the WMD will slowly secede from the then expectantly fully self-sufficient water supply companies. In some cases this could take at least 20 years, mainly because of the differences of phases of implementation as well as the rate of development.

<sup>&</sup>lt;sup>76</sup> WMD (2005) Plan van Aanpak pp 21

<sup>&</sup>lt;sup>77</sup> WMD (2005) Plan van Aanpak pp 5

<sup>&</sup>lt;sup>78</sup> WMD (2005) Plan van Aanpak pp 9

<sup>&</sup>lt;sup>79</sup> Website WMD - project Indonesia

<sup>&</sup>lt;sup>80</sup> Website WMD - project Indonesia

<sup>&</sup>lt;sup>81</sup> WMD (2005) Plan van Aanpak

Other than the above mentioned goals of the project, the project also aims to ensure sustainable development. Sustainable development is the leitmotiv in the P3SW programme.<sup>82</sup> In this case sustainability is perceived in several ways. The first interpretation of sustainability concentrates on the environmental aspects. The Water for Indonesia project thus focuses on the entire water chain (water as a chain activity) i.e. integrated water management.<sup>83</sup> An important facet in the project is for example taking into consideration the conditions of the water collection areas e.g. reforesting water resource areas, protecting the water resources, and treatment of waste water.

A second aspect of sustainability is the spin-off effect on the local economy which is expected to follow the recuperation of the water supply services. It is assumed that, when local infrastructure is improved, in combination with institutional reform and an increase of service levels, this would lead to improved socioeconomic circumstances and regional development.<sup>84</sup> In addition the long term commitment of the WMD as regards the Water for Indonesia project should lead to sustainable improvements in all areas within the new water supply company. The projects thus focuses on training and capacity building for local employees, and on strategic, well placed investments so that the PDAM's eventually are able to gain full autonomy.<sup>85</sup>

Last but not least the Water for Indonesia project aims to extent the input of Dutch knowledge across the border, as well as to preserve and extent expertise within the Dutch water sector. The Dutch government also recognized this particular project as a pilot project to acquire experiences with the PPP concept in combination with the New Public Management and CSR processes in combination with development cooperation.<sup>86</sup> The following chapter will explore the type of PPP which is applied in this case.

#### 5.3 THE PUBLIC-PRIVATE PARTNERSHIP

This paragraph will examine the type of PPP which is applied in the Water for Indonesia project as well as the motivation for the choice of this particular type. The variations of PPPs can be categorized according to the possible relationships between the factions involved, as well as their roles and interests. The fourth paragraph of this chapter will focus more on these aspects by means of a stakeholder analysis. This paragraph will mainly concentrate on the issue of asset ownership and capital investment of the public and the private actors.

The Water for Indonesia project portrays a unique partnership between the Dutch Government, the WMD (the Tirta Drenthe Group) and the Indonesian national and local government. The goal of the project is to create new local water supply companies which are *jointly owned* by the Tirta Drenthe Group (TDG) and the local government (see figure 6). Corresponding to the spectrum of possible relationships, we can classify the type of PPP applied here as a joint venture, or mixed capital partnership. In this paragraph focus is for the most part on the joint venture PPP amid the TDG and the local government.

<sup>&</sup>lt;sup>82</sup> WMD (2005) Plan van Aanpak pp 16

<sup>&</sup>lt;sup>83</sup> Website WMD - project Indonesia

<sup>&</sup>lt;sup>84</sup> UNESCO (2006)

<sup>&</sup>lt;sup>85</sup> WMD (2005) In close cooperation pp 4, and UN (2005) pp 1

<sup>&</sup>lt;sup>86</sup> WMD (2005) Plan van Aanpak pp 21

The new joint venture companies developed in this project are Limited Companies by shares (Ltd) i.e. a PT according to Indonesian law, of which the TDG will have a majority share of 51 percent.<sup>87</sup> In line with the findings in the master plan and the business plan, the TDG, through a PDAM – in cooperation with the local government – develop a shared perspective and make tangible arrangements. Eventually the joint venture PT's will be constructed. The WMD will provide the management of the joint venture PT, serve as an input of knowledge, and ensure that 25 percent of all the investments are covered.<sup>88</sup> The local governments in turn will supply employees and secure the concessions which need to be made. After 15 years the joint venture PT will have to operate as a Public Plc.<sup>89</sup>

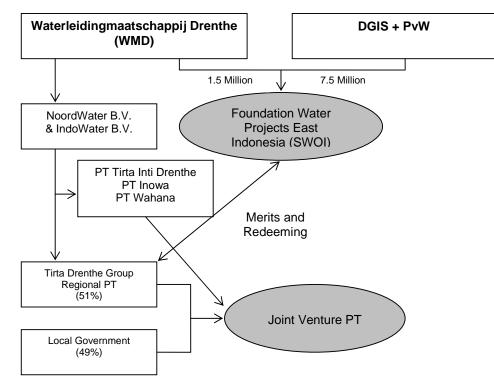


Figure 6: Public Private Partnership structure in Water for Indonesia Project.

Source: figure is based on the Project Plan of WMD

The main reason why the WMD has chosen for this particular type of PPP is that the joint venture PPP method has distinct advantages when compared to other types of partnerships. In particular the possibilities of direct involvement and remaining an important actor in the process of rehabilitation of the PDAM's have been of importance for the WMD.<sup>90</sup> Even though this particular aspect requires a long term commitment, it has shown to be of great value for the final results in the previous project in Ambon, Indonesia. In addition, the joint venture PPP method will warrant the autonomy of the new joint venture PT's as regards the local government, which is of importance to exert a pull on capital and introduce corporate management.<sup>91</sup>

<sup>&</sup>lt;sup>87</sup> WMD (2005) In close cooperation pp 6

<sup>&</sup>lt;sup>88</sup> WMD (2005) Plan van Aanpak

<sup>&</sup>lt;sup>89</sup> "A Public Plc refers to a mode of organisation where the utility is incorporated as a public limited company (or joint stock company as its American equivalent is called) under company law, but where the stocks are owned by local, provincial or national government." (Blokland, 1999) pp 16

<sup>&</sup>lt;sup>90</sup> Interview H. Brink.

<sup>&</sup>lt;sup>91</sup> WMD (2005) Plan van Aanpak pp 12

The application of the joint venture PPP method has several other advantages. One particular advantage within this joint venture PPP is derived from the non-profit principle, which ought to certify that the existing distrust as regards constructing PPPs is taken away. The private sector involvement and commercial goals will be minimized. The success of the joint venture PT's will ultimately depend on skilful management and ability to create a motivated organisation.<sup>92</sup> The following chapter will further explore the stakeholders which are involved in this particular project.

#### 5.4 STAKEHOLDER ANALYSIS

The Water for Indonesia project is a very complicated project with a substantial group of stakeholders. Stakeholders are the people or organisations which have an interest in the project. Here, merely the key stakeholders will be examined in more detail. We will try to identify their roles in the project i.e. providers, users, and regulators.<sup>93</sup> It should be noted though that the information gathered on the roles and interests of the stakeholders in the developing countries comes from publications and the interview with the Dutch partner. This analysis will help to identify the project environment, as well as identify relations in the PPP-structure in more detail. The following stakeholders have been taken into account:

– Dutch Government (DGIS and PvW)	(regulator, and enabler)
- WMD (and the TDG)	(provider, regulator, and enabler)
<ul> <li>National Government Indonesia</li> </ul>	(regulator, and enabler)
<ul> <li>Local Government</li> </ul>	(regulator)
<ul> <li>PDAM's and joint venture PT's</li> </ul>	(provider)

In the first place we need to recognize the three major stakeholders i.e. the WMD, the Dutch government and the Indonesian national and local governments. We start with the key stakeholders in the Netherlands i.e. the Dutch government and the WMD. The WMD is the main private sector initiator of the Water for Indonesia project. They received a 7.5 million euros subsidy from the Dutch government through the P3SW programme. Together with a contribution of 1.5 million euros from the WMD they assembled a revolving fund. This revolving fund was administered by the Foundation for Water Projects East Indonesia (SWOI). The board of this foundation was appointed by the Partners for Water (PvW) programme of Rijkswaterstaat and the WMD.

The fund now contributes to the costs of the programme preparation and project initiatives. Eventually the financial needs of the individual PDAM's will also be rewarded through this fund. In addition the WMD supports several external institutions, for example the PT Tirta Inti Drenthe, PT Inowa, PT Wahana (see appendix 4). Thus, both the Dutch government through the SWOI and the WMD will be able to monitor and control i.e. regulate the investments made as regards the new joint venture PT's. The role and motivations of the WMD have been thoroughly discussed in the previous paragraph, so we will continue this paragraph with exploring the interests of the other key mainly public sector stakeholders.

<sup>&</sup>lt;sup>92</sup> WMD (2005) Plan van Aanpak pp 12

<sup>&</sup>lt;sup>93</sup> Gentry, B. (1997) pp 7

The involvement of the Dutch government in this particular project originates predominantly from the necessity for exploring the potential of Public-Private Partnerships in the water sector and development cooperation.<sup>94</sup> The P3SW programme was developed to finance pilot projects, of which the Water for Indonesia has become part off. In this case the participation of the Dutch government has played a significant role for the implementation of the project. Without the financing of this programme the Water for Indonesia project could not have been realized. Thus, the Dutch government is not only a regulator, but also an enabler.

The WMD will also need to find footing with the Indonesian stakeholders. This leads us to the local governments in Indonesia, which are the current owners of the local water supply companies. The local governments supply the assets of the existing PDAM's, which will be transferred to the joint venture PT. The TDG will negotiate with the national government on the restructuring of loans en obligations of the PDAM, which will need to be accounted for by the new PT.

The joint venture PT will also need to obtain authorization for the winning-productiondistribution and sale of drinking water in the service areas from the proper governmental institutions. In short, the local governments will perform the role of providers, and the national governments will be the enabler. In addition it needs to be noted that, even though the Indonesian governmental stakeholders all realize the importance of providing good quality drinking water, they have diverse interests in the development of new local water supply companies.

