DIPLOMARBEIT

„An Appeal for Public-Public Partnerships in the Water Sector”

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1. INTRODUCTION

1.1 OBJECT OF STUDY

A growing number of public water operators have started to help other public water suppliers to improve their services in order to become more efficient and better trained. Such a support agreement is called Public-Public Partnership, short PUP. This is a “twinning arrangement with a stated non-profit motive that aims to improve water services in one or more of the partner regions and which includes only public partners.”¹ The water utilities or water companies work together on a non-profit basis to build up skills through the use of counselling, training, management, financial restructuring, joint investment, etc. Such a cooperation is often created because of twin town arrangements between cities or municipalities.² PUPs work either at national or international level. A large number of PUPs already exists, more and more studies are carried out on that subject. Hall identified over 130 water-PUPs in more than 70 countries. The existing PUPs have different characteristics but there are some general attributes every PUP possesses.

In this paper PUPs are compared to Public-Private Partnerships (PPPs). The latter are cooperations between public bodies and private companies to finance, build, renovate, operate and maintain the infrastructure or the provision of services. The idea is to combine the advantages of both sides. The public partner has controlling function and the possibility of co-determination. The private part can make profits because of economic and/or technical innovations. Then again the private company takes over several risks and is responsible for the organization of the service provision. Both try to achieve common complementary goals while the opportunities and risks are divided.³ The dynamics of PPPs are totally different from those of PUPs. The objectives and motivations, the basis of the partnership, the approach to accountability and transparency, the risk perception and its management and the proceedings concerning institutional differ sharply.⁴

The UN advocates partnerships between public water operators. In 2006 the UN Secretary General’s Board on Water and Sanitation (UNSGAB) has launched the initiative Water Operator Partnerships (WOPs). The idea behind this has been that the greatest potential to

¹Boag, McDonald 2010:4
²Lobina, Hall 2006:7-8
³Katzmayr 2005:119-120
⁴Lobina, Hall 2006:26
improve the public water utilities lies with the public suppliers themselves since most water utilities are organized locally or community-wide. Originally, the concept of WOPs has been the same as that of PUPs but meanwhile it was expanded and includes by now also private water suppliers. The differences between these two approaches and the risks posed by the expanded approach of WOPs are also described in chapter 4.

This paper discusses the concept of PUPs, the different partnership types and partnership arrangements. Furthermore the characteristics of PUPs and the associated ideas which are given in the literature are provided and their accuracy for the cases of a Swedish and a Lithuanian operator are analysed.

1.2 RESEARCH CONTEXT / PROBLEM PERSPECTIVE

Water cannot be substituted and is more and more contaminated and sometimes even made unusable by the action of man. Furthermore, worldwide water consumption has risen continuously. Even the water reservoirs deep underground are devoted to cover the risen demand. In the agricultural sector huge amounts of water are wasted through irrigation. Companies have seen the opportunity to make high profits in the water sector, as the price for access to water was and is certainly due to increase tremendously.

In July 2010 the UN declared water and sanitation as a universal human right. The resolution is calling on states and international organizations to provide financial resources, build capacity and transfer technology in scaling up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all. Public-Public partnerships are a viable method to reach the aims that the UN sets. The Millennium Development Goals that the UN has set as major goals to reach worldwide until 2015 include a requirement that relates to drinking water and sanitation: "Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation." This goal can only be reached through the public sector, because 90 per cent of the people are supplied by public authorities. Thus, PUPs can be development projects that improve access to drinking water and sanitation. PUPs are sustainable long term partnerships, which do not primarily rely on improving the infrastructure, but usually have the aim to train and develop human resources, to offer technical support or to improve efficiency and build institutional capacity. PUPs also

5Lobina, Hall 2006:22
6United Nations Department of Public Information, News and Media Division 2010
7United Nations 2008:40
8Miranda 2006:54
offer the option to bring already privatized utilities back into public hands. All these characteristics show that PUPs should be closely analysed and their benefits and potential challenges should be clarified.

1.3 THE AIM OF THE PAPER

I believe that it is most efficient when the water supply and waste water treatment remains in public hands. This thesis will demonstrate that water-PUPs have more advantages than public-private partnerships (PPPs) and privatization of public water services. It will be shown that PUPs are the appropriate means to achieve reforms for more efficiency, more transparency, cost effectiveness, increased accountability and improved training of workers in this sector. Until now the concept of Public-Public partnerships is little known. The Public Services International Research Unit (PSIRU) of the University of Greenwich, the Transnational Institute, the Corporate Europe Observatory (CEO) are some of the few research institutions working on this issue. Additionally some regional studies were conducted. In the mainstream literature one will rarely find a paper dealing with such partnerships. Concerning public-private partnerships, there are already numerous works and articles. Hall and Lobina believe: "It is quite possible to create a new and viable public sector structure for water, even when it involves major changes from the preceding structures, without privatization. This seems very simple and obvious, but is constantly ignored in publications by major institutions, including the World Bank, World Water Council, Global Water Partnership, and others."9 For a long time the World Bank has promoted PPPs in the so-called developing countries. Now the bank has come to the conclusion that the latter do not invest enough and seen that private investors are apparently not ready to put money into the development of the infrastructure of countries in the South.10

1.4 THE SCOPE OF THE STUDY

There are several issues which will probably not be solved with the introduction of Public-Public Partnerships. First and foremost the uneven power relations and differences in wealth within local communities and nation-states as well as globally between North and South. However, these conditions have to be kept in mind when PUPs are examined.

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9 Hall, Lobina 2003:14
10 Hall 2009:6
When I analyse Public-Public partnerships in order to compare them to privatization and public-private partnerships, I will not dealt with the topic of price formation, but I will refer to the consequences of PUPs on the prices for consumer in the appropriate section of this paper. I also do not examine the market of bottled water, only the water provision via pipelines.

This study has of course its limits and possible biases. First of all, it is only a study of literature. Only secondary literature is not sufficient to come to general results and conclusions. I have not looked inside a Public-Public Partnership myself. I could only rely on the studies already conducted.

1.5 HYPOTHESES AND CASE STUDY

Usually people refer to public institutions as inefficient, bureaucratic or slow. My basic assumption is rather that an ownership by the public sector is not in itself causing inefficiencies. There exists no inherent inability of public operations to be effective, efficient, equitable and environment-friendly. Katzmayr also points out that the trade-off between the discursive bargaining of the public and an efficient management of companies is firstly an ideological and secondly a economical question. It is possible to have an efficient and ecological public utility without the change of the ownership.¹¹

For the purpose of this paper I established two hypotheses.

_Hypothesis 1:_ In the water sector PUPs can outmatch PPPs or privatizations under certain circumstances.

_Hypothesis 2:_ PUPs primarily provide know-how transfer at low cost, thus outmatching comparable sources for the enhancement of efficiency, effectiveness and productivity.

A representative case study of a successful PUP between a water operator in Sweden and a water operator in Lithuania is presented. It is analysed why and by whom this PUP was created and which political and social dynamics where behind its installation. The hypotheses are tested on this example.

¹¹Katzmayr 2005:144-145
The analysis of the literature and the case study will point out that PUPs are the better choice in regard to the water sector. Generally, the market mechanism is ill-equipped to reach the point where public goods, such as water, are provided in the right amounts. Thus it is inefficient that private companies provide public goods and hence, the provision of water services is done by the public sector with a good reason. PUPs provide a perspective on development for water operators in the North and South with regard to knowledge transfer, effective restructuring of public utilities, democratization of public utilities and solidarity building amongst public operators.

1.6 EXPECTED SCIENTIFIC AND OTHER EFFECTS

The work sheds light on a not well-researched area. The strengths and weaknesses of the PUP-approach as well as its prospects will be analysed. The idea of PUPs is driven forward and perhaps seen as a way to secure and reform the water supply of the public sector.

1.7 LAYOUT OF THE THESIS

Following a brief chapter on water at its current status including its qualities, possible use, forms of management and managing problems, this thesis reviews Public-Private-Partnerships (PPPs) in the water sector and if the promises of this concept were kept. The third chapter deals with Public-Public-Partnerships (PUPs) which I propose to be an efficient way to handle water provision and sewage treatment problems. The following chapter describes Water Operator Partnerships (WOPs) and the problems of this concept, which is highly promoted by the UN. After this the findings and different concepts are discussed and the success factors, difficulties and challenges of the PUP concept are reviewed.

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12 Mansfield, Yohe 2004.668
2. WATER: THE CURRENT STATUS

2.1 INTRODUCTION

Before analysing partnerships of water suppliers and water supply in general, we should look at the resource water itself. There is absolutely no doubt that water is essential to sustain life. It is fundamental for any human activity and because of this reason it should be managed in a way that everyone has access to it. At the moment, this is far from being a reality. One out of eighth people still lacks access to drinking water and 2.6 billion people are affected by a lack of sanitation. In July 2010 the UN declared water and sanitation as a universal human right. The resolution is calling on states and international organisations to provide financial resources, to build capacity and to transfer technology in scaling up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all. This illustrates the utmost urgency of water problems.

On top of that, people have been very careless using water. Generally people thought water is always pure and clean and that it just purifies itself. In opposition to this popular belief water is only available when it regenerates itself and when the limits of its renewability are taken into account. This means that water is not easy to handle, especially because its supply is limited and it is not equally distributed all over the planet. There are water-rich and water-poor regions. Public-Public partnerships must be considered within this discussion in order to understand their potential of positive impact on the water crisis.

The following questions will be answered in this section: How is the state of water today? How do we use it? What are the conflicts of use? How will water resources and water supply develop in the future? Does climate change affect water resources? And finally, how is water managed today and how can water act as support for development?

2.2 WATER ON THE PLANET

The amount of water which exists on our planet sums up to 1.386 million km³ and for the most part it is the water of the world's oceans, reflecting 96,5 %. Only 2,5 % of the total water is fresh water – i.e. water that contains only a very low amount of dissolved salts. For the human population the share of available water is even smaller. 69,5 % of fresh water is

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13 United Nations General Assembly 2010:2-3
14 The Groundwater Foundation 2010
embedded in glaciers, snow, ice or permafrost. The remaining 30,5% divide themselves into groundwater and water on the surface. Groundwater amounts up to 30,1% and only 0,4% of fresh water are on the surface as lakes, rivers, soil moisture, air humidity, marshes and wetlands as well as in living organisms.15

Illustration 1: Water Cycle

The total amount of water on the planet never changes, only its state and accessibility. Water switches through the natural hydrological cycle and changes between the states of liquid, vapour, and ice at various places within the cycle, displayed in illustration 1. This means water is in motion all the time. Because of solar energy, the surface water of reservoirs, soil and vegetation evaporates and enters into the atmosphere. The generated water vapour builds clouds and returns to the surface as rain or to reservoirs as run-off. The water

15Shiklomanov, Rodda 2003:13
evaporated from the surface of oceans and seas either falls back into the sea or is transported by atmospheric circulation to the land where it falls down as rain or snow.

Water is a renewable resource. Only when the recharge and inflow rates of basins and lakes are very slow, extractions can be seen as withdrawals of a non-renewable resource because it takes extremely long until this water has renewed itself. Also contaminations can transform water into a non-renewable resource. Modifications of water sheds, e.g. cutting forests, can reduce the recharge of water in the same way.\textsuperscript{16} Thus, even though more than 70\% of our planet is covered with water\textsuperscript{17}, small changes inside the ecosystem can have huge impacts on it.

The human influence on the hydrological cycle has been immense and is still growing year per year. Due to the increasing population, the development of the industrial production, and the increased agricultural production, more and more water is demanded. The water used for agriculture is devoted to irrigation which causes more evaporation and thus an intensification of the hydrological cycle. The use of groundwater as drinking water constitutes another interference. This leads to a reduction of aquifer storage, the decline of the groundwater levels and sometimes even the surface shifts downwards (land subsidence). Furthermore, rivers are being slowed down because of the construction of reservoirs influencing the water quality.\textsuperscript{18} So we see that human-done modifications have already changed the flow of the water cycle. Withdrawals and usage of water for economic reasons are interventions into the aquatic ecosystem. They can have various impacts on the ecosystem and affect either the quality or the quantity of water or even both. These effects are greater the more a society consumes water.\textsuperscript{19}

If a population is growing, so does the consumption of water\textsuperscript{20} - therefore the water availability will decrease more and more. We can find the highest water availability in Canada, Alaska and Oceania. People living in these areas have the possibility to consume 170,000 to 180,000 m\(^3\) per head every year. By contrast in North Africa and the Arabian Peninsula the water availability is only 200-300 m\(^3\) per year per head. This is categorized as catastrophically low water availability and is causing serious problems to households and

\textsuperscript{16}Gleick, Wolff, Chalecki, Reyes, Rachel 2002:5
\textsuperscript{17}Pidwirny, M. 2006
\textsuperscript{18}Shiklomanov, Rodda 2003:17
\textsuperscript{19}Katzmayr 2005:89-90
\textsuperscript{20}Water consumption is that part of withdrawn water which is evaporated, transpired, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment. [World Water Assessment Programme 2009:98]
agriculture. It is estimated that by 2025 the majority of the world's population will have to live with very low or catastrophically low water availability, which is less than 1000 m³ per year, per head. Developing countries will be hit by severe water stress caused by their growing population and increasing water consumption. The purposes for which we need the scarce water resources are discussed in the following section.

![Illustration 2: Evolution of Freshwater Use](image)

**2.3 WATER USAGE**

We need water for drinking, sanitation, cooking, bathing, washing up, doing the laundry, the toilet and for watering livestock and vegetable plots. We need this special resource to produce our food (e.g. meat, fish, vegetables, fruits etc.), to produce energy, and within the industrial production process (e.g. for cooling and cleaning). We use the waterways for transportation and water is needed in the tourist and leisure industry. Water itself is also used as a commodity and sold as bottled water or for domestic use.

Beside this basic information, the knowledge about water use is still very limited. Most of the compiled data and statistics are based on estimations. Generally one can say that water resources and the population are not evenly distributed around the world and that they are

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21 Shiklomanov, Rodda 2003:384-385
used for different purposes.\textsuperscript{22} One of the calculations of the world water use for the year 1995 show that the water withdrawals amounted for 3.752 km\(^3\). This is more than the volume of Lake Huron in Northern America\textsuperscript{23}. Shiklomanov estimates that withdrawals will increase by 37 % to 5.139 km\(^3\) in 2025.

Not only is the amount of used water changing but also the patterns of use. Today, 66,5 % of the abstractions are used for agriculture, 19 % for industry, 9,5 % by households and 5 % are withdrawn by reservoirs. It is foreseen for 2025 that the stake of agriculture will not grow at the same degree as before but the water usage for the industry and households will increase. The industry will abstract 21,5 %, households will consume 12,6 % and reservoirs will need slightly more than before (5,2 %). Agriculture will still take up 60,7 % of the world’s water use. \textsuperscript{24} The evolution of the global water use can be seen in illustration 2.

Irrigation in agriculture takes up 70% of water withdrawals and this amount can rise up to more than 80% in some regions.\textsuperscript{25} To achieve high and stable crop yields that are independent of the meteorological conditions, irrigation is seen as the most important agro-technical method.\textsuperscript{26} It can increase yields of most crops by 100 to 400 %. Generally there are three different techniques to irrigate crops. The most common technique is surface irrigation in which most or all of the crop area is flooded. A second possibility is sprinkler irrigation which simulates rainfall by pumping water under pressure through a pipe network before delivering it through a sprinkler system. The most water-efficient method is localized irrigation, in which water is distributed under low pressure through pipes and applied in small quantities to each plant or the area close-by.\textsuperscript{27} At the moment localized irrigation is still expensive but in the near future it will become more widely used to save water and to increase crop yields. The Food and Agriculture Organization of the United Nations (FAO) estimates that irrigated land in developing countries will increase up to 34 % by 2030, due to improved irrigation practices the amount of water used by agriculture will increase only by 14%\textsuperscript{,28}

Industrial water use has highly increased during the past decades. The main reason is the rising demand for electric power. In this section huge amount of water is required for cooling

\begin{flushright}
\textsuperscript{22}World Water Assessment Programme 2009:97
\textsuperscript{23}U.S. Environmental Protection Agency 2010
\textsuperscript{24}Shiklomanov, Rodda 2003:374-377
\textsuperscript{25}World Water Assessment Programme 2009:99
\textsuperscript{26}Shiklomanov, Rodda 2003:33-35
\textsuperscript{27}FAO 2008:7
\textsuperscript{28}FAO 2008:14
\end{flushright}
and smaller amounts for the boilers. Furthermore, the production of synthetic fibres, artificial rubber and plastics has also grown. Both consume a lot of water. The industry uses it to cool the equipment, instruments and mechanisms; for transportation and washing; as a solvent or as part of the finished product. Evidently, water is used for sanitation and for meeting the demands of the workforce in industrial enterprises. However, the vast bulk is used for the generation of electricity in thermal or nuclear power stations. Following the sector of power production, the chemical and petrochemical industries, ferrous and non-ferrous metal, wood pulp and paper industry and machine-building enterprises are taking the remaining share of industrial water.\textsuperscript{29}

Because of urbanization and an increasing standard of living, more and more water is consumed in most countries to meet municipal needs. Municipal water is used for domestic purposes of cities and towns as well as of public and private enterprises. The volume of municipal water use depends on the number of people served. This involves to what degree these people are equipped with services and utilities. Further the volume of consumed municipal water is related to climatic conditions. It is considered that 150 to 250 litres of water per day and per person are sufficient to meet all personal demands. For the operation of municipal enterprises and maintenance of cleanliness and hygiene in cities, 150 to 200 litres per day and per head are required additionally. When the water demand lies above these values, this is mostly caused by the demand of industry and for garden-watering. When small towns and villages do not have an effective distribution system, water use lies between 75 and 100 litres per day and per person.\textsuperscript{30}

Systematically different “users” of fresh water like reservoirs need to be mentioned. Building such reservoirs enables a population to artificially increase water resources during low flow periods and in dry seasons. They are also able to provide water for industrial or agricultural use. Furthermore, they can protect areas from flooding and are tools to regulate the amount of water. Nevertheless, they decrease, caused by evaporation, the total water resource in the region in which they are built substantially. It is estimated that the reservoirs volume of the world will increase up to 6.800-7.000 km\textsuperscript{3}. This development is caused by the more important role of hydro-power and its function as supply for peak load demands.\textsuperscript{31}

\textsuperscript{29}Shiklomanov, Rodda 2003:31-32
\textsuperscript{30}Shiklomanov, Rodda 2003:30
\textsuperscript{31}Shiklomanov, Rodda 2003:36
Conflicts of water use can occur at different levels and at all scales. There are local-level conflicts when, for example, farmers compete for limited water resources. Disputes can also occur at the scale of large national or transnational river basins. Different sectors (e.g. domestic, hydro-power, irrigation, industries and recreation) are competing for the limited resource of water. Also the ecosystem itself, whose sustainability is at risk, needs a sufficient amount of the resource.  

A common conflict arises between agriculture and cities. Today, half of the world's population lives in cities and agriculture is the sector that uses most water worldwide. It is often argued that agriculture should give up a part of its share of water to solve problems of poor urban water supply. Generally, conflicts between these two arise when there are shortages. Even though a lot of cities have problems to find water of adequate quality in their surroundings, cities with poor water and sanitation supply are still growing at the highest rates. Thus, poor water and sanitation do not hinder a urban population to grow. These cities seem to be successful in increasing their supplies by constructing new reservoirs on nearby streams, inter-basin transfers, tapping local or distant aquifers by means of deep wells or diverting water away from other uses. These procedures generate third-party impacts. The reallocation away from agriculture to other sectors leads to the fact that adjustments are made to improve irrigation efficiency and that the crop patterns are changed.  

However, farmers are also pushed to exploit groundwater or to divert more surface water which harms the environment. It is probable that they use treated or even untreated wastewater. It can actually get that far that farmers are driven out of business because of reduced water supply. It is likely that in the future cities will try to redirect neighbouring water to their own use. The negative consequences are to a large extent borne by the poor and the environment. Molle and Berkoff are putting it that way: “[T]he conflict between human use in general, and the environment in particular, is perhaps more critical than that between agriculture and cities.” They say that it is misleading to associate the insufficient and precarious supply of water in cities with water scarcity caused by wasteful irrigation in agriculture. A reallocation from agriculture to another sector does not occur in practice and

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32 World Water Assessment Programme 2009:152
33 Molle, Berkoff 2006: 24-28
34 Molle, Berkoff 2006: 32-34
35 World Water Assessment Programme 2009:153
36 Molle, Berkoff 2006: 35
we need to understand the economic and political aspects of water supply and water scarcity. The problem, mainly in developing countries, lies in the lack of farmers' capital which depends on the local political economy and the distribution of power in society.\footnote{Molle, Berkoff 2006: 26,35}

Another conflict line emerges between the hydro-power sector and the sector of agriculture including fisheries. Dams may release water to produce energy at times when downstream irrigators do not need it because hydro-power plants follow energy consumer demands. The fish migration can also be obstructed by dams and hydro-power plants reducing the productivity of fisheries and changing the water regime.\footnote{World Water Assessment Programme 2009:153} However, the industries seem not to be hindered by water supply constraints. Usually they receive priority because of their economic importance. Furthermore, the industrial sector relies heavily on groundwater and is somehow de-linked from problems like droughts. Hence the groundwater sources can deplete and this will generate a backlash in the future.\footnote{Molle, Berkoff 2006: 33-35}

All these conflicts originate from economic and political reasons. The return per cubic meter of water differs across its usage as well as the social importance and the political influence of each sector varies.\footnote{World Water Assessment Programme 2009:152} In general, states give priority to cities and industries due to the economic logic and elite interests.\footnote{Molle, Berkoff 2006: 33}

It is frequently proposed by different authors and organisations to move water from agriculture to areas of higher economic value. The possibility to maximize the net benefit from the used water is generally higher in non-agricultural sectors\footnote{World Water Assessment Programme 2009:152; Molle, Berkoff 2006: 26}. But critics say that there are several severe problems regarding this recommendation, for example that farmers are losing out when competing with the industry. Furthermore, the preservation of landscapes and wetlands is of high value for our future generations apart from economic uses or recreational purposes. With the only aim to maximize profits this aspect is ignored. All in all there is the possibility that you see nature as a huge lay-down for human requirements or one has the view that nature has a value on its own.\footnote{Katzmayr 2005:90-91}
2.4 QUALITY OF WATER

Human-generated water pollution poses a great threat to the water quality. Worldwide water pollution is rising due to economic development driven by urbanization, industries and intensive agricultural systems. Heavy polluting industries are for example the leather and chemicals industry. The polluted water has enormous negative effects on human health. One tenth of the global burden of diseases derives from water, sanitation and hygiene, plus water and environmental factors. The major water pollutants are microbes, nutrients, heavy metals, organic chemicals, oil and sediments, and heat. Eutrophication is the world's most common water quality problem which is the increase of the concentration of nutrients like phosphorus and nitrogen in the water. This impairs the beneficial use of water and is caused by agricultural run-off, domestic sewage, industrial effluents and atmospheric inputs from fossil fuel burning and bush fire. A nutrient imbalance can also cause harmful algal blooms. The fact that data from many countries on pollution loads and on changes in water quality is still missing is complicating the situation. Mainly this results from inadequate monitoring systems.\footnote{World Water Assessment Programme 2009:136-140} Hence, it is hard to give a global overview over polluted waters. Moreover informal settlements that are not officially approved by the government are generally missing in statistics.\footnote{World Water Assessment Programme 2009:103-104} A study from the \textit{French Ministry of Health} estimates that more than 3 million people in France were exposed to water with a quality that does not reach the standards of the World Health Organisation (WHO).\footnote{World Water Assessment Programme 2009:139} Both, UNICEF and the WHO propose that new targets set beyond 2015 should address water quality and the need to be measure and estimate it in a meaningful and cost-effective way.\footnote{World Health Organisation, UNICEF 2010:35}

In general, drinking-water standards vary among countries and regions. The WHO issues international norms on water quality and human health that are used as a basis for regulation and standard setting. The organisation has published \textit{Guidelines for Drinking-water Quality} which should support the development and implementation of risk management strategies to ensure the safety of drinking-water supplies through the control of hazardous constituents of water. The intention of this thesis is to lead to national standards and regulations that can be readily implemented and enforced and that are protective of public health.\footnote{World Health Organisation 2008:1-2}
2.4.1 SEWAGE TREATMENT

To achieve high water quality standards, it is necessary, among other arrangements, to purify the sewage. Sewage treatment means that physical, chemical and biological contaminants are removed from waste-water. This produces a treated waste-stream as well as solid waste or sludge that is discharged or reused for agricultural irrigation, urban landscaping and recreational uses, industrial cooling and processing and indirect potable water production. There are different methods of sewage treatment applied: water-borne sanitation systems and pollution mitigation systems. Another possibility is demonstrated in the usage of lagoons for collective units or of eco-sanitation units for rural households when water is scarce.

In developing countries, however, more than 80 % of sewage is discharged without treatment which pollutes rivers, lakes and coastal areas. But even in industrialized countries the sewage is not treated sufficiently. In most low- and middle-income countries waste-water is led untreated into the sea or rivers. 49

2.5 CLIMATE CHANGE

Aside from the growing population, changes of land-use and of the global economy, the water availability will be lowered additionally because of climate change. The losses of mountain snow packs, glaciers and ice caps will speed up during the 21st century which first produces an oversupply and afterwards shortage of water availability and hydro-power potential. Furthermore, it changes the periodic variations of melt-water flows in regions supplied from major mountain ranges. One sixth of the human population is living in these regions. 50

The run-off will increase at higher latitudes and in some wet tropical areas because of changed precipitation and temperatures. The run-off is expected to decrease because in dry regions at mid-latitudes and dry due to less rainfall and higher levels of evapo-transpiration. Drought-affected areas will most likely increase in size and number. This will lead to an increased water demand for irrigation in divers regions too. 51

49 World Water Assessment Programme 2009:141-142
50 World Water Assessment Programme 2009:69-70
51 World Water Assessment Programme 2009:212-213
Different risks will become more serious as a general result of the climate change. Floods as an example will increase due to an increase of heavy rainfall in many regions. Limited water availability poses a threat to society, physical infrastructure and to the quality of water itself. Higher temperatures influence the physical, chemical and biological properties of lakes and rivers which will have adverse effects on many freshwater species, community compositions and the quality of the water bodies. As the sea level rises, the groundwater supplies are getting more and more salinized resulting in a decrease of the amount of freshwater.\textsuperscript{52} The poorer regions of the world will severely be hit by the effects of climate change. In Africa, an estimated 75 to 250 million people are facing increased water stress by 2020. In some African countries the yields from rain-fed agriculture could scale back by 50 %. The freshwater resources of small islands in the Caribbean and the Pacific are likely to become insufficient to meet the demand of their people during low-rainfall periods by the middle of the century.\textsuperscript{53}

As a consequence of different time horizons climate change is important considering private or public water supply. A region could, for example, develop into an arid zone. Such a transformation heavily influences the management of the water provision. Precautionary measures need to be taken in order to avoid shortages.

### 2.6 WATER MANAGEMENT

In this section I would like to give an overview over how water supply and sanitation is organized, Furthermore, I will point out the differences between rural and urban supply plus answer the question of how water services are financed on the supply and the demand side.

How does water come to us? All over the world water supply and sanitation are usually organised by the public sector. Today most urban and peri-urban regions are served by publicly owned and managed utilities.\textsuperscript{54} However, the number of people served by the private water sector has grown from around 50 million in 1990 to about 300 million by the year 2002. Nevertheless, most people in developing countries are not served by either private or partially private companies anyhow.\textsuperscript{55}

\textsuperscript{52}Pachauri, Reisinger (Eds.) 2007:49
\textsuperscript{53}Pachauri, Reisinger (Eds.) 2007:50-52
\textsuperscript{54}Hall, Lobina, Corral, Hoedeman, Terhorst, Pigeon, Kishimoto 2009:4; World Water Assessment Programme 2009:104-105
\textsuperscript{55}World Water Assessment Programme 2009:262
Aside of the question whether private provision is beneficial to consumers (respectively citizens), this section gives information on private water companies.

In the private water sector two French multinationals dominate the global market: Veolia and Suez. Both control over two-thirds of global private water operations and both also use subsidiaries to run their businesses. For example Veolia works via USFilter and Suez via United Water in the US. Meanwhile, several major multinationals have withdrawn from international projects and have been entirely or mostly sold by their parent companies. The German group RWE sold the British daughter Thames Water in 2006. The French construction company Bouygues disposed most of the international operations of SAUR which is the third-largest French water company. The US company Bechtel and the Italian firm Montedison sold their holdings in International Water and the Anglian Water Group also disposed its international operations. A smaller water operator from the UK, Biwater, is still internationally active.  

The strategy of the multinationals targeted on becoming multi-utility-corporations. These corporations provide energy, public transport, waste management, and all other forms of public services. The water market was interesting for these global players because going into this sector provided a possibility to bind customers in other already liberalized sectors such as energy or gas. It seems as if this strategy has not worked out.

Several public sector companies have also started operating outside of their home country. In Ghana a consortium of three public operators (Vitens from the Netherlands, Rand Water from South Africa and the National State Water Corporation of Uganda) has been awarded a contract to support the urban water utility Ghana Water Company Ltd. The Austrian EVN has started to expand into Eastern and South-Eastern Europe.

The importance of private, small-scale and local water providers is generally increasing. It is estimated that these providers serve 25% of the urban population in Latin America and East Asia and 50% in Africa and South East Asia.