The last key stakeholders which will be evaluated here are the local PDAM's. At present the PDAM's no longer are the only provider of services in the larger cities. Most of these services now have been taken over by private sector water vendors.<sup>95</sup> There is thus a clear need for reorganisation of these PDAM's. That is why they have sought international financial support from private investors. However, the WMD asserted that "non-functioning PDAM's cannot be improved by financial support alone".<sup>96</sup>

There are several significant changes going to take place in the management and operation of the PDAM's after they committed to a joint venture with the TDG. The new joint venture PT's eventually will enclose the role of providing the water services to the users and thus hold the role of provider. The local government will remain to be an influential actor in the new joint venture PT's as they will hold 49% of the shares.

In addition the branch organisation of the PDAM's i.e. PERPAMSI, a semi-governmental institution, will remain to play a significant role as well. They for example will be responsible for the inventory and debts relieve arrangements with the ministry of Finance.<sup>97</sup> The national and regional governments in Indonesia accordingly will perform the role of regulators. The cooperation and coordination with these stakeholders will undeniably influence the accomplishment of the Water for Indonesia project.

<sup>&</sup>lt;sup>94</sup> P3SW programme and the Netherlands Water Partnership

<sup>&</sup>lt;sup>95</sup> WMD (2005) In close cooperation pp 3

<sup>&</sup>lt;sup>96</sup> WMD (2005) In close cooperation pp 3

<sup>&</sup>lt;sup>97</sup> WMD (2005) Plan van Aanpak pp 28

It needs to be noted that, of all the key-stakeholders, the most striking absentee in the entire Water for Indonesia project are the actual users of the new water supply services in the Indonesian cities. There are no representatives (e.g. NGO's, CBO's) of the consumers i.e. civil society involved throughout the course of the project. If this aspect is going to have any significant affects on the outcome of the project will remain to be seen. To date not much is know on the impact of the projects. However, even though the projects only recently were initiated, there are already some outcomes which can be described. The following paragraph will examine these results of the Water for Indonesia project.

#### 5.5 ACCOMPLISHED RESULTS

After the Water for Indonesia project was granted financial support from the P3SW programme, the WMD developed a "plan of approach". In the overall project approach four main stages can be identified. First step is the assembling of a letter of intend. After the letter of intend is signed, the master plan and business plan are composed. These two documents play a central role in the preparation phase. Second are the contract negotiations, followed by the authorization of the joint venture contract and the activation of the joint venture. The final stages are the signing of a joint venture contract, and the activation of a joint venture. At present only three of the eleven cities involved in the project now have reached the final stage and are operating as active joint ventures (see table 1).

Region / Status	Letter of Intend	Contract Negotiations	Joint Venture Contract Signed	Active Joint Venture
Sulawesi				
Kota Manado	*	*	(*)	
Kabupaten Minahasa Utara	*	*		
Maluku				
Kabupaten Maluku Utara/Bacan	*	*	*	*
Kota Ambon	*	*	*	*
Kabupaten Seram	*			
Papua / Irian Jaya				
Kota & Kabupaten Jayapura	*	*		
Kota & Kabupaten Sorong	*		*	*
Kabupaten Biak Numfor	*		*	(*)
Kabupaten Manokwari	*			
Kabupaten Merauke	*	· I.,	(*)	·

Table 1: indication of status per region

Source: WMD (2005), Drinkwatervoorziening in Oost Indonesië, (plan van aanpak) pp 17 and interview

One of the first cities in which the WMD set up an active joint venture PT was the city of Ambon. Here the WMD created the PT Dream Sukses Airindo (DSA). The PT DSA project started in 1994 as a twinning project of the WMD with the PDAM in Ambon. In 1998 this project was converted into a joint venture PPP between the local authorities and the WMD. And even though it were difficult circumstances in the period from 1998–2002 (e.g. the violent riots between Christians and Muslims) they managed to realize at least 1000 new connections; install a new water purification station; and have a water supply capacity of 200 m<sup>3</sup> per hour. Thus, progress as regards the 24 hour water services and a significant reduction of water loss was achieved. In the year 2004 the PT DSA served approximately 3000 households with good quality drinking water, and managed to operate against the cost.<sup>98</sup>

<sup>&</sup>lt;sup>98</sup> WMD (2005) Plan van Aanpak pp 17

Most of the projects are still in the exploration and initiation phase. However, these exploration phases are very important for the continuation and implementation of the projects. The actual joint ventures will need to follow the course of the master plan, business plan and the investment plan assembled in this phase. Careful preparation for implementation is thus valuable. The prospective is that around spring 2007 all projects, with the exception of two, will be to some extent initiated. Analysis of the full impact and results of the implementation of joint venture PPP can only be performed after the completion of these stages. We will conclude this chapter will a short summary.

#### 5.6 SUMMARY

With the Water for Indonesia project the WMD, through the TDG and with financial support from the P3SW programme, thrives to rehabilitate local water supply companies in East Indonesia. This goal is implemented by means of constructing joint venture PPPs with local water supply companies. The new joint venture water supply companies eventually will have to supply sufficient safe water, 24 hours a day and seven days a week in a particular service area. After 15 years of support to the local water supply, the WMD will secede from the joint venture, and the companies have to operate autonomously.

There are many stakeholders involved in the Water for Indonesia project. The most important stakeholders are the WMD, the Dutch government and the local and national government of Indonesia. With the exception of the objective of improving the water supply services, all stakeholders have different motivations and goals for participating in the joint venture. By means of close cooperation, continues negotiations and thorough reporting the attainability and continuity of the project will be ensured.

So far only three of the eleven joint venture companies have been activated. The preliminary results of these projects are however very promising. In addition, the processes of initiating the other eight joint venture water supply companies are in their final stages. After five years of operation, when the companies will have to able to exert a pull on investments from the capital market, an additional assessment of the Water for Indonesia projects can be made. The next chapter will first explore another type of PPP, initiated by the Dutch drinking water supply company Vitens in Mozambique. In the last two chapters of this paper we will further analyse the translation of the MDG in these PPP's.

#### 6 DRINKING WATER PROJECTS MOZAMBIQUE – WATER SUPPLY COMPANY VITENS

This second case study will focus on a project initiated by Vitens International and the independent foundation Water for Life in Mozambique. It is a project which aims to improve the access to drinking water supplies for people in the urban and peri-urban areas in the south-eastern region of Mozambique. The project is jointly financed by the Dutch government through the Directorate General for International Cooperation (DGIS), the African Development Bank (AfDB) and the Mozambique Water Supply Investment and Asset Fund (FIPAG).

In 2004 the aforementioned parties signed a Memorandum of Understanding (MOU) to create autonomous water companies in four cities i.e. Chokwé, Inhambane, Maxixe and Xai-Xai (see figure 7). Currently only 28% of the residents in these cities have access to a sufficient and safe drinking water supplies.<sup>99</sup> The majority thus still depend on alternatives e.g. local hand pumps and small scale water supply systems. These types of water supplies are often unreliable and inadequate to serve all residents with sufficient and safe drinking water. As a result many people experience severe health problems and consequently more than half of the population does not reach the age of 40.<sup>100</sup>

In some of the larger cities the regional water supply companies serve residents with piped drinking water. These companies are government owned and habitually have to deal with a rapidly growing demand for water supplies. Currently these water companies provide low quality water, they have a Non Revenue Water (NRW) figure of 40-45% and there is a general lack of financial means to maintain and expand the water supply systems.<sup>101</sup> In cooperation with the FIPAG, Vitens has developed a project proposal for finding a suitable solution to these problems in the upcoming 3 years (2005-2008).



Figure 7: Cities in which Vitens has worked for the drinking water project Mozambique

<sup>&</sup>lt;sup>99</sup> Kostwinner, E. & R. van Tulder (2006) pp 15

<sup>&</sup>lt;sup>100</sup> Website Vitens - <u>www.vitens.nl</u> and Water for Life - <u>www.waterforlife.nl</u>

<sup>&</sup>lt;sup>101</sup> van Baalen, S.J.A. (2005) pp 8

This chapter will take a closer look at the project proposal and the partnership (i.e. PPP) of Vitens with DGIS and the FIPAG. In line with the previous chapter, a basic introduction to the key elements of the project of Vitens in Mozambique will be given, starting with the goals and motivations. The second part of this chapter will look at the choices made for applying the PPP concept, as well as the type of PPP applied. This will be followed by a paragraph with a stakeholder analysis and the currently accomplished results of the project. The last chapter will include the analysis of the translation of the MDGs in the project.

## 6.1 MOTIVATIONS FOR INITIATING THE DRINKING WATER PROJECTS MOZAMBIQUE

This paragraph will delineate the motivations of the Dutch water supply company Vitens to initiate the drinking water projects in Mozambique. The Dutch water supply company Vitens was assembled in 2002 after a merge of several local water supply companies.<sup>102</sup> Since then they are the leading and largest water supply company in the Netherlands. Separately the water supply companies had several experiences in international projects. And, because Vitens now performs an important role in the Dutch water sector, they decided to continue with developing international activities.

In 2003 they formed a subdivision which focuses on international projects i.e. Vitens International.<sup>103</sup> One of the first projects initiated by Vitens International was in Mozambique. The water specialist at the Dutch embassy in Mozambique contacted Vitens with the request to share their knowledge and experience in urban drinking water supplies with their colleagues in the towns of Chokwé, Inhambane, Maxixe and Xai-Xai.<sup>104</sup> In line with this request the initial proposal as regards the Vitens drinking water supply projects Mozambique was developed.

A main motivation for Vitens to initiate a water project in Mozambique is their commitment to corporate social responsibility principle (CSR). The concept of CSR was translated in their business goal i.e. "Vitens wishes to contribute to improved access to safe drinking water all over the world."<sup>105</sup> They also expressed their commitment with reference to the drinking water projects Mozambique because these projects are urban based, concrete, and small-scaled. These particular types of projects are closely related to Vitens' competences in design, operation and maintenance of (peri-) urban drinking water supply.<sup>106</sup>

Another drive for Vitens to initiate projects for the improvement of drinking water supplies in developing countries is the opportunity offered to Vitens' employees. By means of the drinking water projects Mozambique the employees have been given the opportunity to work in a foreign country. In the past year approximately 40 employees of Vitens participated in the Mozambique project.<sup>107</sup> They received and provided training, which in turn offered them a surplus of experiences.<sup>108</sup> Ultimately the international activities of Vitens are performed to certify that they uphold their leading role in the Dutch water sector.

<sup>&</sup>lt;sup>102</sup> Vitens - <u>http://www.vitens.nl/</u>

<sup>&</sup>lt;sup>103</sup> Vitens International - <u>http://www.vitens.nl/Internationaal/EN/Internationale+projecten.htm</u>

<sup>&</sup>lt;sup>104</sup> Water for Life - <u>http://www.waterforlife.nl/</u>

<sup>&</sup>lt;sup>105</sup> van Baalen, S.J.A. (2005) pp 4

<sup>&</sup>lt;sup>106</sup> van Baalen, S.J.A. (2005) pp 10

<sup>&</sup>lt;sup>107</sup> Vewin (2006) Water Spiegel 9 (6), pp 10

<sup>&</sup>lt;sup>108</sup> Vewin (2006) Water Spiegel 9 (6), pp 19

After a number of agreements between the Dutch government, FIPAG, and the AfDB, Vitens initiated a preliminary research to find a solution to the problems encountered in the four cities in Mozambique. They found that, at present the three main problems encountered in the water utility services in these cities are: the lack of a sufficient production capacity; the water quality; and a weak sustainability.<sup>109</sup> That is why there are several goals developed to find a clear and sustainable solution to these encountered problems. In the next chapter the goals of the project will be delineated.

#### 6.2 GOALS OF THE DRINKING WATER PROJECTS MOZAMBIQUE

The drinking water project Mozambique has several straightforward goals. In the first place Vitens aims to improve the access, quality and sustainability of water supply services in the urban and peri-urban areas in the four cities in Mozambique. They wish to improve access by means of increasing the current coverage of 37% to a coverage of at least 70-75%.<sup>110</sup> This expansion of water supply services will mainly be focussed on the peri-urban areas, where there will be a general target of services with: 30% through standpipes, 25% through yard connections and 20% through household connections.<sup>111</sup> The first stage of the project should already provide approximately 150,000 people with sufficient access to clean water. After three years Vitens has the goal to supply 500,000 people with sufficient safe drinking water supply.

The objective here is thus to "expand the access to safe drinking water by way of improvement and optimization of infrastructure in addition to the small systems in surrounding villages of four towns."<sup>112</sup> This can be accomplished by optimizing and improving existing infrastructure (constructing standpipes, reduce leakages, increase production) as well as develop and provide systems to secure water quality (instalment of chlorination units). However, the central goal is "to create autonomous water companies, which will provide safe water services to its customers and will need to be able to sustain these services, based on the efficient use of water and affordable tariffs."<sup>113</sup>

To reach the status of autonomous water supply there is also the need to reorganize and educate the management. A first step was taken by sending managing directors of the local water supply companies to Maputo for proper training.<sup>114</sup> In addition the projects and activities of Vitens will focus on the elaboration and implementation of Standard Operating Procedures (SOP's).<sup>115</sup> Vitens will contemplate their effort as regard introducing SOP's on the Methods ('what' to do and 'how' to do it), and the People (training employees to implement the methods).<sup>116</sup>

For the implementation and local support throughout the projects, Vitens allocated two fulltime employees. These two employees are responsible for respectively overall management and communication, in cooperation with the local water supply companies in Mozambique.

<sup>&</sup>lt;sup>109</sup> van Baalen, S.J.A. (2005) pp 11

<sup>&</sup>lt;sup>110</sup> van Baalen, S.J.A. (2005) pp 4

<sup>&</sup>lt;sup>111</sup> van Baalen, S.J.A. (2005) pp 8

<sup>&</sup>lt;sup>112</sup> van Baalen, S.J.A. (2005) pp 12

<sup>&</sup>lt;sup>113</sup> Kostwinner, E. & R. van Tulder (2006) pp 15

<sup>&</sup>lt;sup>114</sup> Vewin (2006) Holland WaterAid pp 16

<sup>&</sup>lt;sup>115</sup> the Standard Operating Procedure has three main elements: Methods, People and Means (necessary to implement these methods)

<sup>&</sup>lt;sup>116</sup> van Baalen, S.J.A. (2005) pp 14

In addition to the goals of Vitens international, specific attention is given to the goals of the Water for Life foundation. The Water for Life foundation was formed by Vitens, and only supports projects of Vitens International. The drinking water projects Mozambique are also in compliance with the Water for Life criteria. These criteria are fivefold. In the first place the project should provide structural support to improve access. A second aspect is the cooperation with local organizations and capacity building."<sup>117</sup> This takes place at two separate levels i.e. with locally based Mozambique water supply companies; and local structures (councils) in neighbourhoods.<sup>118</sup>

A third criterion focuses on sharing knowledge. In this case professionals of Vitens International will follow a training, while at the same time training and development of local staff will be carried out.<sup>119</sup> In addition the project should focus on financial sustainability. The revenues should eventually cover the operation and maintenance costs of the water supply services. Water supply services therefore will be categorized according to differences in income and benefits per neighbourhood (e.g. social billing, public standpipes). The project also aims to increase the number of metered and profitable connections.

Last but not least, all Water for Life initiatives require a certain relationship with existing Vitens' projects and have to be designed according to the integrated water management concepts. The drinking water project Mozambique therefore needs to be in compliance with the goal of improving the complete water cycle and be in line with the sustainable development of the access to drinking water supplies. The next paragraph will examine the PPP which is constructed to accomplish these goals.

## 6.3 THE PUBLIC-PRIVATE PARTNERSHIP

The partnership between the public and the private sector within the drinking water project Mozambique is based on a contract-model with clear deliverables embedded in a local chain. The term 'contract' can be defined as "a negotiated, legally recognized and enforceable agreement among the participating organizations that sets forth the rights and obligations of each party."<sup>120</sup> According to the spectrum of possible relationships within a PPP the service contracts-model secures a larger role for the public sector than was the case in the previous exemplar project i.e. a joint venture PPP.

In this case the public authorities retain overall responsibility for the operation and maintenance of the water supply system, and contracts out specific components.<sup>121</sup> In the contracts several clear deliverables have been delineated. "The internal and external accountabilities between the partners are high, requiring a rather high resource contribution from the partners involved and therefore a relatively high degree of interdependence."<sup>122</sup> The main reason why Vitens has chosen to apply this type of PPP is the fact that, even though there is a rather high resource contribution, in this case Vitens will not be responsible for large financial investments and risks.

<sup>&</sup>lt;sup>117</sup> Kostwinner, E. & R. van Tulder (2006) pp 15

<sup>&</sup>lt;sup>118</sup> van Baalen, S.J.A. (2005) pp 16

<sup>&</sup>lt;sup>119</sup> van Baalen, S.J.A. (2005) pp 16

<sup>&</sup>lt;sup>120</sup> Kostwinner, E. & R. van Tulder (2006) pp 17

<sup>&</sup>lt;sup>121</sup> Hodge G. & C. Greve (2005) pp 63

<sup>&</sup>lt;sup>122</sup> Kostwinner, E. & R. van Tulder (2006) pp 17

In the drinking water projects in Mozambique Vitens will principally provide technical assistance and provide vital materials to the water supply companies in the four cities. In addition Vitens will bear related costs e.g. salaries, transport, travel, and housing.<sup>123</sup> The costs of Vitens staff and local consultants will be calculated separately as part of the project. By means of the service contract PPP-model Vitens is closely involved in the recuperation of local water supply companies, without taking the financial risks.

In support of the drinking water projects Mozambique, Vitens reserved 1 million euros over three years. These investments are non-commercially, and based on the "no profit, no loss"-principle. Ultimately the local water supply companies will remain to be responsible for the input of their own staff, as well as the management and operation of the water supply systems. Other stakeholders (e.g. the AfDB and the FIPAG) are responsible for the large financial investments. The PPP of Vitens in Mozambique encloses a number of stakeholders. These key-stakeholders will be analysed in the subsequent chapter.

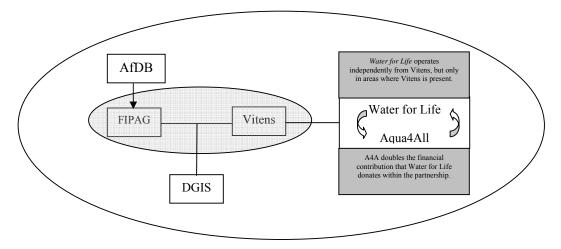
#### 6.4 STAKEHOLDER ANALYSIS

The drinking water projects Mozambique holds several key-stakeholders (see figure 8). In this paragraph an assessment of their roles i.e. the providers, users, and regulators, as well as their interests within the projects will be made.<sup>124</sup> It should be noted though that the information gathered on the roles and interests of the stakeholders in Mozambique is primarily derived from Dutch publications and the interview with a representative of the Dutch partner. The results are therefore biased. There are six key stakeholders identified:

- Vitens International
- Water for Life and Aqua for All
- Dutch Government, (DGIS)
- FIPAG
- The African Development Bank (AfDB)
- Neighbourhood organizations

(regulator, enabler) (enabler) (regulator, provider) (enabler) (users)

Figure 8: Partnership structure of the small works programme Mozambique



Source: Kostwinner, E. & R. van Tulder (2006) pp 17

<sup>&</sup>lt;sup>123</sup> van Baalen, S.J.A. (2005) pp

<sup>&</sup>lt;sup>124</sup> Gentry, B. (1997) pp 7

The first faction of key-stakeholders that has a significant interest in the drinking water projects Mozambique are the Dutch. In the previous paragraphs the goals and motivations of Vitens international and the Water for Life foundation have been delineated. However, the role of the Water for Life foundation will need some further clarification. Water for Life is an independent foundation, which operates as a fundraising concept. It offers the costumers of Vitens the possibility to support the international activities of Vitens on a voluntary basis.<sup>125</sup> The projects of Water for Life will predominantly be executed by Vitens International. In addition to the Water for Life foundation there is the Aqua for All foundation.