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56 Hall 2006:179-180
57 Katzmayr 2005:131-133
58 Hall 2006:179-180; Sievers 2006; World Water Assessment Programme 2009:62
59 World Water Assessment Programme 2009:65
2.6.2 FINANCING WATER SERVICES

Practically, all activities relating to water need financial resources to be developed, to be implemented and carried out. These activities include water resources management and development; water services to municipalities and households, commerce and industry, agriculture, and other economic sectors as well as water sector policy development, research, monitoring, administration, legislation and public information. Governments have three options to finance water-related activities: tariffs, taxes as well as transfers through external aid and philanthropy. Fees have to be paid by local users and they are levied mostly by local authorities. Finance by taxes means that the national government is responsible for the collection and distribution of the funds. It is also possible to gain funding by the international community. This is done mainly for jump-start projects.60

Prices played a relatively minor role in managing water demand. When assessing the affordability of water charges for households, the yardstick commonly used is that payments should not exceed 3 % of net household income. A problem is that poorer groups generally spend a higher share of their household income on water.61 Generally, only little data is available on the amount on investments spent directly by households (e.g. on-site sanitation or self-supply of water).62

2.6.3 PROBLEMS OF WATER MANAGEMENT

When problems regarding the water sector occur, which is mostly the case in developing countries and countries in transition, then the following ones are most common and widespread: lack of political support, poor governance, under-resourcing and under-investment. Thus, this sector is generally not transparent, not accountable, and not economically sustainable and shows high levels of unaccounted-for water and low revenue collection. This often results in a deterioration of infrastructure, the eventual breakdown of services and which itself leads to customer dissatisfaction. Another issue is the fact that operations and maintenance are neglected almost in all countries for the benefit of investments in new infrastructure. The UN proposes contrariwise to target a balance

60 World Water Assessment Programme 2009:57-58
61 World Water Assessment Programme 2009:61
62 World Health Organisation 2010:7
between hard and soft infrastructure which includes the support for policies, legal systems and human capacity building.  

Nearly all over the world there are problems with water losses. According to the International Water Association (IWA) these real losses - when water is produced but does not reach the consumer - derive from leaks, bursts and overflows on mains, service reservoirs and service connections, up to the point of customer metering. In urban distribution systems leakage rates of 50% are not uncommon. Losses of municipal water are caused by evaporation, leaks in the water supply and sewerage systems as well as by watering gardens and lawns, cleaning streets, for recreation areas and allotments. When there are public, well-managed and relatively new systems for water supply and sewage disposal, the losses usually are between 5 % and 10 % of the total intake water. The losses can reach up from 40 % to 60 % if there are no such systems or the towns are not fully equipped with them.

We can observe that there are already changes going on concerning the water management practices. The concepts of water planning and management concentrated for a 100 years on geographically large, physical infrastructure-based water supply and sanitation systems that provide a single quality product. Because of climatic, environmental, social and economic pressures this paradigm has changed. The new concepts focus on multi-source, multi-quality, and multi-use loops of water provision. Furthermore, people and companies try to economise their water use and tempt to reduce abstractions. Since the 1990s major water service reforms have taken place in many countries. Most of the time it was a move from centralized to decentralized public provision. A lot of national monopolies were broken down into hundreds of municipal providers. The transition for most water consumers has not been from public to private but from an unregulated centralized public provider to a regulated decentralized public provider. Though, when there are troubles, then the IFIs usually propose a private provision.

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63 World Water Assessment Programme 2009:57-58  
64 Lambert 2003:50  
65 World Water Assessment Programme 2009:58  
66 Shiklomanov, Rodda 2003:31  
67 Lemon, Jefferson, Jeffrey 2001:529-530; Shiklomanov, Rodda 2003:30  
68 World Water Assessment Programme 2009:104-105
The problems of water management today can generally be summed up by the following keywords: low efficiency, environmental degradation and inequality. Some improvements have been achieved but the water use efficiency is still low in many sectors.\textsuperscript{69}

### 2.7 WATER SUPPORTING DEVELOPMENT

There are only four years to go until the Millennium Development Goals (MDGs) target date, when the proportion of people without sustainable access to safe drinking-water and basic sanitation should be halved, is reached. Access to drinking water is defined as the availability of at least 20 litres of drinking water per person per day within one km of the dwelling or as a 30 minutes water-hauling trip from there, respectively. The drinking water should be safe and thus meet accepted quality standards and pose no significant health risk. Access to basic sanitation represents access to an improved sanitation facility for defecation, which means that human excreta are hygienically separated from human contact or the immediate environment.\textsuperscript{70}

It is foreseen that all regions worldwide will meet the MDG drinking water target. In the year 2006 54% of the world population already had a piped connection to a dwelling, plot or yard. 33% used different improved drinking water sources. The rest of the population, which accounts for 884 million people, does not have any of those connections and almost all of them live in developing regions. Still, even when people have access to improved water services, there can be the problem that these services are poorly maintained, inoperable for many hours a day or provide polluted water. Another point to mention is that the water supply and sanitation coverage is generally much higher in urban than in rural areas. Altogether we can see a progress in water supply nearly everywhere (except in Sub-Saharan Africa) but the sanitation coverage ranks far behind. In Sub-Saharan Africa and Oceania 2.4 billion people are likely to be without access to basic sanitation.\textsuperscript{71} So this MDG target will very probably not be met.

The different actors of water supply are public utilities, private organisations, communities or individuals. As the majority of the world population is served by public operators it could be a reasonable way to support the public sector in order to increase the number of people having access to safe drinking-water and to basic sanitation. One way of doing this is the

\textsuperscript{69}World Water Assessment Programme 2009:154

\textsuperscript{70}World Water Assessment Programme 2009:103-104

\textsuperscript{71}World Water Assessment Programme 2009:102-104
establishment of Public-Public Partnerships. Despite such actions, governments, international organisations and IFIs focused for the last years on the private sector. These developments will be discussed in the following chapter.
3. PRIVATISATION AND PPPS

As water is such a special resource it evokes emotions like no other issue. As chapter one has shown, the benefits of water for humans, animals and the ecosystem as a whole are countless. Regrettably, in huge parts of the world, problems with the provision of water exist. When reforms of public utilities are discussed to overcome these problems, the focus usually lies on Private Sector Participation (PSP) \(^{72}\) or Public-Private Partnerships (PPPs). International Financial Institutions, bilateral donors and transnational corporations favoured the participation of the private sector for decades, especially in the water sector. The outcome of this process is mixed. In this chapter arguments are presented that illustrate that PSP and PPPs in the water sector are not as successful as presumed. Furthermore, the chapter discusses the theoretical ideas behind privatisation, followed by the objectives and incentives to fully or partly privatise a public service. This part is followed by exemplifying practical experiences with privatisation such as the very common Public-Private Partnerships or corporatisation. In the end of this chapter I will sum up the outcomes of the privatisation process.

3.1 PRIVATISATION IN THEORY

Privatisation stands for “the transfer of ownership and control of government or state assets, firms and operations to private investors.” Publicly owned utilities or assets are fully or partly sold to private companies. A private company, of course, is privately owned, managed and financed. The private sector respectively private entities are characterised by a commercial objective to make profits. In a broader sense privatisation also includes policies like contracting-out which is “the process by which activities, while publicly organized and financed, are carried out by private sector companies.” \(^{73}\) This process is called corporatisation at this point and will be explained later on in this chapter.

The basic goal of privatisation and market liberalisation is to create a market economy in which goods and services cost their “real” prices. This fact leads to the efficient allocation of resources which, in turn, leads to economic growth for the benefit of all. The private ownership of companies that provide goods and services is theoretically leading to the “real”

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\(^{72}\) PSP includes a wide range of arrangements between a government agency and a non-public institution. Informal operators or civil society organisation are also part of PSP. (Budds, McGranahan 2003:87)

\(^{73}\) OECD Glossary
prices because the market logic provides the adequate incentives through motives like profit-seeking and increased competition.\footnote{Martinussen 1997:263}

Katzmayr\footnote{Katzmayr 2005:121-122} describes the ideal procedure of a privatisation process as follows:

1. The profit of selling is yielded from the public company to the tax-payers.
2. The municipality does not have to spend money on future investments and just needs to invest into regulation measures and thus saves money and time.
3. A customer-friendly service is provided by the private company.
4. The politicians have more time for their strategic tasks and thus they offer a better service to the citizens.

Altogether this process should enable a higher efficiency, an improved financial position of the public sector, free resources for an allocation in other important sectors like social policy, and strengthens the role of the private sector altogether.\footnote{Prasad 2006:672} It is a move away from ‘the taxpayer pays’ towards ‘the user pays’ and it is intended to achieve a better economic use of the privatised services.\footnote{Grimsey, Lewis 2002:108} Additionally, it is presumed that corporate social responsibility (CSR) acts as a form of self-regulation.\footnote{Hall, Lobina 2004:268} The company formed after a privatisation should be characterised by a facilitated business management according to economic principles, a more flexible personnel policy, less complex budgetary and fiscal regulations and a tailor-made organization.\footnote{Katzmayr 2005:121-122}

Several economic concepts come into play in the case of water. Most of them are exceptions from the general rules or assumptions because the water sector is very special. An illustrating example is that a high capital intensity leads to high sunk costs. These are costs which, once payable, cannot be recovered. When sunk costs are present, firms face a barrier to exit and to enter a market.\footnote{OECD Glossary} Moreover, a high percentage of the costs of water systems arise from investments in the network. Extending and maintaining the network is expensive. Furthermore, long-term storage in times of droughts is problematic. Above all, there is no
substitute for water and it is directly linked to public health and environmental issues. Thus, the water industry does not fit into standard economic theory.  

Privatisation in theory is great and brings a lot of benefits to the government and to the society as a whole. What should not be forgotten is the fact that the theory of privatisation is based on the assumption that there are no externalities and no public goods, that the market is not monopolistic and that there is no asymmetry of information. These are all assumptions that rarely bear accord with reality. For the case of water supply, which is seen as natural monopoly, privatisation becomes much more complex.

### 3.2 DIGRESSION: ECONOMIC CONCEPTS

The neoclassical theory knows different cases, where markets fall short of efficient and perfect competition. The four most important cases of market failure are public goods; externalities, like pollution; imperfect competition, such as monopolies, and inadequate property rights. Another concept that can be attributed to water services is the one of the natural monopoly.

#### 3.2.1 PUBLIC GOODS

In the neoclassical theory a pure public good possesses two characteristics: it is non-rival and non-exclusive. First, this good can be enjoyed by a person without reducing the enjoyment that it gives to others. Second, people cannot easily or costlessly be excluded from consuming this good. When a good fulfils only one of these characteristics it is an impure public good.

Private and public goods can be differentiated by looking at the question of exclusion and impact. The decision to consume a private good like bread is an individual decision and does not commit anyone else to consume a certain amount of bread and has no external benefits or costs to other individuals. On the other hand, the decision to provide a certain level of a public good like primary health care or public schools has a great impact on the people in a certain region or a country. These levels are crucial for the well-being of the population and their benefits are spread among the entire community. There are also global public goods.

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81 Prasad 2006:673
82 Mansfield, Yohe 2004:668
which are externalities whose impacts are indivisibly spread across the planet such as global warming.\textsuperscript{83}

In the case of water it is possible to exclude users and it is possible that there are rivalries because drinking water is a scarce resource in some regions of the world. Thus, water is usually seen as an impure public good because it is a common pool resource which is non-excludable but rival in consumption. However, the non-excludability is more and more contested through privatization or bypassed, for example, by sold bottled water. Therefore, water takes on more aspects of a private good. Nevertheless, basic ecological functions or services are provided by water resources. This underpins the argument of water as a public good. \textsuperscript{84}

\section*{3.2.2 EXTERNALITIES}

The second type of market failure is produced by externalities. A positive externality is the case when the action of one economic actor results in uncompensated benefit to others. A negative externality describes the opposite case: the actions of one economic actor cause uncompensated harm for others. These actions take place outside the marketplace. They are seen as “failures” because there are economic transactions without payment. \textsuperscript{85}

In Chapter one we have seen that the water taken up by cities has an impact on the water supply for agriculture. Here, negative externalities include effects on the performance of a river and on the groundwater system. A positive externality can occur when the quality of the water is ameliorated and thus the state of health of a community is improved.

\section*{3.2.3 IMPERFECT COMPETITION}

Under imperfect competition a buyer or a seller is able to affect a good's price in a way which is never the case under perfect competition. Examples are monopolies which have the power to reduce the quantity of sales or increase the price of goods and services at the same time. Monopolies exist when there is only one supplier on the market resulting in an elimination of any competition which causes market failure. Such a market failure leads to an obstruction of the so-called free market forces. Thus, there is no positive impact on the general public. This is the reason why the neoclassic urges for the control of monopolies by the state. In reality,

\textsuperscript{83} Samuelson, Nordhaus 2005:370-371
\textsuperscript{84} Katzmayr 2005:109-111; Opschoor 2006:424
\textsuperscript{85} Samuelson, Nordhaus 2005:36-37; Mansfield, Yohe 2004.675-676; Katzmayr 2005:103-104
nearly all industries possess characteristics of imperfect competition.\textsuperscript{86} The market for water services is one of them. The global water industry is dominated by only a few transnational companies, as described in chapter one.\textsuperscript{87}

### 3.2.4 NATURAL MONOPOLY

In the neoclassical theory natural monopolies are markets in which a good or a service can be efficiently produced only by a single firm. Natural monopolies have nothing to do with nature. The natural stands for inevitable or mandatory. A natural monopoly exists because of increasing economies of scale. The costs per unit decrease with increasing production because the fixed costs do not increase to the same extent as the unit costs. For example the costs per cubic meter of water decrease when the amount of produced/treated water increases because the fixed costs of labour and infrastructure are divided over a larger amount of water. Many natural monopolies are network-bound industries such as electricity, gas or water.\textsuperscript{88}

### 3.2.5 PROPERTY RIGHTS

Theorists in property rights believe that the overexploitation of the environment and thus the production of public goods should be regulated by market economy, which requires an allocation of property rights.\textsuperscript{89} A property right consists of \textit{“the right to consume, earn income from or sell the asset. The process of establishing property rights involves enshrining legal ownership.”} Such a property right allows the owner to possess an asset. Necessarily, this includes the opportunity for the owner to take legal steps, provided by the law, in case of a violation of his/her rights. Regarding water, usually the state and public officials decide who receives water rights, how the water should be used, and how much will be charged for its use.\textsuperscript{90} The theory of property rights assumes in contrast that public companies have a low efficiency due to less strong property rights.\textsuperscript{91} It is presumed that only the market forces urge for an unambiguous assignment of property rights for reasons of transaction cost savings. The inadequate specification of property rights, as is present in an extreme case with common goods and public goods, is regarded as one of the main causes of market failure.\textsuperscript{92}

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\textsuperscript{86} Samuelson, Nordhaus 2005:36-37; Mansfield, Yohe 2004.675-676; Katzmayr 2005:103-104  
\textsuperscript{87} Hall 2001:11  
\textsuperscript{88} Samuelson, Nordhaus 2005:170-172; Katzmayr 2005:103-104  
\textsuperscript{89} Löhr 2005:2  
\textsuperscript{90} Holden, Thobani 1996:6-7  
\textsuperscript{91} Dunn 1994:309  
\textsuperscript{92} Löhr 2005:1-2
In a World Bank paper it is also stated, “Once rights are defined and can be traded and transactions costs are low, assets will be employed in the most efficient manner. In this way societal welfare will be maximized.” The authors propose that water rights should “be sold at freely negotiated prices to anyone for any purpose.”

I assume, contrary to that, that there is no difference concerning property rights of water between public or private suppliers. It is questionable whether the transaction costs are really lower for private companies because they also have to secure their rights for sources and pipelines. The city of Vienna is an example for a municipality that owns water sources and has no problem to secure them. The city owns headwaters in Lower Austria and in Styria and two Mountain Spring Pipelines (in German Hochquellenleitungen) which provide the city with water from those areas.