The Aqua for All foundation supplies funding and shares experiences for the implementation of projects in developing countries. It is a foundation in which several actors of the Dutch water sector have combined their means and expertise to support international projects. In this case project the Aqua for All foundation doubles the financial contribution of Water for Life within the PPP. The Aqua for All foundation has been given the opportunity to double these contributions through the thematic co-financing of DGIS. In this programme DGIS thus doubles the gifts and contributions by way of funding the Aqua for All foundation.<sup>126</sup> In addition DGIS has promised to support the drinking water projects of Vitens in Mozambique with 1 million euro. Hence, in this case Water for Life, Aqua for All and DGIS play the role of financer and enabler within the Mozambique project.

Vitens International is also an important enabler as well as regulator of the projects in Mozambique. In addition Vitens offers their expertise and management skills to the FIPAG.<sup>127</sup> The Dutch water supply company Vitens is thus an important contributor to the FIPAG programme for improving drinking water supplies in Mozambique. In addition a substantial financial contribution comes from the African Development Bank (AfDB). In 1996 the AfDB provided a 35 million dollars loan for the extension of the network and rehabilitation of infrastructure.<sup>128</sup> However, investments made from this loan will remain to be the responsibility of the FIPAG.

The FIPAG (Fundo de Investimento e Património do Abastecimento de Aqua) is a water supply investment and asset holding fund in Mozambique which holds the assets and responsibilities for development and operation of the state water resources in the four towns involved in the partnership. They are not directly part of the national government; though they primarily operate on a national level. The FIPAG is the main partner via which support is given to the local water companies, and thus the intermediary. The local water companies however will remain to "manage the delivery of water services, liaise with local government and carry out implementation with their own staff."<sup>129</sup> Presently these water supply companies operate under the responsibility of FIPAG, and consequently FIPAG is the main provider of water supplies. Eventually the operation will be separated from the asset holding fund. When this will be executed is not know to the author. Vitens

<sup>&</sup>lt;sup>125</sup> van Baalen, S.J.A. (2005) pp 4

<sup>&</sup>lt;sup>126</sup> Vewin (2006), Holland WaterAid pp 16

<sup>&</sup>lt;sup>127</sup> Kostwinner, E. & R. van Tulder (2006) pp 18

<sup>&</sup>lt;sup>128</sup> Kostwinner, E. & R. van Tulder (2006) pp 16

<sup>&</sup>lt;sup>129</sup> Kostwinner, E. & R. van Tulder (2006) pp 18

Last but not least Vitens has decided to involve the users and user organizations or representatives in the water supply projects in Mozambique. Even though the initial phase of the project is still performed over the heads of local users, they do play an important role in the final stages. In particular the actual implementation of a water supply connection to a community, and the local management of for example standpipes requires the involvement of local representatives. The local water supply companies and Vitens have good confidence in the competences of local communities for managing the local water supplies.<sup>130</sup> It can be concluded that Vitens thus recognized the importance of a large group of stakeholders in all the different stages of the project. The next chapter will delineate the current accomplished result of the Vitens water supply project in Mozambique.

## 6.5 ACCOMPLISHED RESULTS

Since the start of the project in 2005 Vitens has undertaken various small-scale activities within the drinking water projects Mozambique. As illustrated in the previous paragraphs these projects are mainly focussed upon: the repair and extension of basic infrastructure; instalment of standpipes; improvement of water quality (chlorination units); increasing the production capacity of local water supply companies; and a supplementary educational programme.

Vitens partially implemented these small-scale activities in each of the four towns included in the Mozambique projects. For example, in the cities of Maxixe, Chókwé and Inhambane Vitens has repaired and installed several standpipes, established chlorination units and repaired the secondary water supply infrastructure. Problems as regards the limitations of water productions in the city of Xai Xai forced Vitens to look for an alternative solution. The local water supply company here now daily fill up a plastic water tank in one community to supply the inhabitants with clean drinking water.<sup>131</sup>

However, these are of course only temporarily solutions to the problems as regards securing sufficient safe water supplies. In the long run increased production of water and improved management of the water supply companies will make it possible to reach more and more people over the years. This however is an ongoing process, which could take at least 10 to 15 years. Thus, consequently far more people will benefit from the drinking water projects Mozambique in the long run.

In addition the education programme for the employees of the local water supply companies has turned out to be a success. In 2005 already 21 local employees have completed short-term studies in i.e. communication and publication, human resources, accounting, hydromechanics and training in management and operation.<sup>132</sup> Also, in 2006 two managing directors of local water supply companies have enrolled in courses at the University of Maputo. The clients and the company itself will clearly benefits from the educational programme, seeing that the participants are enthusiastic and motivated. Last but not least many of the local inhabitants are now being educated and informed on the appropriate usage of water supplies.

<sup>&</sup>lt;sup>130</sup> J. Hoffer, interview

<sup>&</sup>lt;sup>131</sup> Water for Life website – voortgang projecten

<sup>&</sup>lt;sup>132</sup> Water for Life website – voortgang projecten

There are also several visible and quantifiable benefits of the Mozambique projects. According to Jan Hoffer, managing director of Vitens International, over 210,000 people already have visibly benefited from Vitens' activities.<sup>133</sup> The majority of these people benefited from Vitens' activities in the extension of secondary networks into communities, as well as the instalment of standpipes and improved water quality (via the instalment of chlorination units). Ultimately, at least 500,000 people will benefit from the small work programme Mozambique.<sup>134</sup> The current accomplishments of the projects already have brought about 'goodwill' of the municipalities as well.

Even though these short term results as regards improvements of water supplies in these cities of Mozambique are impressive, in the long run the water supply companies have to operate autonomously. The question remains if these companies will be able to operate autonomously when Vitens will secede from the partnership after 3 years. The partners in the drinking water project Mozambique however are confident that this ultimately will be possible.<sup>135</sup> The next paragraph will conclude this chapter with a short summary.

#### 6.6 SUMMARY

This chapter outlined the key elements of the drinking water projects Mozambique of the Dutch water supply company Vitens. The main goal of this project is to "expand the access to safe drinking water through the improvement and the optimization of the secondary infrastructure and the small systems in surrounding villages of four towns i.e. Chokwé, Inhambane, Maxixe and Xai-Xai."<sup>136</sup> In addition support is given to the local water supply companies. Eventually these water companies will have to operate autonomously, and provide sufficient safe water for affordable tariffs to at least 530,000 residents.

To accomplish this objective Vitens has established a partnership with the Dutch government (DGIS), FIPAG and the AfDB. This particular partnership is based on a service contract PPPmodel with clear deliverables embedded in a local chain. In the Mozambique project Vitens will mainly provide technical assistance and grant additional investment capital which can catalyze improved management practice.<sup>137</sup>. In addition Vitens and FIPAG will regulate the investments and implementation of the project, as well as provide technical and managerial knowledge. Other stakeholders like for example the foundations Water for Life and Aqua for All will provide financial assistance. In the final stages of the project Vitens also aims to involve the users of the water supply services (neighbourhood organisations).

To date the project has accomplished several visible results in the four cities in Mozambique. In some cases Vitens, in cooperation with the FIPAG, has been able to extent secondary infrastructure into the communities, and install and repair standpipes. Other results have been seen in the education of employees, as well as in the education of water supply users. However, the question remains if these results will be maintained after Vitens will slowly withdraw from providing support to the local water supply companies. The next chapter will analyse the Vitens project in Mozambique, as well as the Water for Indonesia project of the WMD in reference to the application of the PPP concept, and the implementation of development cooperation policy.

<sup>&</sup>lt;sup>133</sup> Vewin (2006) Holland WaterAid pp 17

<sup>&</sup>lt;sup>134</sup> Vewin (2006) Water Spiegel 9(5), pp 30

<sup>&</sup>lt;sup>135</sup> Kostwinner, E. & R. van Tulder (2006) pp 20

<sup>&</sup>lt;sup>136</sup> van Baalen, S.J.A. (2005) pp 12

<sup>&</sup>lt;sup>137</sup> Kostwinner, E. & R. van Tulder (2006) pp 20

## 7 ANALYSIS OF THE TWO CASES

This chapter will make an effort in providing a short analysis of the partnerships between the public and the private sector in the cases of the Water for Indonesia project and the drinking water projects Mozambique. The centres of attention in these cases are the types of PPP, the differences between the types of PPP, motives for implementation, as well as the translation of the MDGs throughout the course of implementation of these partnerships. Focus is given to the Dutch stakeholders i.e. Vitens, WMD and DGIS, their goals and the short term impact of the projects. Last but not least this chapter will provide a short summary followed by the final chapter which will conclude with an answer to the main research question.

## 7.1 ANALYSIS OF PUBLIC-PRIVATE PARTNERSHIP

This first paragraph will examine the two types of PPPs applied in the case studies i.e. the joint venture and service contract PPP model in detail. In the previous two paragraphs the key components of these two distinctive PPPs have been introduced. This established a foundation for placing the partnerships in a model of deliverables in reference to resource contribution.<sup>138</sup> This model defines the deliverables in clear and less clear, depending on the formality of agreements on partnering. The more formal the agreements are, the higher the accountability and dependence between stakeholders. In addition the feature of high or low resource contribution will explicate arrangements and level of risks taken by the stakeholders.

These two features are important for indicating the level of interdependence between the stakeholders which are taken into account in the stakeholder analysis (see figure 9). The interdependence of stakeholders in turn is an important element in substantiating goals and objectives within a partnership. In the length of these features, the advantages and disadvantages of the two particular types of PPP applied in the cases – as perceived by the Dutch initiators – will be discussed. However, the paragraph will first set off with a short analysis of the incentives for initiating a project in a developing country and incentives for applying the PPP concept.

The motives of the WMD and Vitens for initiating respectively the Water for Indonesia project and the drinking water projects Mozambique are relatively compatible. In the first place both Dutch water supply companies have initiated these projects in order to make a contribution in achieving the MDGs and the 50 million programme of DGIS.<sup>139</sup> This is also in line with their commitment to the concept of Corporate Social Responsibility (CSR). Here, the concept of CSR has demonstrated to be of considerable value in contribution to meeting the MDG's.<sup>140</sup>

Vitens and the WMD thus recognized that they can play a significant role in offering development cooperation in the water sector. They have participated by means of assembling partnerships with local water companies in developing countries. Eventually they both decided on partnering with local water supply companies in medium sized cities. The selection for projects in urban areas is a very rational one, seeing that the Dutch water supply companies hold explicit knowledge in managing and operating urban water supply services. And, with the support of the Dutch government (DGIS) they were given the opportunity to utilize this knowledge in projects which otherwise might not be attained.

<sup>138</sup> Kostwinner & Tulder (2006), pp 17

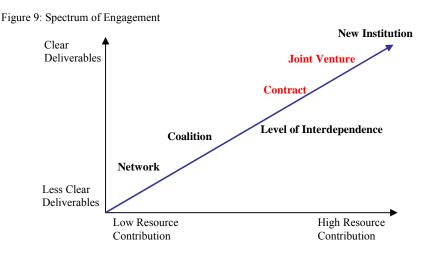
<sup>&</sup>lt;sup>139</sup> DGIS, 2006

<sup>&</sup>lt;sup>140</sup> Kaźmierkiewicz, P & J. Kling (2006)

In addition the Dutch water supply companies have a number of motives for initiating a project in a developing country which are clearly not related to support the implementation of Dutch policy and achieving the MDGs. By way of the international projects the WMD and Vitens for example are presented with the opportunity to extent their activities across the European boarder, which in turn created interesting opportunities for their employees. The projects are also an important means for the Dutch water supply companies to show their costumers that they are making an effort in reaching the MDGs i.e. CSR. However, these particular motives appeared to be secondary vis-à-vis the aforementioned objectives.

Besides the aforementioned motives for initiating a project in a developing country, there is also a rationale behind applying the PPP concept. Between the two water supply companies these rationales differ considerably. The WMD for example has chosen to apply the PPP concept for the reason that they had prior experiences with this concept in an earlier, very successful, project in Indonesia.<sup>141</sup> This was an excellent motivation for extending this particular technique to projects in other cities. Vitens also had a little knowledge on applying the PPP concept in development cooperation through projects implemented by for example NUON.<sup>142</sup> However, their experiences led them to the decision to set off a project which required a lower level of involvement. The projects in Mozambique therefore did not set off as a PPP, but along the track developed into one.

The different type of PPPs applied by the WMD and Vitens show several disparities in interest, as well as in commitment. The interests of the WMD in the Water for Indonesia project for example are comparatively higher than is the case in Vitens' projects in Mozambique. This rather high level of interest was the main incentive for the WMD to apply this particular PPP model. The joint venture PPP model provided them with the opportunity for direct involvement in decision making (appendix 3). In addition they remained to be an important actor in the process of rehabilitating the local water supply companies. In terms of duration the joint venture PPP model also requires a long term commitment – a minimum of 15 years – while the service contract PPP model is often based on a short term (see appendix 2).



Source: Kostwinner & Tulder (2006), pp 17

<sup>141</sup> Interview H. Brink

<sup>&</sup>lt;sup>142</sup> NUON is one of the regional companies which merged with several other companies in 2002 to become Vitens.

The joint venture PPP model enfolds many formal agreements i.e. clear deliverables, leading to a high level of interdependence (see figure 9). The WMD perceives these features of the joint venture PPP-model to be important advantages. A slight disadvantage of the joint venture PPP model is the requirement for high resource contribution. Urban water supplies are often very costly.<sup>143</sup> In many cases large investments need to be made in order to ensure the sustainability of qualitative and reliable services of the water companies. In the case of the WMD have to be accountable for the investments in eleven companies, seeing that they are the majority shareholder. It remains to be seen if the financial structure within the project plan of the WMD i.e. the revolving fund, will be sufficient to cover the required initial investments.

These aforementioned characteristics of the joint venture PPP model were conversely the main incentives for Vitens to decide on an alternative approach in partnering i.e. the service contract PPP model. The service contract PPP model required a lesser resource contribution, and, in the case of the drinking water project Mozambique Vitens has a lesser interest in the local water supply companies. By means of this type of PPP Vitens does not take any large financial risks, and could concentrate on providing technical and managerial support. Furthermore, because Vitens' structural involvement on all levels within the project, there still is a rather high level of interdependence when compared to other types of PPPs e.g. coalition, network etcetera (see figure 8).

The PPP concept hence was successfully applied by both the two Dutch water supply companies. Vitens and the WMD however preferred rather different types of PPPs with a mixture of characteristics and effects. An important similar effect of the two projects however is that these different types of PPP have definitely proven to be less threatening for local (public) stakeholders then was the case in full privatization.<sup>144</sup> For example, in Mozambique and Indonesia existing public resistance as regards private sector involvement in drinking water supply services were overcome by the successful implementation of the PPP concept.<sup>145</sup> The successful implementation of this particular concept thus created a change in perception on private intervention in public services.

The successful implementation of the PPP concept in these cases is without a doubt primarily interrelated to the involvement of the Dutch stakeholders. That is, the Dutch water supply companies are not the conventional private sector party. They are Public Limited Companies (Plc), and therefore well aware of the responsibilities of providing a public service. For that reason, in both case studies there was no commercial drive as regards the implementation of the projects. The projects were based on a "no profit, no loss" principle. The PPPs within the projects of the Dutch water supply companies and the local water supply companies in the developing country consequently provided an attractive mix of public and private stakeholders.

Both the public and the private parties in the Netherlands have benefited from the participation in the PPP. The private sector – the Dutch water supply companies – benefit because they are able to embark on international activities and implement the CSR-concept. In addition the public sector i.e. the Dutch government through DGIS was able to implement projects and accomplish goals which otherwise might not be reached.

<sup>&</sup>lt;sup>143</sup> Lenton, R & A. Wright (2004)

<sup>&</sup>lt;sup>144</sup> Vewin (2006) Water Spiegel 9 (6), pp 10

<sup>&</sup>lt;sup>145</sup> Hall D. & E. Lobina (2004) pp 272, Hall, D & E. Lobina (1999)

The main beneficiaries are of course the public partners in the developing countries e.g. the local water supply companies. Eventually, when the Dutch partners will withdraw from the partnership, these companies are expected to operate autonomously. However, the question remains if these companies are then actually capable to operate autonomously.

It can be concluded that the application of the PPP concept in the exemplar cases created a win-win situation for the public and private parties in the developed as well as in the developing countries. However, if the objective of increasing *efficiency and effectivity in providing development cooperation* (the main motive for applying the PPP concept) is realized, remains to be seen.<sup>146</sup> The also raises the question if the PPP method actually contributed to the implementation of policy and the MDG's? This leads us to another important aspect of this study i.e. translating Dutch policy and the MDGs within the PPP's. The next paragraph will thus continue with the analysis of translating the MDGs in the two case studies.

# 7.2 ANALYSIS OF TRANSLATING THE MDG AND DUTCH POLICY

This chapter will evaluate the translation of Dutch policy and the MDGs within the two case studies. First an aide memoire of the policy outlined by the Dutch government as regards development cooperation and the water sector. The Dutch government is encouraging the implementation of MDG number seven, the tenth target i.e. to cut in half, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation. In order to make a substantial contribution to this particular target, the Dutch government translated the seventh MDG into Dutch policy by means of a quantitative target. This target is to ensure sustainable access to sufficient safe drinking water supplies for at least 50 million people by the year 2015.

There are many ways to achieve this goal. A popular method adapted by the Dutch government is the assembling of PPPs. In this research focus is given to two exemplar cases of PPPs – established by Dutch water supply companies – in addition to the 50 million people objective. The application of this particular method i.e. the PPP method, within these two case studies has been discussed in the previous paragraph. The question remains if these initiatives actually contributed to reaching the MDGs as translated in Dutch development cooperation. In order to make a significant contribution to achieving the MDGs, DGIS stated that any initiative should hold to the following approaches:<sup>147</sup>

- 1. The plan of approach has to focus on results;
- 2. The programs should entail a mechanism to ensure continuation after the gradual secession of support i.e. technical, financial and institutional independence;
- 3. The programs need to be social, economical and environmental sustainable;
- 4. The planning, financing and implementation require the participation of local users, local governments and institutions, as well as international parties as to improve "ownership";
- 5. Capacity building, education and awareness building of local parties are essential elements for the long term effectivity;
- 6. Public and private parties need to cooperate, in the Netherlands as well as in the receiving country;
- 7. Projects should be focussed on rural areas as well as slums in the peri-urban areas;

<sup>146</sup> UN (2004) pp 3

<sup>&</sup>lt;sup>147</sup> BUZA (2006)

In the first place it could be noted that the motives of Vitens and the WMD as delineated in the previous paragraphs are both predominantly in accordance to the above stated requirements (see table 2). In addition the two Dutch water supply companies declared, in various instances, that implementing the MDGs is one of the main reasons why they initiated the projects. From this point of view the water supply companies thus clearly intended to translate the MDGs in their projects.