### 3.3 OBJECTIVES AND INCENTIVES TO (FULLY OR PARTLY) PRIVATISE

To understand the reasons for privatisations and PPPs, it is important to know the objectives and incentives of governments, international organisations, international financial institutions (IFIs), municipalities and private companies. In this section I will also give a brief overview over historical processes concerning the changing discourse in development cooperation.

#### 3.3.1 GOVERNMENTS IN GENERAL AND MUNICIPALITIES

Governments face the pressure to reduce their national debts. At the same time they need to expand and improve public facilities. Governments often claim that they face constraints of borrowing and at the same time a reluctance to increase taxes or charges. Thus they have invited private sector entities to enter into contracts in order to construct or manage public sector infrastructure facilities, or to provide services to the community on behalf of the public body. Their aim is an effective use of public funds. The public operator needs to ensure that the disposable funds are spent in an economical, efficient and effective way. This should derive from private sector innovation, different asset design or construction techniques and

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93 Holden, Thobani 1996:6-7
94 Stadt Wien Website
95 Grimsey, Lewis 2002:107, Hall 2008:13
operational practices. Key risks are transferred to the private sector which has to manage them appropriately. The municipalities are nowadays embedded and integrated in a world market. The global economic integration leads to a reduction of the economic, social and political relevance of local communities. The financial strength of the municipalities diminishes. Given that more and more public operations are privatised. The communities lose their abilities to provide them and they also lose a relevant source of income. Profits are taken out of the local system but the costs are at the expenses of the citizens. This is clearly a reason for the occurrence of curious financing forms like Cross-Border-Leasing which has been prohibited by the law of the United States in the meantime. Altogether, the public sector at the local and municipal level mostly lacks assets and creditworthiness resulting in difficulties to gain access to commercial finance.

### 3.3.2 GOVERNMENTS IN DEVELOPING COUNTRIES

In the 1960's and 1970's the development goal was to provide a cost-free access to water for everybody. The idea was that the governments of the developing countries had to render the water services and that IFIs had to support them. In the 1980's the discourse changed and the aim was that social infrastructure should be financed by cost-sharing. In the 1990's the private sector discovered water as a profitable business. Multinational companies were attracted by a large new market. At the same time the principle of full-cost-coverage came up in the development discourse. Budds, McGranahan conclude about developments, “The neoliberal agenda was [...] adopted by the North-dominated international financial institutions (primarily the World Bank Group and the International Monetary Fund) which, using their leverage as creditors, aggressively promoted neoliberal reforms to governments of indebted low- and middle-income countries, often through structural adjustment policies that advocated the reduction of state spending and avoidance of substantial state investment.”

It seemed that the governments of developing countries had failed to provide access to public services for everyone and thus it was worth turning to the private sector to solve this.

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96 Grimsey, Lewis 2002:109  
97 Katzmayr 2005:60, 141  
98 Budds, McGranahan 2003:97  
99 Von Braunmühl 2008:41  
100 Budds, McGranahan 2003:90. The neoliberal doctrine believes that social functions and economic development should be undertaken by business within free markets, with the state playing a facilitating and regulatory role without direct engagement. [Ibid]
problem. Consequently, the development countries have the “incentive” to follow the conditions of their financial donors. The countries in the South are still highly dependent to the North and to IFIs which can, more or less, dictate them economic policies. The conditions to multilateral and bilateral development finance imposed by donor agencies and donor countries are perceived by many critics as a means of pursuing the interests of the donor country’s private sector rather than the interests of the recipient countries. The power imbalance between indebted countries and the IFIs or multinational corporations during negotiations cannot be dismissed. The International Monetary Fund (IMF) for example gives loans to countries which are forced to agree to implement economic and financial policies which often include reductions in public spending, in private consumption or of imports. These policies are usually concurring with resistance by the affected countries and their population. By the way, note that the IMF has not only given loans to countries in the South, but also to several Eastern European countries such as Hungary, Romania or Ukraine.

3.3.3 INTERNATIONAL ORGANISATIONS AND INTERNATIONAL FINANCIAL INSTITUTIONS

The main aim of international organisations like the UN and IFIs is to ensure access to safe drinking water and access to basic sanitation for as many people as possible. The MDGs, which all UN member states and 23 international organisations (including the World Bank and the IMF) have agreed on in 2000, reflect this wish clearly.

At the Third World Water Forum in 2003 the Camdessus report on financing water services was presented. The Global Water Partnership (GWP), the World Water Council (WWC) and the 3rd World Water Forum had set up a panel comprising 20 financial experts that addressed the attraction of financial resources to the water sector. The conclusion drawn by the experts was that the financial flows into the water sector need to at least double in order to reach the MDGs. The report provoked large discontent among NGOs and the civil society. They claimed that the experts focused too strongly on large infrastructure projects and on almost exclusively the private sector. Further, the experts are accused to talk down the public sector and its services and that they left the problem of poverty fairly out, to name just a few

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101 Prasad 2006:670
102 Budds, McGranahan 2003:92
103 Carbaugh 2006:437
104 You can find a map of these countries here: http://www.imf.org/external/region/eur/map/index.htm
105 UNDP Glossary
of them. The World Bank concluded contrarily to further promote private sector participation to increase efficiency and performance. In 2003 the European Commission stated likewise that competition in the water sector should bring lower prices, security of distribution and higher rates of employment. The Commission is pushing for a liberalised water market but not implicitly for a privatisation. Katzmayr assumes that ideological and vested interests stand behind the positive attitude of the EU towards privatisation and liberalization. Interests of consumers and workers are standing against the ones of companies and corporations. Economic interests are not necessarily superficial.

Another important international player is the World Trade Organization (WTO). The organisation currently incorporates 153 member states and builds a framework to negotiate and settle trade agreements. These agreements, negotiated and signed by the bulk of the world’s trading nations, form the heart of the WTO. One agreement, the General Agreement on Trade in Services (GATS), is dealing with cross-border services, such as water provision or sanitation services. The EU is meanwhile abstaining from the liberalisation of water services within the framework of GATS, because of the pressure by the civil society. But the EU is at the same time requesting the very same matter from developing countries and newly industrialising countries. This is indeed a controversial demand.

3.3.4 PRIVATE COMPANIES

Private companies are interested in privatisation and PPPs because it is their chance to enter a market and to make profits. A private company needs to make profits and the general objective is to maximize it. As part of a PPP or as a purely private operator, a firm has an incentive to increase the water price as high as possible and to keep the compliance with the regulator to a minimum.

Another reason for a company to enter into the water market was already mentioned in chapter one. The water sector can be an opportunity for multi-utility-corporations to enter liberalised markets such as gas or energy.

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106 Winpenny, Camdessus 2003: v; Brugger 2004: 5, 23-28
107 Katzmayr 2005: 122, 146, 148
108 World Trade Organisation
109 Katzmayr 2005: 150-152
110 The problem of unequal power relations will be discussed in chapter 3.
111 Bayliss 2001: 9
A private company unusually aims to start a community project. When such things are done, then this is part of a Corporate Social Responsibility (CSR) strategy. CSR has no clear definition but can be broadly defined as the sum of all potential measures to secure the social legitimacy of a business.\textsuperscript{112} CSR stands in conflict with the shareholders’ mission. If only those CSR projects are carried out from which a direct financial benefit results, the critical stakeholder group will probably not take it seriously. In contrast, CSR projects that focus on philanthropic aspects cannot be justified on financial benefits.\textsuperscript{113} This is also a problem regarding development policies. Companies assign priority to other criteria than international development goals. The demands of funders and market conditions are much more important than e.g. pro-poor strategies.\textsuperscript{114}

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Operation and Maintenance</th>
<th>Financing</th>
<th>Business risk</th>
<th>Duration</th>
<th>Government involvement</th>
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</thead>
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<tr>
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<td>public</td>
<td>public</td>
<td>unlimited</td>
<td>maximum</td>
</tr>
<tr>
<td>Service Contract</td>
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<td>public and private</td>
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<td>public</td>
<td>1 – 2 years</td>
</tr>
<tr>
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<td>public</td>
<td>private</td>
<td>public</td>
<td>public</td>
<td>3 – 5 years</td>
</tr>
<tr>
<td>Lease Contract</td>
<td>public</td>
<td>private</td>
<td>public</td>
<td>shared</td>
<td>8 – 15 years</td>
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<tr>
<td>Concession</td>
<td>public</td>
<td>private</td>
<td>private</td>
<td>private</td>
<td>25 – 30 years</td>
</tr>
<tr>
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<td>private</td>
<td>private</td>
<td>private</td>
<td>20 – 30 years</td>
</tr>
<tr>
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<td>private and public</td>
<td>public and public and public and public and public and public and public</td>
<td>private</td>
<td>private</td>
<td>unlimited</td>
</tr>
<tr>
<td>Full Privatisation</td>
<td>private</td>
<td>private</td>
<td>private</td>
<td>private</td>
<td>unlimited</td>
</tr>
</tbody>
</table>

Table 1: Different forms of private sector involvement

### 3.4 PRIVATISATION IN PRACTICE

Table 1 shows different forms of private involvement in the water sector. Responsibilities are shifted from the state to the market. A complete shift is a full privatisation. A total sale to the private sector is rare but has taken place in the UK. Joint ownership of state and private partners is also possible. Build-Operate-Transfer (BOT) projects are for example the construction and operation of a water or sewerage treatment plant. The private company is responsible for constructing the infrastructure and manages continuing operation afterwards. At the end of the contract the ownership is transferred to the government.\textsuperscript{115} Very common forms are concessions or leases where the private entity operates and maintains the services, collects the revenues and gains a profit for doing so. In the case of a management

\textsuperscript{112} Gabler Verlag  
\textsuperscript{113} Loew, Ankele, Braun, Clausen 2004:47  
\textsuperscript{114} Budds, McGranahan 2003:102  
\textsuperscript{115} Budds, McGranahan 2003:90
contract the private company is paid a fee for managing the business but does not collect the revenues.\textsuperscript{116} Service contracts are usually smaller arrangements where only tasks like the collection of charges are outsourced. Public-Private Partnerships are in the majority of cases run as concessions or BOT projects.\textsuperscript{117}

Generally these contractual arrangements are hard to dissolve, e.g. in the case of non-compliance it is difficult because of legal constraints and administrative processes involved. Examples for such cases are Cochabamba (Bolivia) or Grenoble (France), where dissolving concession contracts took several years.\textsuperscript{118} The mere length of these contracts stands in opposition to competition, which in theory should bring lower prices, security of distribution and higher rates of employment.

Meanwhile a full privatisation is not desired any more by the citizens and thus by the politicians. There is a widespread opposition to privatisation in the water sector. It seems that the public is aware of the underlying conflicts. People do not have the demand of a more ethical behaviour by corporations but are totally against a corporate involvement in this sector. The great opposition against privatisation has led to a change. Prasad describes it this way, “[T]he high level of privatisation failure, especially in the water sector, has led the pro-privatisation lobby to do some soul-searching. It is now accepted that it does not matter who controls the network, but that it should be run like a business with equity principles.”\textsuperscript{119} That is the reason why we will look into this amendment in greater detail. The new forms of privatisations are PPPs and corporatisation. The ownership of the public utilities stays public but the operations become private or are carried out in the manner of a private company.

3.4.1 PUBLIC-PRIVATE PARTNERSHIPS

PPPs can be defined as “agreements where public sector bodies enter into long-term contractual agreements with private sector entities for the construction or management of public sector infrastructure facilities by the private sector entity, or the provision of services (using infrastructure facilities) by the private sector entity to the community on behalf of a public sector entity.”\textsuperscript{120} In a PPP the control over a facility is transferred to the private company. The public sector organization acts as the purchaser, the private sector partner

\begin{itemize}
\item\textsuperscript{116} Hall 2001:11
\item\textsuperscript{117} Katzmayr 2005:119-120
\item\textsuperscript{118} Hall 2001:12
\item\textsuperscript{119} Prasad 2006:686
\item\textsuperscript{120} Grimsey, Lewis 2002:108
\end{itemize}
adopts the role of a supplier.¹²¹ Both try to achieve common complementary goals. The public partner has a controlling function and the possibility of co-determination. The private part can make profits because of economic and/or technical innovations. Then again the private company takes over several risks because of the incentive to make profits.¹²²

There are two ways a PPP can work: Either it is based on existing facilities or new infrastructure is built. The infrastructure is then operated and owned by the private entity alone or in a joint venture between government and the private actor. The public sector defines and specifies the available services of the facility. The private actor then provides the services for a defined period of time. After this period the control over the facility is re-transferred to the public entity.¹²³

2.4.1.1 COSTS AND RISKS

A widespread assumption seems to be that PPPs do not produce costs to the public. This myth takes various forms, e.g. that the construction costs of PPP projects are not paid by the public (authorities. Another one is the opinion that authorising PPPs would allow the government or municipalities to spend more money on other services. But PPPs have to be paid just as projects managed directly by public authorities.¹²⁴ They are not free of charge. PPPs need to be set up, the details have to be negotiated and renegotiated, and they have to be monitored by a public authority. These transaction costs are relatively high. They comprise legal, consulting and financial costs. Included are the identification, allocation and mitigation of the performance and political risks involved for the private operator, its shareholders, and the project financiers. These efforts can mount up to 10% of the whole project costs.¹²⁵

A company joining in a PPP is usually found via tendering. This starting phase is prone to bribery and corruption. It is very likely that companies underestimate the expected costs of investments and overestimate the expected demand for the service. Sometimes “loss leaders” or unrealistic bids are submitted in a tendering process. Companies act this way in

¹²¹ Greasley, Watson, Patel 2008:307
¹²² European Commission cited by Katzmayr 2005:119
¹²³ Grimsey, Lewis 2002:108-109
¹²⁴ Hall 2008:14
¹²⁵ Lobina, Hall 2006:4, Hall 2008:19
order to get a project approved or to be the best bidder. \textsuperscript{126} Not till the project is scooped up the real costs come to light.

In terms of water provision, which is a natural monopoly, it is in all likelihood that customers are overcharged. This can also be proven empirically looking at the water sector in France. A study covered up that in 2004 the price of water under PPPs was 16.6\% higher compared to areas where municipalities provided such service. Also the IMF stated that it is possible that the private sector is overcompensated because the government overprices risk and thus the costs of a PPP increase.\textsuperscript{127}

There can be hidden costs such as financial support to the private company in form of cash contributions in the construction phase, subsidies during the operation phase or a favourable tax regime. Public authorities also often provide financial guarantees to minimise the risk of the private sector.\textsuperscript{128} It is also possible that the public operator which is due to become a PPP is fully disencumbered of all debts in order to guarantee the PPP a “fresh” and smooth start.