However, a closer look at the actual implementation demonstrates additional affects and differences of these particular projects in relation to the stated requirements. Therefore the next part of this paragraph will attempt to identify the seven issues in approach enclosed in the initial goals of the projects, the project plans and preliminary results. This should eventually elucidate the extent to which the Dutch water supply companies translated Dutch policy, and consequently the MDGs within their projects.

The first issue i.e. the *focus on results*, is in both projects noticeably present. This aspect is one of the main advantages referred to in favour of involving a private party in development cooperation and providing public services.<sup>148</sup> Not only is this requirement necessary for (financial) support from the Dutch government, but both the WMD and Vitens value measurable results as to rapport their achievements internally and to its donors. For that reason they established clear goals and extensive reporting plans.

A second issue is the importance of *continuation* after the secession of support from the Dutch partners' i.e. to secure technical, financial and institutional independence. This is a very important issue in accordance to reaching the MDGs. In many previous cases the withdrawal of support however led to the diminution of outcomes. The local water supply companies were often not able to operate and manage the water supply services autonomously without the assistance of foreign partners. There are therefore several measures to be taken as to ensure autonomy of the receiving local water supply companies.

In the Water for Indonesia project for example, the WMD provides training to management as well as operative employees to ensure technical and institutional independence of the water supply companies. In addition financial procedures as regards the collection of revenues and debt relieve are created (e.g. implement full-cost recovery). The projects will be financed by means of a revolving fund, which will have to ensure financial sustainability and control the merits and redeems. In the long run the WMD also aims to create autonomous water supply companies. This will need to be accomplished within 15 years, after which the WMD will gradually secede from the joint venture. In conclusion the WMD thus has accordingly taken significant measures to guarantee continuation.

The drinking water project Mozambique of Vitens International however does not include arrangements for financial independence of the water supply companies. Even though the support of Vitens does include the education of management and technical staff, there will only be a temporary contract-based contribution. After three years of support Vitens will eventually withdraw from the project. The question remains if the three water supply companies will then eventually be able to function autonomously. At present this will mainly depend on the activities of the FIPAG. In addition it should be noted that Vitens has plans to extent their involvement in the projects in Mozambique for at least another three years, leading to a better prospective for creating autonomous water supply companies in the future.

<sup>&</sup>lt;sup>148</sup> Harris C. (2003) pp 2, and World Bank (1994), pp 400

This brings us to the question of *sustainability*. The chapter three we defined the triple bottom line of sustainability and sustainable development i.e. social, economic and environmental. The Dutch government also signifies the importance of these three aspects of sustainability. In the two case studies however these three elements only play a minor role in the fundamental structure. The WMD in the Water for Indonesia project though did define the objective to ensure sustainability throughout the project. In particular economic sustainability, which will need to be ensured by means of a long term commitment and the eventual autonomy of the water supply company, is an important feature. Secondly environmental sustainability is taken into account by way of the extended goal of integrated water management (e.g. reforesting water resource areas).

In the case of drinking water projects Mozambique Vitens not specifically has taken into account the aspects of sustainability. No specified plans have been made to include environmental sustainability or integrated water management within the projects. Of course, the financial contribution made investments possible which in any other case would not have been made. And, autonomy of the water supply companies is part of the overall goal of the project, which should eventually lead to economic sustainability. Another important factor in both projects is the spin-off effect on the local economy, which is expected to follow the recuperation of the water supply companies.<sup>149</sup> Thus, the spin-off effects of improving water supply services will likely be a significant contribution to sustainable development as well.

A fourth issue is the *participation of local partners* in the planning, financing and implementation to improve "ownership". Of course both projects need at least a basic involvement of local partners e.g. the local water supply companies, local government and institutions in order to ensure that their projects will be implemented. However, as the projects are aimed at improving drinking water supply companies in urban and peri-urban areas, the residents of these cities are thus important local partners as well.

In both case studies several local partners are involved throughout the course of the projects. In the Water for Indonesia project for example, the WMD has developed a close cooperation with local governments (which are the current owners of local water supplies) for the institutional development and in financial support. In addition the WMD makes use of local knowledge for the technical assistance and the implementation of plans. However, there are no representatives of the user groups (e.g. NGO's, CBO's) involved in the planning and implementation of the project.

In the case of the drinking water projects Mozambique Vitens has developed a close cooperation with local governments and institutions, as well as the user groups through neighbourhood organisations. Even though the planning and development of the projects is performed over the heads of these groups, they are closely involved in the implementation phase. In addition Vitens cooperates with the management of the local water supply companies through a partnership with the Mozambique Water Supply Investment and Asset Fund (FIPAG).

<sup>&</sup>lt;sup>149</sup> UNESCO (2006)

The Dutch government also acknowledged that, partially for the continuation of the project after withdrawal of foreign partners, as well as the long term effectivity of the development assistance, it is important to educate, create awareness and ensure *capacity building*.<sup>150</sup> As may have become clear in the previous subsections, both the WMD and Vitens have added training and educational programmes to their projects. However, Vitens has paid specific attention to this facet, and provides educational programmes for communities in the household use of water to secure safe and healthy water supplies as well. In addition to the technical and managerial support, they have also sent a communication advisor to educate local employees.

The next to last issue of approach is an obvious one as regards the two case studies i.e. cooperation between the public and the private sector. The application of the PPP method in both cases innately requires a *public and a private party* in the Netherlands as well as in the receiving country. Therefore, they are completely in line with the requirements of DGIS as regards this particular approach. The last condition however could be more difficult to achieve. The requisite to be precise is that the project approach should be *focussed on rural areas, as well as slums* in the peri-urban areas.

Table 2. Concordance of approach of the two case studies			
	Water for Indonesia	Project Mozambique	
1. Focus on results	Clear goals, Regular reports on results;	Clear goals; Regular reports on	
	Extensive reporting plan (master plan	results; SOP; Responsibility to donors	
	investment plan, business plan etc.)	in Water for Life foundation	
2. Ensure continuation	Financial plan (with revolving fund);	Educational programme;	
	Educational programme; Reorganisation;	Autonomy goal	
	Autonomy goal		
3. Sustainability	Financial sustainability; Long term	Financial sustainability; Spin-off on	
	commitment; Integrated water	local economy	
	management - Environmental		
	sustainability; Spin-off on local economy		
4. Local user	Partnering with local water company;	Partnering with local water company;	
participation	Local governments bodies; Local	Local government bodies; Local	
	knowledge application; Local employees;	employees; Involving neighbourhood	
		and user organisations/representatives	
5. Capacity building	Educational programme	Educational programme;	
6. Public and Private	Joint Venture PPP	Service Contract PPP	
Participation			
7. Focus on rural areas	Urban water supply services; Focus on	Urban and peri-urban water supply	
and slums	household connections; Social billing	services; Focus on standpipes; Social	
	programme	billing programme	
Duration of commitment	15 years	3 years	
to the project			
Objective number of	3,000,000	500,000	
people served			

Table 2: Concordance of approach of the two case studies

<sup>&</sup>lt;sup>150</sup> Capacity-building can be defined as creating an environment for "the ability of individuals and organizations or organizational units to perform functions effectively, efficiently and sustainable." UNDP (1998)

In both projects focus is primarily given to water supply services in medium sized cities, consequently excluding the rural areas. There are however good reasons for this urban bias (see previous paragraph). The main reason here is the fact that the Dutch water companies have specified knowledge in water supply services in urban areas. However, the urban areas between these cities, and even within these cities, differ to a great extent in needs and level of access to water supply services. In these areas many people live in illegal settlements, and the cities are rapidly growing in the outskirts.

In between the two projects there are thus also clear differences in which focus is directed at different communities and methods for reaching communities. Vitens for example tends to direct their attention more on the peri-urban areas, where they provide standpipes (which are important for serving the poor). However, these types of services often do not secure sufficient revenue, which is needed to ensure the autonomy of the local water supply company in the long run. Therefore, to a lesser extent house or yard-connections are also taken into account.

The WMD's first priority is creating household connections in the urban areas, with additional standpipe connections and a social billing programme (to ensure that poor households are also able to obtain access to piped water supplies). The household connections generate revenues which are essential to cover the operation and maintenances costs of the local water supply companies. The Water for Indonesia project is thus to a greater extent centred on securing sufficient revenue to ensure that the local water supply companies are able to operate autonomously.

A last subject of this analysis is the *quantitative contribution* to the objective of increasing the number of people with sustainable access to an improved water supply service. This aspect is very important for DGIS in order to quantify their achievement in reaching the MDGs. Both projects have made estimates of the number of people which they intent to serve with water supplies. The WMD for example expects to serve 3,000,000 people with improved drinking water services after 15 years of support through the eleven water supply companies in Indonesia. After 3 years of support Vitens aims to serve approximately 500,000 people by providing technical assistance to three local water supply companies in four cities in Mozambique. Measuring the exact number of people who benefit from the WMD and Vitens projects however will be an exceptionally difficult task. Therefore, these figures will remain speculative.

It can be concluded that, within both the projects of WMD and Vitens, the policy of DGIS and the goal of achieving the MDGs have been systematically translated. However, there are large differences as regards the magnitude and importance given to the various issues. It became clear that WMD has given priority to long term commitment and sustainability, while Vitens aims to provide short term assistance, with a focus on poor communities. These focuses are inherent to the specific characteristics of the different types of PPPs applied. Before continuing with the final chapter of this thesis, the last paragraph of this chapter will first offer a short summary.

### 7.3 SUMMARY

This chapter reviewed the application of the PPP concept in the case study projects of the Dutch water supply companies Vitens and WMD. The two Dutch water supply companies had clear and very similar motives for initiating a project in a developing country and applying the PPP concept. However, they applied very different types of PPP's, with diverse characteristics. In particular there were clear differences as regards commitment, interests, deliverables and resource contribution. From these characteristics a particular level of interdependence was deducted, and the advantages as well as disadvantages of both types of PPP were discussed. In the end the analysis showed that the application of both the types of PPPs in the exemplar cases created a win-win situation for the public and private parties in the developed as well as in the developing countries.