Profits are generally extracted out of the water system. These profits are not reinvested and thus lost for the community/state. This can be observed by looking at the private investments into the water sector. World Bank officials have recognised that private investments in water and sanitation services have been very low in the 1990s and that the vast majority of financial funding is done and will be done by the public sector.\textsuperscript{129} Private capital flows into the water supply and sanitation have been very unsteady between 1987 and 2003. They reached a peak in 1997 with over 8 billion USD and fell under one billion USD in 2003. This money did not go into the poorest regions or in regions with the lowest levels of access but in countries such as Argentina, the Philippines, Malaysia or Chile. These are countries which are not ranked as very poor. This shows that foreign capital is interested in large markets with low risk.\textsuperscript{130} Some representatives of multinational water companies have also admitted that they define themselves more as service providers and not as financiers.\textsuperscript{131}

\begin{itemize}
\item \textsuperscript{126} Hall 2008:20; Hall, Lobina 2004:269
\item \textsuperscript{127} Hall 2008:15, 20
\item \textsuperscript{128} Hall 2001:14
\item \textsuperscript{129} Castro 2008:70
\item \textsuperscript{130} Prasad 2006:676,680
\item \textsuperscript{131} Castro 2008:70
\end{itemize}
For leasing operations, BOTs, concessions and a full privatisation, good information and a strong capacity for regulation and coordination is needed. The water quality standards, prices and service levels need to be monitored and thus the community or the state needs to have the regulatory oversight. Thus, labour and capital costs occur which are borne by the regulatory agencies. Direct administrative and compliance costs are paid by the private and the public sector. There are also indirect costs incurred by private sector organizations and consumers as a result of both implementing the regulations and trying to avoid them. A private firm is attracted by a slack regulation because this offers the possibility to make profits. From a business perspective, the more charitable a company has to be, the less attractive is this activity for it because it does not directly bring a profit.

Another aspect is the costs of money itself. In almost every country borrowing money is cheaper for governments than for private companies. This implies the fact that governments face less risk of defaults. Private companies can go bankrupt more easily and that is why they pay higher interest rates for credits. Therefore a PPP always starts with a certain handicap which it can only offset by lower operating costs.

In case of an infrastructure PPP, the construction costs have to be paid by the public. These costs are generally high because the transfer of construction risk is paid for by the government or a municipality. The certainty of an on-time delivery which is within budget increases these costs substantially. Altogether, infrastructure projects have to face risks in the following areas: technique, construction, operation, revenues, finance, politics, environment or force majeure. It is possible that engineering or design failures occur or that the construction is faulty or delayed. The operating and maintenance costs can be higher as calculated. Different reasons can lead to a shortfall of revenues, for example the volatility of prices. Financial risks derive from inadequate hedging of revenue streams or investment costs. Changes to the legal regulations or of government policies can occur. The operations can have adverse environmental impacts or hazards. Finally, force majeure which stands for extraordinary events or circumstances beyond the control of the parties is a risk of a PPP.

It is evident that a risk transfer is not for free: a great part of the risks of PPPs originate from the complexity of the arrangement itself. Documentation, financing, taxation, technical

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132 Yamout, Jamali 2007:631
133 Parker 2002:501
134 Hall 2008:17
135 Hall 2008:18
136 Grimsey, Lewis 2002:111
details, sub-agreements, and so on, are involved and the nature of the risks varies over the
time period of the project.\textsuperscript{137} A PPP contract cannot cover all possible circumstances and
problems with the delivery of the service, particularly when the contract runs over 25 or 30
years. In the end the public authority has the responsibility for maintaining the service and
repaying the bankers, no matter what happens to the private partner.\textsuperscript{138} This is probably the
greatest risk of a PPP. Another risk results from macroeconomic instability. It is hard to
calculate a price for water which is appropriate to the private operator is at the same time not
too expensive for disadvantaged consumers and which is generally adequate to the
economy.\textsuperscript{139}

It is important to evaluate if the benefits of the risk transfer to the private partner are higher
than the costs of this action. PPPs are feasible if a reliable, long-term revenue stream can be
established. The projected revenues are one of the greatest risks of such a project.\textsuperscript{140}

3.4.2 CORPORATISATION

Another process that has taken place in many countries where a full privatisation of water
services was not desired is a formal privatisation or corporatisation. The idea of
corporatisation is to capture the advantages of a privately run company, e.g. efficiency,
productivity, and financial sustainability; while retaining government accountability. A
corporatized company “has to emulate the behavior of a private company.” Thus, it becomes
more or less a private company because it adopts key corporate characteristics: “corporate
governance; a separate legal entity or company at least partially owned by government
(often local government); modern financial management and accounting practices; customer
orientation; and effective and transparent use of data to assess and monitor performance.”\textsuperscript{141}
Corporatisation is one request of the New Public Management philosophy. This approach
discusses ways to lift the barrier between state and market in order to modernise the state.\textsuperscript{142}

Corporatized entities in the water sector are independent business units for water services
operating separate from municipalities or governments. The public operator is run under a
private-law organisational form but rests to 100\% in public hands. Katzmayr describes this as
a separation of the municipal council, the public sphere and local parliamentary control. For

\begin{footnotes}
\footnotetext{137} Grimsey, Lewis 2002:109
\footnotetext{138} Hall 2008:20
\footnotetext{139} Prasad 2006:683
\footnotetext{140} Grimsey, Lewis 2002:111
\footnotetext{141} US Aid 6-8
\footnotetext{142} Gabler Wirtschaftslexikon
\end{footnotes}
him it is the first step towards material privatization. It is a form of learning from an economically-led behaviour and the problem is that only monetary and short-term goals are pursued. When water is commoditised it is thereupon only available to those who can afford it. Thus the citizen becomes a customer. The idea behind this is to offer citizens more choices, e.g.: in the selection of services, in the way how to interact with the water provider and in the selection of the water provider itself. Critics believe that the market logic introduced into the water management is incompatible with guaranteeing citizen's basic right to water. Their key argument is that private companies will manage water in a less sustainable way. Furthermore, the impression that there is no need for public utilities owned by the general public becomes stronger. More and more public institutions are released to self-governance but receive at the same time high subsidies. It is feared that the process of corporatisation moves water operators out of the grasp of the citizens but they have to pay for them nevertheless.

3.4.3 OUTCOMES

3.4.2.1 FAILURES AND CORRUPTION
Prasad lists a collection of failed takeovers by private water companies: Buenos Aires, Atlanta, Manila, Cochabamba, Jakarta, Nelspruit, Kelantan, Mozambique, Nkokebde, Conakry, Gambia, Parana, Trinidad and Tobago, Belize, La Paz, and Dar es Salaam. This compilation is not really creating confidence and shows that private sector involvement in the water sector does not have a good reputation. As seen with hidden costs of PPPs, the private sector is often associated with bribery, corruption, non-compliance with contracts, layoffs, price increases or environmental pollution. In most cases the contracts need to be renegotiated and the World Bank has even published a manual how to renegotiate a failed contract. Furthermore the World Bank states that “the privatisation process itself can create corrupt incentives.” It lists the possibilities to bribe in order to be favoured in bidding processes or to obtain a low assessment of the public property that is leased off. It shows that in the water sector, corruption is closely associated to the awarding of contracts. The two French multinationals Veolia and Suez have both been convicted of corruption for trying to obtain long-term water concessions in France, Italy and in the USA. Thames-Water was

143 Katzmayr 2005:118
144 Bakker 2007:437
145 Prasad 2006:682-683
146 Prasad 2006:682
147 Hall 2001:15
confined for collusion in awarding contracts in Chile and in Indonesia. To sum up, privatisation increases the incentive and the opportunity for corruption and bribery.

3.4.2.2 OUTCOMES CONCERNING PERFORMANCE AND EFFICIENCY

Studies on privatisation show that this measure generally contributes to improving performance at the company level but that it is insufficient to raise economic performance by itself. It is certain that the ownership for itself does not determine the performance. There are other contributing factors such as leadership or commitment by the workers.

In general, there is no statistical evidence that the efficiency of private water operators is higher than of public ones. Even the IMF stated that it cannot be taken for granted that PPPs are more efficient compared to public investment or government supply of services. One study published by the World Bank affirms that PSP in infrastructure did not take social issues into account. Another study recognises that total welfare reached with PSPs is not shared with the poor.

3.4.2.3 OUTCOMES CONCERNING THE POOR

The evidence on the implications of privatisation on poverty is contradictory. Several studies are documenting that all categories of the population could benefit from privatisation because it leads to improvements in access and coverage, efficiency and quality. Other studies show negative consequences for the poor such as job losses, decreases in income or reduced access to basic services. This means that poor people and small businesses can be priced out of the market. There is also only little evidence that low-income groups are any better off in the case of a private provision. Moreover, these groups are often explicitly excluded from the service area covered by the contracts.

For poorer citizens the calculations of the tariffs is of great importance. Efficient and cost-covering tariffs are not implicitly sustainable and reasonable. In industrial countries the costs for water constitute only a minor part of the household expenses. In developing countries this part is usually much higher. When prices of water rise, this increases inequality because of the low-income elasticity applying to water. Water consumption varies very little with income

148 Hall, Lobina 2006a:33
149 Hall, Lobina 2006b:10
151 Prasad 2006:673-674
152 Budds, McGranahan 2003:109-110
because the individual water needs are too similar.\footnote{Prasad 2006:675} When water stays in public hands it is possible to redistribute and to provide access to water explicitly for poorer groups. It is not easy to motivate companies to act accordingly. From a philosophical view it can be argued that privatisation prefers the non-poor because it is profit-motivated and is thus not targeting on equity and social justice. The extension of the water network and the connection of new households, which are not able to afford the full economic cost, pose a potential risk to a private company's profitability.\footnote{Hall 2001:13} So it can be found that the number of new household connection to the pipeline network achieved with private finance in regions such as Asia or Sub-Saharan Africa is minor.

PSI states that private companies offer their services primarily in large cities and serve the poor only when governments pay for it or provide multiple guarantees. Holland argues, \textit{“It would be better if the rich in these countries subsidise their own poor instead of subsidizing shareholders in Europe.”}\footnote{Holland 2005:150-151} This means that governments in the global South should abstain from PPPs and work on a way to subsidize the poor instead of turning to private investors (from the North).

It appears that especially in areas allowing to achieve profits easily, contracts are concluded with private suppliers.\footnote{Von Braunmühl 2008:48} The less attractive business of servicing the poor is often done including the element of participation. This saves costs and safeguards payment acceptance. Main goal is to increase developmental funds to influence decisions of a population regarding its access to water services. At the same time, an economical and environmental aware consumer culture is promoted, together with a rising sensitisation that water has an economic value and that services associated with it have to be paid by the water users.\footnote{Von Braunmühl 2008:48-49} The strategy to treat water as a commodity is challenging with a refusal by the civil society. The protest comes along with the resistance to a commodification of public goods. Generally, when water and other public goods and services are charged then the wealthier citizens are those who are able to pay and the poorer ones are dealing with a serious problem. Facing the wealth differences within local communities and nation-states as well as globally between

\begin{thebibliography}{9}
\bibitem{Prasad} Prasad 2006:675
\bibitem{Hall} Hall 2001:13
\bibitem{Holland} Holland 2005:150-151
\bibitem{VonBraunmühl1} Von Braunmühl 2008:48
\bibitem{VonBraunmühl2} Von Braunmühl 2008:48-49
\end{thebibliography}
the North and the South, the allocation via market-forces poses the risk that the poor pay for the water consumption of the rich.\textsuperscript{158}

### 3.4.2.4 OUTCOMES CONCERNING REGULATION

The actors who are pro privatisation usually blame weak regulations whenever a privatisation fails. In developing countries it was often overlooked that the regulatory governance had not been well developed prior to a privatisation. However, effective regulation and regulatory governance is needed for the desired market-led development. Furthermore effective and efficient institutions are necessary but their formation takes time, even in developed countries.\textsuperscript{159} A regulation body is usually centralized, bureaucratic and often too big. If water stays in public hands, this body does not need to be installed. As argued before, bribery is very common in the water sector. If there are no profits to be made, corruption can be prevented. Besides, the more efficiently a regulation system works, the less interested are private companies to participate in a tender process because their cost benefits cease to exist.

Privatization leads to a relocation of regulation, away from the political sphere to a shadowy and unaccountable world, as Stoker puts it.\textsuperscript{160} The decision-making is privatized. This measure allows only short-term gains for tax-payers. The focus just lies on quantifiable values and not on the provision of public services for a meaningful human existence. Furthermore, citizens do not have a real choice between suppliers because concessions are granted without the concerning their opinion. Citizens are not only just consumers but have the right of information, of hearing and of interaction within the decision-making process. In addition politicians loose information and cannot achieve learning effects any more. Also the municipalities loose strategic competences.\textsuperscript{161} Private companies prefer confidentiality and secrecy in order to protect their ability to maximize the own benefit. They usually insist on secret contracts.\textsuperscript{162}

### 3.4.2.5 OUTCOMES CONCERNING THE WORKERS

Private companies were expected to reduce the number of workers because this was seen as a meaningful cost-cutting measure. Banks and analyst propose a low number of workers as a measure for a better performance. Hence the standard measure which is employees per

\textsuperscript{158} Partzsch 2007:18  
\textsuperscript{159} Prasad 2006:684  
\textsuperscript{160} Stoker 1997 cited by Katzmayr 2005:131  
\textsuperscript{161} Katzmayr 2005:128  
\textsuperscript{162} Hall 2001: 15
thousand connections does not take into account if a water operator carries out its own construction or if this part is outsourced. Furthermore, extending services and providing a better service quality often derives from extra workers.\textsuperscript{163} When the number of workers is reduced and the output stays the same, this is not a problem from an economic point of view. However, same output does not mean that the quality of the work stays the same. And a sharp reduction of personnel does not automatically imply improved efficiency. Qualified staff and adequate levels of workers are indispensable. A lack of qualified personnel can lead to physical losses or poor service.\textsuperscript{164} Water services, like any other service, need a accurately paid, trained and stable workforce.\textsuperscript{165}

### 3.4.2.6 OUTCOMES CONCERNING THE ENVIRONMENT

There are no ecological arguments brought up supporting privatization or liberalization of the water management. Only economic reasons are under consideration. The opponents of privatization are against experiments that may risk the ecological and social functionality of water.\textsuperscript{166} There is for example a tension between company strategies and public policies concerning leakages and water stress. Companies expect very little benefits from reducing their leakages but from small savings in power and chemicals. The costs are high and there are no immediate benefits to except.\textsuperscript{167} Another example is the use of ground water. From an economical point of view it would be more viable to use the water of larger ground water resources and stop taking water from smaller and less cost-efficient sources. This poses the risk of a loss of protection zones and a risk of excessive exploitation.\textsuperscript{168}

The question to ask is why sticking to private involvement when it only costs more and creates probably not any efficiency gains? The option to reform public providers through in-house restructuring and partnerships while keeping full public ownership and control was for a long time overlooked or ignored. This reasonable option will be explained in the next chapter.

\textsuperscript{163} Hall, Lobina 2006b:12-13  
\textsuperscript{164} Hall 2001: 20  
\textsuperscript{165} Hall, Lobina 2006b:12  
\textsuperscript{166} Katzmayr 2005:114  
\textsuperscript{167} Hall, Lobina 2004:274  
\textsuperscript{168} Katzmayr 2005:138-139
4. PUBLIC-PUBLIC PARTNERSHIPS

As we have seen in chapter two, neither privatisation nor PPPs fulfil their promises to improve the water services beneficial to the society and both can to the contrary cause huge problems. When a utility is privatised or reformed into a PPP, several costs and risks arise to the operator, the government, the municipality and the society.

A totally different concept for the improvement of public water services are Public-Public Partnerships (PUPs). In the last years more and more publications mention PUPs as examples of well-running partnerships. Literature reviewing on PUPs start in the early 2000s but the concept is much older. One of the first PUPs was founded in the 1980s by Lilongwe (Malawi) and the UK's Severn Trent.\(^{169}\) It seems that in the water sector PUPs have, on the one side, originated as a response to PPPs and privatisation in general.\(^{170}\) On the other side, the concept of city twinning, which came up after World War II, was also an initiator for PUPs. The idea of collaboration between municipalities seems to have provided the political fundament for these partnerships regarding the water sector.\(^{171}\)

The appearance of PUPs is a movement towards a different image of the public sector which is often talked down to be inefficient, bureaucratic, slow and inflexible - all objections for investing in the private sector. This attitude is in my view omnipresent in Western societies. Miranda also says, “The disparagement of the public sector has left an ingrained cultural bias against the public sector within donor governments and institutions which is difficult to change.”\(^{172}\)

This chapter starts with a discussion of the concept of PUPs, its different partnership types as well as partnership arrangements that can be made. David Hall identified over 130 PUPs in the water sector in more than 70 countries. The existing PUPs have different characteristics - each one distinguishes in certain points from all the others. These characteristics and the associated ideas, which are explained in the literature, are discussed in the following part of this thesis. Additionally, their accuracy is analysed using a case example of a Swedish and a Lithuanian operator.

\(^{169}\) Boag, McDonald 2010:3. The PUP took place before the British water companies were privatised.
\(^{170}\) Lobina, Hall 2006:6
\(^{171}\) Boag, McDonald 2010:3
\(^{172}\) Miranda 2006:55
4.1 THE CONCEPT OF PUBLIC-PUBLIC PARTNERSHIPS

In the latest publication of the Transnational Institute and the Public Services International Research Unit, PUPs are defined as “the collaboration between two or more public authorities or organizations, based on solidarity, to improve the capacity and effectiveness of one partner in providing public water or sanitation services.” Boag and McDonald define it slightly differently. For them a PUP is a “twinning arrangement with a stated non-profit motive that aims to improve water services in one or more of the partner regions and which includes only public partners.” The second definition is more precise and does not include the mere normative approach of solidarity. This notion is not the solely important feature of PUPs because the core of the concept is created according the fact that two (or more) public partners are collaborating and that profit-seeking is explicitly excluded. The partners come together and state that they are not motivated by commercial goals.

When we focus on a neoclassical view, we can say that a PUP has the objective to maximise the consumers’ surplus. This leads to a maximization of welfare gains. Water generally has a high consumers’ surplus because people would pay a very high price for water (especially for the first litres in order to survive) but they are usually paying a lot less than their actual willingness to pay as low-income elasticity applies to water. What is more, in a PUP there is no need for growth of annual income or growth of annual profit. Only a need for the growth of the knowledge and of efficiency exists.

PUPs are generally not managing agents for large-scale infrastructure projects or for implementing specific policies like cost-recovery mechanisms. Their aim is to provide local management and workers with the essential skills to discover problems and find appropriate solutions to overcome them. Know-how transfer takes place in a very cost-effective way.

PUPs can work either on national or international level. The initiators of a PUP differ from case to case. It can be the public operator which takes the lead or politicians who want to improve public water services. In the case of Stockholm Vatten which was a supporting operator in Kaunas (Lithuania) and Riga (Latvia), the PUP process started at the political level. An international initiative aimed to coordinate multilateral and bilateral cooperation. This was followed by a political mandate given to Stockholm Vatten to be the supporting

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172 Hall et al. 2009:2
174 Boag, McDonald 2010:4
175 Consumers’ surplus is a measure of consumer welfare and is defined as the excess of social valuation of product over the price actually paid. [OECD Glossary]
176 Hall, Lobina 2006b:35
partner for the two Baltic operators. The municipal, national and international political initiatives attracted international finance and bilateral grants.\textsuperscript{177} For PUPs in general, the initiation by trade unions, NGOs\textsuperscript{178}, community representatives or other civil society groups or individuals is also possible.

In principle, in a PUP the public ownership and management of operations are retained. But in most published examples of PUPs it is not clear who is meant with ‘public’: state and non-state-actors are often mingled together and no delimitation is made. As a consequence different notions of the public domain are mixed.\textsuperscript{179} A reason could be that the concept is relatively new.

In general we can see that the interpretations of ‘public’ and ‘private’ change within the social, political and economic context.\textsuperscript{180} Shifts in economic policy and politics redraw the boundaries of the public sphere and public institutions. This includes boundary shifts such as the formation of neoliberalism or the rise of business and financial news coverage, shifts from seeking government regulation of corporations or via organized labour to directly targeting corporations through public dispute.\textsuperscript{181} Different interests are behind each step in the direction towards more public or more private involvement. This is also a reason for the unclear delimitation of public and private in the PUP concepts. Different vested interests try to form the water sector according to their advantage.

Nevertheless, public can be seen in two ways, either from the view of Habermas or from an institutional perspective. Habermas argues that the state authority is the executor of the public sphere but is not a part of it. State authority is normally seen as public but its task to care for the well-being of all citizens can be derived especially from the aspect of the public sphere. State and public sphere are not the same but rather opponents. The public sphere is responsible for non-governmental opinion-making. The public sphere is \textit{“the realm of our social life in which something approaching public opinion can be formed.”}\textsuperscript{182} It is restricted by the private sphere on one side and the realm of secrecy on the other. The second term stands for the back rooms of power of public authority: interpersonal power networks and

\textsuperscript{177} Lobina, Hall 2006b:13
\textsuperscript{178} In wider usage, the term NGO can be applied to any non-profit organization which is independent from government. NGOs are typically value-based organizations which depend, in whole or in part, on charitable donations and voluntary service. [World Bank]
\textsuperscript{179} Boag, McDonald 2010:13
\textsuperscript{180} Boag, McDonald 2010:13
\textsuperscript{181} Social Science Research Council
\textsuperscript{182} Habermas 1964
legal restrictions through censorship and repression.\textsuperscript{183} Contrary to that view, I have chosen an institutional perspective and equate public water services with state ownership of facilities and resources. This definition includes ownership by community groups and other non-state actors in order to expand the conventional boundaries of public ownership.\textsuperscript{184} Boag and McDonald propose to use the term 'public' only for state entities that are publicly owned, managed, financed, and stand under political control and oversight. "\begin{quote}Examples of this include government bodies and departments (at all levels of state), state utilities and parastatals, and state development agencies (bilateral, multilateral) with a mandate to serve all residents in a given geographic area.\end{quote}\textsuperscript{185}" In this paper I only analyse PUPs which include these kinds of public partners but I will give a brief overview over other PUP forms. In addition, the above definition does include corporatised entities which are described in chapter two. As this kind of outsourcing has become very common, it is not possible to exclude it. However, corporatisation can be highly problematic because it restricts the public to influence political processes and thus it turns the citizen into a mere customer. A PUP with a corporatised entity as one partner is probably not excluded of the profit-maximization aim. Only monetary and short-term goals are pursued.

\section*{4.2 Partnership Types}

In table 2, based on the illustration of Boag and McDonald, some examples of PUPs classified according to their spatial and organisational dimension are shown. \textsuperscript{186} Looking at the type of organisation, we see co-operations between public-authorities which are most of the time municipal water providers, and partnerships between non-state-actors. Geographically there are PUPs within one country either doing business in the North or in the South and such working across borders. First, we look at the organisational scale of PUPs.

\textsuperscript{183} Social Science Research Council
\textsuperscript{184} Boag, McDonald 2010:13
\textsuperscript{185} Boag, McDonald 2010:17
\textsuperscript{186} Boag, McDonald 2010:4:

I do not use the third category of Boag and McDonald, which is 'development partnership', because this is one specification of an international partnership which works North-South.
Spatial scale

<table>
<thead>
<tr>
<th>Organisational scale</th>
<th>Domestic Partnership</th>
<th>Multinational Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public-authority</td>
<td>Municipal water provider and national water department</td>
<td>Municipal water providers of two countries</td>
</tr>
<tr>
<td>+ Public-authority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public-authority</td>
<td>Municipal water provider and a trade union or an NGO</td>
<td>National water department and an NGO from another country</td>
</tr>
<tr>
<td>+ Non-state entity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-state-entity</td>
<td>Water coorative and an NGO in the same municipality</td>
<td>Unions from two countries</td>
</tr>
<tr>
<td>+ Non-state entity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-Partnerships</td>
<td>Municipal water provider and a trade union and a local community group</td>
<td>Regional water provider and an NGO with a regional water provider of another country</td>
</tr>
</tbody>
</table>

Table 2: Types of Public-Public Partnerships

4.2.1 ORGANISATIONAL SCALE

As the responsibility for water and sanitation is lying at different levels of government, PUPs can be launched at different levels as well. A public-authorities partnership\textsuperscript{187} involves public authorities of the same type and level such as collaborations of municipal operators or of different types and levels. Common examples are a national water department or provincial authorities.\textsuperscript{188} Publicly owned and managed PUPs of this kind can, for instance, be found in Honduras, South Africa, Malaysia and Brazil. Such cooperation is often created because of twinning arrangements between cities or communities.\textsuperscript{189}

In contrast to formal state actors, other civil society organisations can also be part of a PUP. These non-profit private entities include non-state and non-commercial organisations. Examples are community-based organisations, NGOs, churches, foundations, social movements, academic institutions, trade unions, and other local actors. These actors are no formal public institutions but form a part of the wider public and have become institutions with a strong public acknowledgement.

\textsuperscript{187} Public-authorities partnerships can also be named as Public Utility Partnerships or Public Operator Partnerships (POPs).
\textsuperscript{188} TNI, CEO 2006:8; Lobina, Hall 2006:6
\textsuperscript{189} Hall, Lobina 2006b:7-8
There are also governmental organized NGOs representing hybrid cases within this definition. All these non-profit private actors work independently of the formal public sector and provide service to a particular set of group interests.\textsuperscript{190} They are included within this concept when they work on a non-profit basis. In general, non-state entities play an important role as part of the civil society. NGOs can build political support for PUPs among governments and donors. They can also serve as a link between public operators especially in the North and in the South. NGOs and trade unions\textsuperscript{191} can for instance take over the monitoring business to ensure that PUPs stay public and non-profit.\textsuperscript{192}

Next to NGOs are other entities that are called not-for-profit organisations. Their intention is not to make profits for private gain. But it is possible that such an organization makes in fact a profit from time to time. However it is not the principal purpose for which it is constituted.\textsuperscript{193} Including these organisations is probably weakening the concept of PUPs and opens it up for private companies. But this requires deep analyses in every specific case which would go beyond the limits of this thesis. In summary, organisations that work for profit are excluded from the concept of Public-Public Partnerships. A partnership with a commercially operating partner resembles to a PPP and is therefore not a PUP. The disadvantages that can arise with an eventual inclusion of the private sector, happening in the case for WOPs, are discussed in chapter four.

To date, these partnerships between public authorities and non-state actors only exist on the domestic level, usually between a municipal authority and a locally based association aiming for an improvement of the water services in the community. Partnerships between trade unions or NGOs and public water authorities are also mostly established on a local level. On a national level, the question of water is typically not interesting for citizens. Back on a local level however, people are personally affected and thus interested. This fact supports the idea of community involvement. Co-operations between non-state-actors are also highly localized. However, there is one example of such an international PUP, namely between Dushtha

\textsuperscript{190} Boag, McDonald 2010:17
\textsuperscript{191} Either trade unions just work in the areas of working time and remuneration or their aim is to reach a higher living standard for all.
\textsuperscript{192} TNI, CEO 2006:15
\textsuperscript{193} The International Center for Not-for-Profit Law
Shasthya Kendra and WaterAid in Dhaka, Bangladesh. The aim of this partnership was to expand water services to informal settlements.  

A special constellation is a multi-partnership because very different objectives, attitudes and operation methods collide. The co-operation of Odi municipal water utility in South Africa with the regional water board Rand Water and the local and national trade union is an example for a domestic multi-partnership.

What also needs to be taken into account is that it makes a difference if two state-actors like municipalities or a municipality and a NGO work together. The reason is that in the first case the two partners possess in-house expertise on municipal affairs which the NGO is lacking. However, difference can also be a driver for change.

4.2.2 SPATIAL SCALE

When we look at spatial possibilities of PUPs we can find domestic partnerships in only one country and multinational partnerships in two or more countries.

A) DOMESTIC PARTNERSHIPS

Domestic partnerships have various characteristics. They are usually established because of geographical proximity. Study tours and visits are easier and cheaper to arrange. The communication is presumably uncomplicated due to a common language and/or a common working culture. Moreover the socio-economic and the hydrological context are similar. With nearly the same economic situation the partners face related constraints and challenges. In addition, within the same country the legal framework does usually not vary.

An example for a public-authority-partnership in one country is the Tamil Nadu Water Supply and Drainage Board (TWAD) cooperating with other state utilities in India. In 2004 the Palangarai village in the Coimbatore District of Tamil Nadu launched a programme to change their water system. For the period of one year the villagers organised meetings involving all local stakeholders, regardless of their position, sex or age. The water engineers of TWAD provided technical know-how and information. The villagers then decided to plant trees in

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195 Boag, McDonald 2010:5-6
196 Bontenbal 2009:101
197 Boag, McDonald 2010:5
order to lift the water levels. This aim was reached. Illegal tapping, which was also a big problem, could be stopped. The transparent and improved water distribution leads to a 100% collection of annual taxes.\textsuperscript{198}

**B) MULTINATIONAL PARTNERSHIPS**

Multinational PUPs combine partners of different countries. The following combinations are possible: North-South, South-South, South-North, North-North. The first direction stands for the supporting partner and the second for the supported partner. North and South name the wealthy and non-wealthy parts of the world.

**4.2.3 DIGRESSION ON THE NORTH-SOUTH DIVIDE**

The North-South divide describes two economic differently developed spheres of the world. On the one hand is the wealthy North, made up of economically developed countries. On the other hand stands the less wealthy South, made up by less developed countries. The geographical designations result from the fact that most wealthiest countries are located in the North (exceptions are for example Australia and New Zealand) and the less wealthy states are situated in the global South. However, the North-South divide is not absolute in a geographical sense but a pure economic distinction.\textsuperscript{199} If the aggregation of countries of Africa, Asia and Latin America is an appropriate way to explain certain developments, is a complicated question but answering it would lead to far in this thesis.\textsuperscript{200}

Having addressed this question, we can turn to the partnerships in the North and in the South.

**NORTH-SOUTH PUP:**

These partnerships are generally considered to be instruments that help develop and build capacity in partner organisations and companies in the South. A transfer of technique and knowledge from North to South is intended. In the field of international development this concept has become omnipresent. During the 20th century international co-operations where renamed and re-designed dissociating themselves from paternalistic approaches towards joint concepts. Partnerships should stress equality and promote recipient partners to assume

\textsuperscript{198} Suresh 2007:31  
\textsuperscript{199} Samson 2006  
\textsuperscript{200} I do not go into greater detail here. For further information on this topic see Jean-Philippe Therien (1999): Beyond the North-South divide: The two tales of world poverty.
leadership and take on ownership according to their development strategies.\textsuperscript{201} In theory, these partnerships are based on the idea of joint ownership of interventions and not on aid conditionality.\textsuperscript{202} The northern partner should avoid a dominant and intervening role. However, these intentions did not turn out to last. The structural inequalities are still persistent in North-South partnerships because the North retains further financial, technological and institutional advantaged over the South.\textsuperscript{203}

North-South PUPs originated in the 1980s and existed long before an academic discussion of PUPs began. Within these kinds of partnerships an operator from the global South has the aim to improve its infrastructure and/or capacity and receives help by an operator (or another water organisation) from the global North. The supporting partner cares for facilitating inter-cultural exchange for the workforce of the own utility or for increasing the international experience of the workers out of social or professional reasons.