A second issue in this chapter was the translation of the MDGs and Dutch policy throughout the projects and their goals in addition to the application of the PPP concept. In particular the seventh goal, target ten – to cut in half, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation – was important here. In concordance to this particular goal, the Dutch government developed the 50 million people objective with the intention to quantify their achievements to the MDGs. Quantifying the contribution of the case study projects in achieving the MDGs however was clearly not straightforward.

Therefore, a qualitative analysis was performed as regards the application of policy issues and project approach requirements of the Dutch government in development cooperation. The qualitative analysis revealed that in both projects the main objective is to improve the management and operation of local water supply companies. In the majority of issues and approach requirements i.e. focus on results, ensure continuation, sustainability, local user participation, capacity building, PPP and focus on rural areas and slums, the projects seemed to be in accordance to Dutch policy.

The Dutch water supply companies also made estimates of the number of people which eventually would attain access to improved water supply services in an attempt to quantify their contribution to the MDGs. Accordingly, the WMD aims to secure sustainable water supply services for at least 3 million people, and Vitens aims to serve at least 500.000 people. These figures however will remain speculative. As a conclusion it could be noted that the improvements of a local water supply company' services can have a direct and indirect effect on the increase of people's access to drinking water supplies. Accordingly, this would lead to increasing the number of people with sustainable access to drinking water supply services as well as alleviate poverty. These are important goals of DGIS which are reflected in the projects of the Dutch water supply companies. In the next chapter we will continue with the final conclusion to this research.

## 8 CONCLUSION

This final chapter will make an effort in providing an answer to the main research question, as well as provide a general conclusion to the research. We set off with the first component of the research question i.e. *what is a Public-Private Partnership (PPP)?* In this research the following definition was utilized: "a PPP is a spectrum of possible relationships between public and private actors for the co-operative provision of, in this case, water supply services". The PPP concept was thoroughly discussed in chapter four of this paper. Here it was concluded that the PPP model can take many forms, and has proved to be a very popular methodology applied in development cooperation and infrastructure development.

There are many motivations for applying the PPP method in development cooperation. In the first place the method is well accepted as an effective approach for implementing the MDGs by the UN and other international organization. And, the Dutch government supports the implementing of the MDGs and application of the PPP method in development cooperation. For that reason the Dutch water supply companies in the two case studies both received endorsements from the Dutch government in their water supply projects in developing countries (see appendix 1). Another important reason was that, mutually the WMD and Vitens aimed to cooperate with local water supply companies, which in developing countries are predominantly operated and owned by public authorities. Therefore, a partnering with the public sector was to be anticipated.

Many other reasons for applying the PPP method in development cooperation and water supply services have been cited. In the length of this research however, focus was largely attended on the second issue in the main research question i.e. *how is the PPP method implemented by Dutch water supply companies in developing countries?* The two aforementioned case studies were chosen for examining in detail, by what means the PPP concept was implemented by Dutch water supply companies in developing countries. The WMD and Vitens respectively assembled the Water for Indonesia project; and the water supply project Mozambique. These projects were the first of its kind in Dutch development cooperation to apply the PPP method.

There are many different means for assembling a partnership. Accordingly, both the WMD and Vitens applied very different types of PPPs. The "maximalist-minimalist" spectrum, which comes forward in the aforementioned definition, made it possible to situate the different types of PPPs employed in the two case studies. The first Dutch water company assembled a joint venture PPP, whilst the latter chose to apply the service contract PPP model. These two types of partnership showed significant differences in resource contribution and deliverables. In addition there were large differences in commitment and interests of the private parties i.e. the Dutch stakeholders within the project.

Despite these differences, both projects asserted to hold the objective to make a significant contribution in achieving the MDGs, corresponding to policy set by the Dutch government. The applications of the PPP method moreover demonstrated to be of significant value in the successful implementation of the two projects, and the defined objective. In particular the participation of local partners and the change of attitude as regards the involvement of a private sector party by means of assembling a partnership proved valuable. This was mainly caused by the fact that these exemplar cases did not portrayed a typical partnership between the public and the private stakeholder (i.e. Dutch water supply companies). Further analysis on the roles of stakeholders though is found in the subsequent part of this paragraph.

Generally, the construction and implementation of PPPs takes a lot of time and effort. In particular the cooperation with the local stakeholders, dealing with their diverse interests and bringing together the goals and objectives, often are long term procedures. The partnerships within the case studies were only recently initiated, however. Therefore it was not possible to draw any comprehensive conclusions on the effects and impact of applying a particular type of PPP with the purpose of achieving the MDGs. In addition it was not possible to elucidate on the question if the application of the PPP method created a more effective and efficient way of providing development cooperation.

This research therefore was not aimed at making a quantitative evaluation of applying the PPP method in reference to implementing the MDGs. The focus here was mainly on the last issue within the main research question i.e. to what extent did they translate the Millennium Development Goals (MDG) and Dutch policy within the drinking water projects? This distinct issue is qualitative examined within the goals and objectives of the two exemplar case studies. In these case studies we found that, both Vitens and the WMD clearly hold to the ambition to make a significant contribution to implementing the seventh MDG, target ten i.e. increasing access to sustainable drinking water supplies. This intent was several times repeated in the project proposals, as well as in the articles found on these projects.

To realize this objective they chose to rehabilitate and extent local water supply companies by means of creating partnerships with local public water companies i.e. the PPP method. Within these partnerships the Dutch water supply companies – the private stakeholders – defined their roles exceedingly different. The differences between these roles were for the most part evidently determined by the types of PPPs applied. The roles and interests in accordance significantly influenced the extent to which they were able to translate Dutch policy and the MDGs within the partnership.

Several elements of the MDGs and Dutch policy for development cooperation therefore were accurately implemented, whilst others were less evidently present. One important element of the MDGs, which is also clearly translated in Dutch policy, is for example the aspect of providing a mechanism to ensure continuation after the gradual secession of support i.e. technical, financial and institutional independence.<sup>151</sup> This can be converted to the goal of creating autonomous water supply companies in developing countries. And, as aforementioned in both projects the objective of creating autonomous water supply companies was noticeably translated.

The role of Vitens within the drinking water projects Mozambique although did not explicitly allow for them to certify this objective. In particular the issue that Vitens does not perform the role of provider within the project appeared to be the rationale. In both cases the Dutch water supply companies fulfilled the roles of regulator and enabler. However, in the case of the Water for Indonesia project, the WMD also occupied the role of provider.

Important imperatives for creating autonomous water supply companies – introducing fullcost recovery; significant financial investments; reorganisation of management etcetera – fell outside the responsibilities of a service-contract PPP. The partnership created by the WMD i.e. the joint-venture PPP on the other hand, did generate a prospect for providing these imperatives. It remains to be seen if the financial plan (the revolving fund) created within this project however will be able to cover the financial needs as well.

<sup>&</sup>lt;sup>151</sup> DGIS (2006)

It could be concluded that the type of PPP applied, and the defined roles of stakeholders herein thus evidently influenced the extent to which they were able to translate policy and the MDGs. In addition the stakeholder analysis on the two case studies revealed that, the roles of the public and private sector highly influenced the extent to which they were able to translate the MDGs in the projects. In these particular two cases, additional private sector involvement for example led to more clear deliverables. In addition an increase of private sector involvement mandated a higher resource contribution. These two features in turn created a higher level of interdependence, substantiating defined goals and objectives within the partnership, resulting in a more effective way of implementing Dutch policy and the MDGs.

It thus is assumed that an extended role for the private stakeholders created an augmented potential for translating policy and the MDGs. Again it should be noted though that, within these exemplar cases, the private sector i.e. the Dutch water supply companies, is not archetypal. Herein we definitely should not forget the substantial financial contribution of the public sector – the Dutch government – which made the investments more feasible. Without these endorsements, the projects would clearly not be attained. Consequently, these case studies do not represent a comprehensive view on the application of this particular methodology in general. Though, it demonstrated that the application of the PPP methodology, in this particular form and segment of development cooperation, be very successful.

By means of the two cases the research evidently illustrated that Dutch water supply companies can be of considerable value in providing development assistance. The WMD and Vitens both offered fundamental financial support, specialist knowledge as well as entrepreneurial spirit to the local water supply companies in developing countries. Additionally, the short term results, as well as the defined goals and objectives within these two projects evidently show that, to some extent they are willing and able to make a significant contribution to implementing the seventh MDGs i.e. improve access to a sufficient and safe drinking water supply in developing countries.

There are nonetheless a number of questions which remained unanswered. For example, to what degree did they manage to benefit particular target groups i.e. poor communities? A second issue, in reference to the application of the PPP method raises the question: did the appliance of this particular methodology actually increase efficiency and effectivity within offering development cooperation? In addition it yet remains to be seen if the actual end results of the projects will be aligned with the defined goals and objectives.

Clarification on these extended issues is important for the future application of this particular methodology in development cooperation, implementing the MDGs and providing public services in developing countries. Therefore, as a general conclusion to this research it needs to be noted that further studies as regards the application of the PPP method, and the translation of the MDGs and Dutch policy in development cooperation herein is recommended.