PUPs provide a development for water operators in the South with regard to knowledge transfer, effective restructuring of public utilities, democratization of public utilities and solidarity building amongst public operators. Municipal partnerships have for example been identified as highly significant contexts for development education.\textsuperscript{204} Furthermore, they offer a possibility to redistribute chances. States could spend a part of their development budgets on PUPs. This would cause a huge impact with a relative small amount of money to invest because building capacity costs less than large infrastructure projects.

A North-South PUP offers also another benefit. Not only southern organisations are able to learn. Practitioners from the North can also benefit from experiences gained in the partnership, for example learning from innovations in decentralised governments or coming to know about poor community coping and self-reliance strategies in the South. They can learn about user involvement in service provision in the South. Afterwards they are potentially able to adapt southern anti-poverty agenda to the northern context and bring different other insights to the North.\textsuperscript{205} An inter-cultural exchange of ideas can take place.

One good example for a North-South PUP is the collaboration of the municipal Lilongwe Water Board in Malawi and the public operator Severn Trent in the UK in 1982. This was a World Bank funded program that focused on capacity building projects. In 1994, when the

\begin{footnotesize}
\textsuperscript{201} Bontenbal 2009:100-101  
\textsuperscript{202} Johnson, Wilson 2006:72  
\textsuperscript{203} Bontenbal 2009:100-101  
\textsuperscript{204} Devers-Kanoglu 2009:202  
\textsuperscript{205} Johnson, Wilson 2006:74
\end{footnotesize}
program was completed, the Lilongwe Water Board took over as external adviser.\textsuperscript{206} Other examples are a PUP between Amsterdam Waternet and the city of Alexandria in Egypt, or a PUP between Sevilla’s CPASE and Bolivian authorities with the aim to re-establish a public sector water operator in La Paz/El Alto after a failed concession.\textsuperscript{207} This provides evidence that PUPs are a mean to bring privatised utilities back under public control.

There are several challenges to overcome in such a constellation. The socio-economic differences can be a barrier as well as the hydrological divergences. Cultural differences can also hinder a well-running collaboration as well as differences in size. To reach an equal relationship can be problematic.\textsuperscript{208} Moreover, the daily work of northern operators is usually to maintain and renew already existing water networks with wealthy water users. In countries of the South the situation is mostly totally different.\textsuperscript{209} To a large extent water users are poor and networks need to be constructed for the first time.

**SOUTH-SOUTH PUP:**

It is not always necessary that knowledge is provided by northern organisations. Every water operator has know-how to share. A partnership in the South can bring together countries with similar socio-economic circumstances.\textsuperscript{210}

In a partnership different inequalities can emerge such as access to resources, power relations, knowledge, capacities and capabilities. Different assumptions, world views, agendas and expectations collide. These differences are apparent in North-North, South-South and most of all in North-South/South-North partnerships.\textsuperscript{211} In PPPs the power inequalities are more obvious. When a municipality in the South engages in a partnership with a transnational corporation the distribution of power is totally uneven. One party is much more powerful than the other. Boys says, “The corporations have expertise, more lawyers, more accountants, bigger budgets, more experience.”\textsuperscript{212} PUPs are based on a relationship forged around common values and objectives where profit-seeking is explicitly excluded. There are probably not the same asymmetric distribution of power as in North-South PUPs because the operators have similar backgrounds.

\begin{thebibliography}{9}
\bibitem{206} Boag, McDonald 2010:8, Hall 2000:4
\bibitem{207} Hall et al. 2009:4
\bibitem{208} TNI, CEO 2006:13
\bibitem{209} TNI, CEO 2006:12
\bibitem{210} Boag, McDonald 2010:8
\bibitem{211} Johnson, Wilson 2006:71, 73
\bibitem{212} Holland 2005:155
\end{thebibliography}
There are several examples of PUPs in the South, for instance the Argentinian water operator ABSA which supported the Peruvian city of Huancayo. This PUP aimed to improve the public water delivery which is characterized by high leakage rates and discontinuous service. The PUP still works on these problems.

**NORTH-NORTH PUP:**
Such collaboration is similar to South-South PUPs. The partners have similar problems and problem solution strategies. A good and well-functioning example for a North-North partnership is the systematic Baltic Sea partnership of the 1990s between water operators in Sweden and Finland working with municipalities in Estonia, Latvia and Lithuania.

**SOUTH-NORTH PUP:**
As already mentioned, the North can also learn from the South, for example in terms of democratisation and participation as we see it in Porto Alegre. Generally, a cooperation in which the northern partner has problems and asks a southern partner for help has not been documented but has probably already started or will start in the near future.

### 4.3 PARTNERSHIP ARRANGEMENTS

Partnerships follow the phrase that the whole is more than the sum of its parts. Organisations enter such an arrangement in order to improve their comparative advantages and to find win-win solutions. Boag and McDonald define the partnership itself as “any substantial formal contractual collaboration between two or more agencies in the public and/or non-profit sector for the purpose of operating and/or financing the delivery of a water service over an extended period of time.” Such a partnership can combine two or more public entities, two or more non-profit entities, or a combination thereof, as described above. It is also defined that the partnership is not a loose oral engagement but a contractual state. Both partners show their willingness to reach their common established goals. A partnership can for instance be based on a contract or on a memorandum of understanding. The way of implementation counts. The basic idea is to respect the integrity of the local water company or water organisation because this partnership is about advising and engaging and not about

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213 Hall et al. 2009:4
214 TNI 2007:1
215 Hall et al. 2009:4
216 Johnson, Wilson 2006:72
217 Boag, McDonald 2010:18
seeking management control.\textsuperscript{218} Local managers are usually not replaced by (foreign) experts because this can reduce the absorptive capacity of the supported partner and can undermine the ability to internalise knowledge for the long term.\textsuperscript{219}

To illustrate how such a partnership works, here are some further definitions. The World Economic Forum states that true partnerships are about sharing agendas together with combined resources, risks and rewards.\textsuperscript{220} For Johnson and Wilson a partnership is a “dynamic process through which partners have the potential to learn and thereby promote new forms and practices.” At worst, one partner is just copying the other but in the best case, partners unite their knowledge and produce totally new solutions and ideas.

A partnership is not only based on similarities but also on differences. In the best case, difference can be a driver of mutuality. To realise mutual benefits, different values, knowledge and practices are shared. Ideally, trust, dialogue and reciprocity support this realisation.\textsuperscript{221} Mutual trust and respect play a major role in such partnerships. To achieve this time is needed. Hall found out that the most effective PUPs had the longest lead-in times. However, qualification of the partners and effectiveness of the accountability networks underlying the collaboration are key factors for success.\textsuperscript{222} An exemplary way of building trust can be to pursue modest goals at the beginning that can realistically be achieved. This reinforces the (still minor) trust which existed at the start. Without any trust, the partnership would not have been built. In a second phase the partners can develop more ambitious initiatives.\textsuperscript{223} The decision for a designated partner does not depend on the bid promising the lowest cost but on the most suitable water operator which can be usually identified after prior contacts.

The success of a PUP depends on the supporting and also on the supported partner. Conscious agency is needed to make the partnership work. Further relevant for a well-functioning partnership are the local organisational culture, the institutional framework and the socio-economic conditions. Particularly in the case of North-South PUPs these requirements need to be observed if two very different partners work together.

\textsuperscript{218} TNI, CEO 2006:10  
\textsuperscript{219} Lobina, Hall 2006:15  
\textsuperscript{220} Cited by Phumpiu, Gustafsson 2008:22  
\textsuperscript{221} Johnson, Wilson 2006:71  
\textsuperscript{222} Hall Lobina 2006:13-14  
\textsuperscript{223} Johnson, Wilson 2006:71, 76
The formation of PUPs can have different reasons. This section sums up the partly already mentioned motives for entering such a partnership.

On the supported side the aims can be the following:

1. **Training and developing of human resources:**
   Most of the public utilities which enter into such a partnership are seeking to improve their service quality and effectiveness. This can be achieved by training of the workforce in order to have a competent and committed staff and management. The absence of commercial considerations with regard to profit-seeking offers the possibility to concentrate resources on knowledge transfer.

2. **Technical support:**
   PUPs can focus on providing technical assistance like to solving problems such as leakages, protection of groundwater resources, waste-water treatment or to introduce quality management, preventive maintenance systems, improved customer relations or management information systems. The goal is to improve and expand water service quality and/or quantity and sometimes to introduce new technologies to enable take modernisation steps.

3. **Improving efficiency and building institutional capacity:**
   Another aim can be to build up institutional capacity of the public water sector and sanitation operators. The workforce is not only trained in technical areas but also receives soft skills trainings such as project management or on teamwork.

4. **Improving participation:**
   In some examples the objective was to develop the involvement of the public or the workers to enable a more responsive and effective service. Furthermore, enhanced accountability and transparency to citizens is sometimes intended. However, dealing with the last mentioned objectives, non-state actors seem to be more concerned with accountability and participation issues than state-actors are.

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224 Hall et al. 2009:3; Boag, Mc Donald 2010:7; Lobina, Hall 2006:13, TNI 2007:2
5. **IMPROVING ACCESS TO WATER SERVICES:**
There are PUPs with the goal to expand water services connections to marginalised communities and to design payment plans that are affordable to all. In highly developed countries this is usually not a problem but in developing countries the access to water is an essential issue.

6. **FINANCING WATER SERVICES:**
Some PUPs where formed in order to develop alternative financing mechanisms or to use municipal partnerships to achieve economies of scale and compensate costs. A divisions of labour is occasionally an aim. Sometimes the cost-revenue structures where reviewed to determine them appropriately.

7. **PROTECTING AGAINST PRIVATIZATION - PUBLIC SECTOR ETHOS:**
When such an objective is set, public utilities and non-governmental partners are strengthened and empowered. Efforts are made to build solidarity amongst the public operators and the non-governmental groups to avoid a privatisation of water services. Lobina and Hall often state the public sector ethos as an objective for the involved partners. They explain public sector ethos with “pride in public sector's mission and sharing of own capacity”.225

PUPs also offer the option to bring already privatized utilities back into public hands because the lacking knowledge at the local or municipal level can be provided by another public operator.

8. **ENVIRONMENTAL GOALS:**
Sometimes the protection of the environment can be an objective too. An example for this motive is the Baltic Sea pollution which is a common problem of Baltic and Nordic countries.226

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225 Lobina, Hall 2006:20  
226 Lobina, Hall 2006:7
For the aid-giving/supporting side, which offers knowledge and time, the motivation can be.

1. **FINANCIAL INCENTIVES:**
The supporters can be motivated by financing and subsidy schemes by the state. The favourers receive remuneration for their services, for example also by donor agencies or by development banks. The contribution of the supporting partner's employees should be fully funded in order to receive sustained commitment. The boundaries between making profit and receiving an appropriate remuneration are maybe fluid but the intention is not to overtake the business and not a growth in profit.

As it is not desirable to risk public money, most public operators do not tender for consultancy work, which the private sector has greater incentives to compete for. Thus it requires financial encouragement to realize the potential of public partnerships.

2. **LEARNING AND EXPERIENCING:**
The supporting side joins a partnership to gain valuable experience which can be used either for other PUPs or for their own utility. Moreover the workforce is gaining (international) experience which is also beneficial to the own utility. It is basically an individual benefit for the employees. As said before, both sides possess the possibility to learn and thus to gain insights for improving the organisation. PUPs give their own staff new opportunities for development.

3. **SOCIAL AND PROFESSIONAL REASONS:**
Managers are also motivated for social and professional reasons. They are proud of their services and want to share their experiences. In their mind it is positive to be so good to be even a mentor for others. A PUP can probably also serve as a measurement of quality control.

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228 Hukka, Vinnari 2007:88
229 Hall, Lobina 2006b:36
230 TNI 2007:2
231 TNI, CEO 2006:10; Holland 2005:193
232 Boag, McDonald 2010:8
233 Holland 2005:158
4. **MARKETING – CORPORATE SOCIAL RESPONSIBILITY:**
With a PUP a water operator can promote its expertise and raise its institutional and political perception. This can bring other positive effects, for example a better access to loans and it can raise the confidence into the public operator of the citizens at home.

5. **ALTRUISTIC REASONS:**
An operator gives a helping hand to those in need, e.g. in cases of emergency after natural disasters.

6. **PROTECTING AGAINST PRIVATIZATION - PUBLIC SECTOR ETHOS:**
Here the same arguments as for the aid-receiving side are valid.

7. **ENVIRONMENTAL GOALS:**
These goals can be the same as for the supported side.

There are probably more location-specific goals of a certain PUP depending on the socio-economic and the hydrological contexts (e.g. epidemic prevention) but the objectives given above provide a general overview over the incentives to form and run a PUP.
4.5 CHARACTERISTICS AND QUALITIES OF PUPS

This section sums up the characteristics and qualities that apply to water partnerships and includes some examples of how PUPs could be effectively implemented into practice.

4.5.1 TRANSPARENCY AND ACCOUNTABILITY

Transparency stands for "an environment in which the objectives of policy, its legal, institutional, and economic framework, policy decisions and their rationale, data and information related to monetary and financial policies, and the terms of agencies' accountability, are provided to the public in a comprehensible, accessible, and timely manner."\(^{234}\) Full transparency is very comprehensive and widespread. It comprises the whole organisation or company. Accountability goes hand in hand with transparency and means that a manager or a body is held responsible for accomplishing defined tasks and duties and for obeying rules and standards that are applicable to the role. Usually rewards for a good performance are given and consequences for an inadequate performance are demanded. Actions need to be reported and defined explicitly.\(^{235}\) Reporting is an essential part to get transparency and accountability related to the partner, the financiers, the taxpayers and other stakeholders. In a partnership where transparency is commonly agreed on, the partners can be held accountable if social and public service objectives are not reached. Whether the agreed partnership objectives are implemented can be ensured by monitoring.