### REFERENCES

- Ayee, J & R. Crook (2003), "Toilet Wars": Urban sanitation services and the politics of public private partnerships in Ghana", Brighton, Institute of Development Studies (IDS) http://www.ntd.co.uk/idsbookshop/details.asp?id=784 visited on 22-01-2007

 Baalen, S.J.A. van (2005), "Urban and peri-urban drinking water projects in Mozambique; Definition of W4L projects in Mozambique 2005-2006", Apeldoorn, Vitens International <u>http://www.waterforlife.nl/Projecten/Projectbeschrijving+2005+-+2006.htm</u> visited on 22-01-2007

- Bennet E. et al. (2000), "Joint venture Public-Private Partnerships (PPP) for urban environmental services; Report on UNDP/PPPUE's project development facility", New York, UNDP PPPUE Working paper series volume 2

http://www.undp.org/dpa/publications/PPPUEvol2.pdf visited on 22-01-2007

- Blokland, M. et al (1999), *Private business, public owners, government shareholdings in water companies*, Nieuwegein, Ministry of Housing, Spatial Planning and the Environment

- Coninck, H.C. et al (2003), "Public-Private Partnerships voor armoedebestrijding, duidelijke daden of mooie woorden?", Arnhem, DGIS, ECN and ETC http://www.ecn.nl/docs/library/report/2003/c03024.pdf visited on 22-01-2007

- DGIS (2003), "Mutual interests, mutual responsibilities: Dutch development cooperation en route to 2015, The Hague, Department of Foreign affairs

- Dolowitz, D. & D. Marsh (1996) "Who learns what from whom: a review of the policy transfer literature, *Political studies* 44 (2), pp. 343-356

 Fox, T. & D. Prescott (2004), "Exploring the role of development cooperation agencies in corporate responsibility", Stockholm, Ministry of Foreign Affairs Sweden <u>http://www.regeringen.se/content/1/c6/02/18/54/9f133a59.pdf</u> visited on 22-01-2007

- Gentry, B (1996) "Privatization, foreign investment and the environment: Case studies of large scale privatizations with foreign participation", World Bank Environment Department Research paper

- Gentry, B & L. O. Fernandez. (1997), "Evolving Public-Private Partnerships: general themes and urban water examples; OECD workshop on globalization and the environment: new challenges for the public and private sectors", Paris, OECD www.undp.org/pppue/pppueold/library/files/gentry01.doc visited on 22-01-2007

- Grimsey, D & M.K. Lewis (2004), *Public-Private Partnerships, the worldwide revolution in infrastructure provision and project finance*, Cheltenham, Edward Elgar Publishing Ltd.

- Gronden, J. van de (2005), "Schiet de millennium campagne haar doel voorbij?", Vise Versa 39 (3), pp 30

- Haarmeyer, D. & A. Mody (1997), "Private capital in water and sanitation", *Finance and Development* 34(1) pp 34-37

- Hall, D. & E. Lobina (2004), "Private and public interests in water and energy", *Natural Resources Forum* 28, pp 268-277

- Hall, D., E. Lobina, & R. de la Motte (2003), "Public solutions for private problems; Responding to the shortfall in water infrastructure investment", London, Public Services International Research Unit (PSIRU)

www.psiru.org/reports/2003-09-W-strats.doc visited on 22-01-2007

- Hall, D. & E. Lobina (1999), "Public sector alternatives to water supply and sewerage privatisation: Case studies", *International Journal of Water Resources Development* 16(1), pp 35-55

- Harcourt (2004), "The road to the UN- Millennium Development Goals; some insights in the international debate", Amsterdam, NCDO

http://www.ncdo.nl/docs/uploads/Harcourt.pdf?PHPSESSID=a5b40f826589c4f030e3 13cf558ad6b5 visited on 22-01-2007

- Harris, C. (2003), "Private participation in infrastructure in developing countries: trends, impacts, and policy lessons", Washington DC, World Bank

http://web.mit.edu/urbanupgrading/waterandsanitation/resources/pdf-files/Harris-PrivateParticipation.pdf visited on 22-01-2007

- Hodge, G. & C. Greve (2005), "*The challenge of public private partnerships, learning from international experience*", Cheltenham, Edward Elgar Publishing Ltd.

- Joy, C., P. Hardstaff (2005), "Dirty Aid, Dirty Water; the UK government's push to privatise water and sanitation in poor countries", London, Briefing of the World Development Movement,

http://www.wdm.org.uk/resources/briefings/aid/dadwlong.pdf visited on 22-01-2007

- Kaźmierkiewicz, P & J. Kling (2006), "*National Millennium Development Goals; a framework for action*", Bratislava, UNDP Europe and CIS regional MDG report, http://www.undp.ru/publications/NMDG-AFFA eng.pdf visited on 22-01-2007

- Kostwinner, E. & R. van Tulder (2006), "Partnerships for development in practice, two cases and lessons learned", Maastricht, Report of Expert Centre Sustainable Business and Development Cooperation (ECSAD)

http://www.ecsad.nl/ visited on 22-01-2007

- Lange, M. de (1995), "Besluitvorming rond Ruimtelijk Beleid: verkenning en toepassing van doorwerking als beleidsbegrip", Amsterdam, Thesis Publisher

 Lenton, R & A. Wright (2004), "Achieving the MDG for water and sanitation: what will it take?", New York, Full Interim report of Task Force 7 on water and sanitation <u>http://www.un-ngls.org/MDG/Goal\_7.htm</u> visited on 22-01-2007

- Mehrotra, S., E. Delamonica (2005), "The private sector and privatization in social services." *Global Social Policy* 5(2), pp 141-174

- Parkin, J. and Sharma, D. (1999), Infrastructure planning, London, Thomas Telford Ltd.

- Schordt et al. (2004), "Monitoring Millennium Development Goals, a review of experiences and challenges", Delft, International Water and Sanitation Centre (IRC) http://www.irc.nl/content/download/12311/176556/file/Monitoring MDGs.pdf

- Seldon, J (1998), "Creative inter-sectoral partnering for urban water supply systems in developing countries", New Haven, Research Paper UNDP/Yale Collaborative Programme www.undp.org/pppue/pppueold/library/files/james01.doc visited on 22-01-2007

- Shiva, V (2002), "Water wars; privatization, pollution and profit", Cambridge MA, South end Press

- UN (2003), "Enhanced cooperation between the United Nations and all relevant partners, in particular the private sector", New York, GA 58 sessions: A/58/22187 August 2003. http://www.un.org/ga/58/documentation/list2.html visited on 22-01-2007

- UN (2005), "Public-Private Partnership for service delivery: water and sanitation", New York, E/ECA/CHDCS.3/4, 13 April 2005 (United Nations economic and social council) http://www.uneca.org/chdcs/chdcs3/ppps\_chdcs\_3.pdf\_visited on 22-01-2007

- UNDP (1998), "*Capacity assessment and development*", Technical Advisory Paper No.3. http://magnet.undp.org/Docs/cap/CAPTECH3.htm visited on 22-01-2007

- UNDP (2000) "Joint Venture Public-Private Partnerships for urban environmental services; report on UNDP/PPPUE project development facility", New York, PPPUE working paper volume 2

http://www.undp.org/dpa/publications/PPPUEvol2.pdf visited on 22-01-2007

- UNESCO (2006), "Water, a shared responsibility", World Water development report 2, New York, United Nations

http://unesdoc.unesco.org/images/0014/001444/144409E.pdf visited on 22-01-2007

- Vewin (2006), "Holland Water Aid; international special of waterspiegel", 9(2), Den Haag, PACT Public Affairs BV

- Vewin (2006), "Waterspiegel; opinieblad van de vereniging van waterbrijven in Nederland", 9(5) en 9(6), Den Haag, PACT Public Affairs BV

- VROM (2004), "The sustainable development action programme progress report", The Hague, National Ministry of Housing, Spatial Planning and the Environment <u>http://www2.vrom.nl/pagina.html?id=9751</u> visited on 22-01-2007

- WCED (1987), "Report of the world commission on environment and development: Our Common Future", Oxford: Oxford University Press. http://www.are.admin.ch/are/en/nachhaltig/international\_uno/unterseite02330/

- Wettenhall, R. (2005), "The public-private interface: surveying the history", in: Hodge, G. & C. Greve (2005) "*The challenge of public private partnerships, learning from international experience*", Cheltenham, Edward Elgar Publishing Ltd. pp 22-44

 Winpenny J. 2003. "Financing Water for All" Report for the world panel on financing water infrastructure, Delft, International Water and Sanitation Centre (IRC) http://www.irc.nl/page/7798 visited on 22-01-2007

- WMD (2005), "Drinkwatervoorziening in Oost Indonesië; plan van aanpak", Assen, Waterleidingmaatschappij Drenthe

- WMD (2005), "Towards sustainable drinking water supply in East Indonesia; in close cooperation", Assen, Waterleidingmaatschappij Drenthe

- World Bank (1994), 'Infrastructure for development', in: Corbridge, S. (1995), "Development Studies, a reader", London, Arnold, pp 393-400

- WSSD (2002), "Plan of Implementation, advanced unedited text. World Summit on Sustainable Development", Johannesburg, United Nations

http://www.icca-chem.org/downloads/misc/Plan.pdf visited on 22-01-2007

## WEBSITES

Aqua for All

• <u>http://www.aquaforall.nl/</u> visited on 22-01-2007

BUZA (2004), Kamerbrief inzake voortgang waterprogramma

• <u>http://www.minbuza.nl/nl/actueel/brievenparlement,2005/05/kamerbrief\_inzake\_voort</u> <u>gang\_waterprogramma\_2004\_xwordx.html</u>\_visited on 22-01-2007

BUZA (2006), Dossier Water

• <u>http://www.minbuza.nl/nl/themas,milieu/water/index.html</u> visited on 22-01-2007

#### Stop Suez

• <u>http://www.stopsuez.org/page.aspx</u> visited on 22-01-2007

The Netherlands Water Partnership

• <u>http://www.nwp.nl</u> visited on 22-01-2007

United Nations Development Programme, Public-Private Partnership in Urban Environment

• <u>http://pppue.undp.org/</u> visited on 22-01-2007

Waterleidingmaatschappij Drenthe (WMD)

• <u>http://www.wmd.nl/english</u> visited on 22-01-2007

Waterleidingmaatschappij Vitens (WMD)

• <u>http://www.vitens.nl/</u> visited on 22-01-2007

Water for Life

• <u>http://www.waterforlife.nl/</u> visited on 22-01-2007

World Bank (2006)

• <u>http://rru.worldbank.org/Discussions/Topics/Topic60.aspx</u> visited on 22-01-2007

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