In Berlin, for example, the water services were partially privatised in 1999 when RWE and Veolia entered a PPP with the communal water operator. A citizen's initiative was campaigning for a publication of the signed contracts. The initiative succeeded in collecting the adequate amount of supporters to submit a petition for a referendum. At the beginning of November 2010 the mayor declared that the contract together with all the annexes and modification agreements will be published on the internet. However, there won't be a statutory disclosure obligation of contracts, decisions and side agreements for which the initiative is still fighting for.\(^{236}\) They succeeded in this particular case but further PPPs in Berlin are not legally obliged to publish the contracts made with the city. The initiative interprets the access to information on arrangements of (partly) public-owned companies as a citizen's right. This example shows clearly an integral advantage of the public sector in

\(^{234}\) OECD Glossary
\(^{235}\) ibid
\(^{236}\) Berliner Wassertisch 2010
In contrast to the private sector, it is a fact that there is no commercial interest in secrecy because openness brings no negative impacts to public operators which do not stand in competition to other operators. Thus, all information about finances and charges concerning water can be made public. It is possible to give public access to all documents produced by the public utility. Transparency can cover up who uses and who pollutes water, what are the costs and who pays for them. Transparency can clearly work as a safeguard against rent-seeking of individuals or organisations.\textsuperscript{237}

\textbf{4.5.2 INSTITUTIONAL AND ORGANISATIONAL CHANGES}

An increased institutional performance should strengthen public institutions and administrations. Institutional and organisational change is usually accomplished in parallel with capacity building and investment programmes.\textsuperscript{238} Capacity building for institutional strengthening can be distinguished in three areas:

\begin{itemize}
  \item Human resource development which results from the training of staff and the improvement of recruitment procedures and work conditions,
  \item Organisational development which comprises the change of management structures or of the organisational culture,
  \item Capacity building that is aimed at institutional reforms which include policy and legal change or constitutional reform.\textsuperscript{239}
\end{itemize}

All three areas can be addressed by a PUP. Capacity building can either focus on learning of specific skills and competencies or be more diffuse and facilitate building confidence, enabling people to speak in front of others and to develop leadership. The empowerment of workers and managers can form a key ingredient for a wider organisational change.\textsuperscript{240}

The supporting partner plays a significant role in the organisational development of the supported partner. The experience with the own type of organisation will function as a role model for proposed changes. The financiers can also influence this attempted model in relation to their policy and objectives. As argued before, the integrity of the local operator should be preserved.

\textsuperscript{237} Hall 2001:20
\textsuperscript{238} Lobina, Hall 2006:20
\textsuperscript{239} Bontenbal 2009:101
\textsuperscript{240} Johnson, Wilson 2006:73
Some potential barriers to institutional change in the public sector are a poor communication, a lack of transformational leadership and a lack of individual identification with new initiatives. Communication is a key factor for a successful partnership and to avoid these barriers.  

In some cases, an appropriate socially and politically acceptable institutional change might require the inclusion and participation of more actors than only operators, local authorities and financiers. The local communities and representatives of the civil society could for instance participate in the decision-making process or in the monitoring task.

### 4.5.3 PARTICIPATION AND POWER RELATIONS

What advantages can participation bring a PUP? Luis Padron of the workers-run drinking and waste-water operator of the Buenos Aires province in Argentina says, “Getting the workers involved in the management of a public utility helps to ensure permanent planning and care. Participation by the users and civil society helps guarantee an appropriate administration.”

Generally, the participation of the civil society in decision-making can bring in a wider range of voices, increase transparency and accountability, empower end-users and develop political and technical capacity. The World Bank sees participation in the water sector as a mean that leads to effectiveness, efficiency, empowerment, equity and entitlements. Though not everybody means the same with participation. In reality there are different forms of participation.

![Illustration 3: Ladder of Participation](image)

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241 Greasley, Watson, Patel 2008:307  
242 Lobina, Hall 2006:18-19  
243 TNI 2007:3  
244 Boag, McDonald 2010:15  
245 Von Braunmühl 2008:40
Arnstein defines them by using a ladder ranging from non-participation at the lowest level to citizen power at the highest spoke. Non-participation reflects for example manipulation or therapy. These are ostensible forms of participation because the people are either manipulated for other purposes or educated. In between the two contrasting poles stands tokenism which comprises the methods of informing, consultation and placation. To inform the citizens is a first step towards involvement. But when people are just informed or consulted they have no possibility to give feedbacks or enter a debate. Placation means that selected citizens are able to participate but the decision-making right rests at the power-holders. Lastly, the types of citizen power are partnership, delegated power and citizen control, which is the maximum level that can be reached. In a partnership the power is redistributed by negotiation. When citizens have delegated power then they are solely responsible for a plan or a programme. The topmost ladder spoke stands for the self-determination of a community. The ladder of participation is certainly a simplification but it shows that participation of citizens can have different shapes and it helps to uncover “fake” forms or shortcomings of a participation process. The government or a water operator may have the opinion that consultation suffices enough in terms of participation. Evaluations and studies of specific participatory processes have consistently pointed out that, at best, consultations are held and that the invited receive much too little support, to be able to participate in a self-confident, informed and accountable way.

A challenge required to overcome are the general barriers that hinder participation. On the one hand, it is possible that the power-holders do not intend to give up their privileges or keep on patronizing. When members of the civil society demand participation they usually intend to reach citizen power.

The ‘powerless’ can encounter socio-economic barriers, lack adequate knowledge or have problems to be represented. Generally, power and resource differences exist across race, class, gender, geography and ethnic lines. It is possible that these differentials continue to exist or are even intensified in the course of participatory decision-making. Johnson and Wilson argue, “[...] partnerships based on learning do not circumvent issues of power relations between the actors, although they imply a commitment to address them.” What has to be considered concerning power relations in order to reach a well-run PUP is: There is

246 Arnstein 1969:2-4
247 Von Braunmühl 2008:40
248 Arnstein 1969:3
249 Boag, McDonald 2010:15-16
250 Johnson, Wilson 2006:79
no single public voice. Primarily women are under-represented in participatory structures. Either because they are not authorized or the times and places of participation are incompatible with their home care duties, or they are already structurally discouraged to take the floor in public places. There are also other “weaker” groups of society. The access to resources and the right to full citizenship are absolutely not equally distributed worldwide or even within one single state. Many residents of developing countries have to constantly reiterate and negotiate their claims with the state. They cannot rely on a functioning legal or social system as it is established in most northern countries.

A further obstacle to an equal partnership is a different viewpoint on knowledge. Inside a partnership knowledge is produced under several circumstances. It is “culturally, socially and politically produced and is continuously reformulated as a powerful normative construct. Knowledge is thus an accumulation of social norms, rituals and practices that, far from being constructed in isolation from power relations, is embedded in them (or against them). Knowledge can for example be unequally valued. The knowledge of practitioners from the North is often more important than the knowledge of people from the South.

A study on partnerships of northern and southern NGOs found out that even when certain structures reinforced power asymmetries, the southern NGO could nevertheless build capacities and strengthen its voice and ability to affect the overall framework. Additionally, with participatory mechanisms it is possible to identify investments of value to poor communities and to find a consensus on the topics of tax and pricing levels and on cost distribution. It is easier to involve civil society actors such as trade unions, community groups or citizens in a PUP than in a private company because a public operator does not lose a business advantage. These partnerships can even develop out of community initiatives.

A very good example of popular participation in the water sector is described by Antonio Miranda. In Recife in Brazil a municipal conference on water and sanitation was held in order to improve the water services in the city. This was a seven-month lasting process which involved 4000 people in 20 meetings taking place within their neighbourhood. The aim of the process was to come to a decision how to improve the water services. During this period the

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251 Von Braunmühl 2008:40
252 Bakker 2008:245
253 Kothari 2007:141
254 Johnson, Wilson 2006:79
255 Johnson, Wilson 2006:73
256 Hall, Lobina 2006b:34
stakeholders received all the information they needed to make this decision. In the end more than 160 decisions were voted on. On vote approved to oppose privatisation of the water and sanitation services. The community decided for example to install a municipal council of water and sanitation.257

4.5.4 THE ROLE OF POLITICIANS

Public operators are sensitive to elections and political changes. A new political leader is able to revise the way an operator is governed. To avoid this, transparency and accountability measures need to be enforced.258 This also helps to establish an adequate staff management. It is important that workers are employed because of their qualifications and not because of their political attempts. The problem of political interference with the financial system of the public operator can for example be solved by separating the accounts of the utility from those of the municipality or the state.259

However, it is important that a PUP gains support from politicians, e.g. to receive financial funding. Focusing on the PUP between ABSA (Argentina) and SEDAM (Peru), the toughest part was to reach an agreement at the political level. Padron says that the time scale of the politicians was a four years election term and safe water services should on the other hand remain for generations. This gap was hard to overcome.260 It can take some time to convince politicians of such a project and to explain the project concept. In the case of Stockholm Vatten-Kaunas this has taken up substantial partnership resources.261 But politicians are interested in their own reputation. They want to convince the voters to re-elect them. A PUP can help politicians to stay in office because the partnership leads to a regular and predictable service. Regularity and calculability are reasons in favour of bureaucracy but in disfavour of markets.262 If politicians do not act in terms of social-welfare-reasons they act because of the incentive to stay where they are.

4.5.5 KNOWLEDGE, LEARNING AND KNOW-HOW TRANSFER

To resume, a major aim of each PUP is to transfer know-how. One partner is seeking help and the other brings in knowledge and assists in certain issues. In a PUP it is intended to

257 Belén et al. 2005: 115
258 Miranda 2006:54
259 Lobina, Hall 2006:19
260 TNI 2007:3
261 Lobina, Hall 2006:13
262 Engels 1976:76
build up competencies, skills and knowledge by the supporting partner. The knowledge-transfer can be initiated by workshops, on-the-job training, study tours, regular contacts as well as training programmes in the areas of management, technology, operations, institutional development or strategy. The supported partner receives first-hand experience from another public utility or an independent organisation. Experiences as well as practices of problem definition and problem solution are shared.

Commonly, learning and knowledge-transfer can take place by intention or by chance, in a direct or indirect way. It is an outcome as well as a process. Learning practices are "instrumentally copying or reproducing, adapting new knowledge for strategic purposes, as well as challenging old ideas and old knowledge in the transformative sense."263 There are several forms of learning. Informal learning is not structured and results from daily life activities. It is most of the time non-intentional. Formal learning is structured and provided by an education or training institution. Non-formal learning is the same but is provided by other institutions or persons. These two forms are usually intentional. Learning-by-doing is, for example intentional and informal. All these different forms and practices can be applied in a PUP. Mutual learning is desirable but most of the time the focus lies on teaching or improving of the southern partner in an international partnership. Unintended learning in the North (or South) is probably ignored and the intended organized learning in the South is seen as the only outcome.264 This can be a barrier to an effective knowledge-transfer because the mutuality is missing.

The already existent knowledge, capacities and practice are important. They are fundamental in order to induce real change in an organisation. Basically, the knowledge-transfer should work as a process and not through several one-time events.265 Furthermore, it is important that the new knowledge is retained within the supported PUP beyond the lifetime of the partnership. One way of achieving this is to not hire external managers but train the present staff. As argued before, the absorptive capacity should not be reduced by a high employee turnover. Contracts valid of more than three years could be useful.

The workforce of the supporting partner benefits from the partnership because they can widen their horizons, enrich their knowledge and experience.266 I see a partnership as a two-sided learning process and that the ideal partnership is based on mutuality. With friendship

263 Johnson, Wilson 2006:72, 77, 78
264 Devers-Kanoglu 2009:204, 206, 208
265 Bontenbal 2009:101
266 Lobina, Hall 2006:16-17
and mutual understanding the learning effect is greater. Dialogic learning where a participant is treated as a genuine person and not as an object of manipulation and where success is commonly defined, should build the framework of the learning process. Nonaka constitutes, “The mere transfer of information will often make little sense if it is abstracted from embedded emotions and nuanced contexts that are associated with shared experiences”.

Individual learning is easier than organisational learning. However, individual learning needs to be embedded organisationally. This depends highly on the structural position of the learner and on the willingness of the organisation or organisational unit to learn and to innovate. Evidently, the learning partnership works effectively, if the organisational partners have a learning culture into which they can feed. The opposite is a culture, where e.g. managers share information only on a need-to-know basis and where employees keep secrets. It would be better if people at all levels ask questions and share stories about successes, failures, and what they have learned.

As argued in 3.5.1., the absence of commercial objectives in a PUP generally offers the space for knowledge transfer. Knowledge is not seen as a private good but can float freely and is public. Secrecy is not such an important issue as in the private sector because a public operator is not loosing a commercial advantage to the other operator or to a non-state-entity.

## 4.6 COSTS AND RISKS

PUPs are organised totally different compared to a privatisation. The costs and risks of a PUP are lower compared to PPPs or to a full privatisation. To form a PUP no long-winded negotiations and legal or consulting processes are needed. As shown in chapter two, for PPPs risk plays a more important role in order to safeguard the future profitability. Thus the financial, legal, consulting expenses and other transaction costs are important cost-factors. PUPs do not request complex contract(s) with profit margins. The not-for-profit basis offers the possibility to fully reinvest the mobilised financial resources into the local system. There are no profits extracted in the form of dividends or costly consultancy services. Furthermore, a PUP is a collaborative approach of change and this can facilitate the acceptability and

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267 Johnson, Wilson 2006:76
268 Nonaka cited by Johnson, Wilson 2006:76
269 Johnson, Wilson 2006:78-79
270 Conner, Clawson 2002
271 Hall, Lobina 2006b:13, 16
boost local commitment. If a participation framework is created, then the effectiveness of a project is increasing because of cost sharing and recovery as well as of a long-term sustainability. Even when the community is only little participating, the costs can be lowered and sustainability is increasing.

What takes up resources is the search for an appropriate partner and to finance a PUP. Other costs involved are efforts to start and run a PUP. First of all, there are expenses for human resources. The trainers and experts need to be paid. Holding seminars and doing on-the-job trainings take up the working time of the employees who are usually working on their common tasks at that time. External advisers are usually not engaged. Visits and study tours cause travel costs. Regarding this matter, risks play a minor role. Lobina and Hall argue that in terms of risk management, the activities of PUPs are only the conduction of feasibility studies. Before starting an investment project, a local assessment of the required extensions and improvements is needed. This approach is quite obvious but has often been neglected. It is important to be aware of the local needs, otherwise the financial planning is conflicting with the local interests. Usually external actors assess a much higher demand for investment than locals. The Orangi project in Karachi in Pakistan has for example campaigned against a 70 million dollar project of the Asian Development Bank because they deemed it to be unnecessary.

The performance and political risk of a PUP is, like risk of PPPs, generally retained by the local operator and local authorities. The effectiveness of risk reduction depends on reforms of the organisation because the local operator stays fully responsible for the operation. One could think that a risk of a PUP can arise if one partner does not stick to the contract or if a partner gives misinformation or even harming advice and this could cause extra-costs for the supported partner. But there is actually no incentive to do so and the supporting partner is never working alone and is not taking decisions by him/herself.

No additional costs for regulation occur as there are no new contracts and no new arrangements. The deals between the two public operators are concerned with know-how-transfer and not with the service provision itself. Furthermore, the PUP usually does not

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272 Lobina, Hall 2006:2, 17-18
273 Green 2000: 69-70
274 Lobina, Hall 2006:20
275 Hall, Lobina 2006b:18
276 Lobina, Hall 2006:20
modify the price structure of the operator and thus there exists no such risk like overcharging water users as it can be the case dealing with a PPP.

Costs are sometimes not easy to calculate. The OECD found out in a study on Baltic countries that capacity building activities often involved aid in kind (flows of goods and services with no payment in money or debt instruments in exchange\(^{277}\)) through institutional twinning and other partnerships. Often the costs for people working on development co-operations in local governments are not explicitly displayed in the statistics.\(^{278}\)

Employees will not be fired en masse because there is no change in ownership and usually no change of the mission of the public operator. Workers are probably a cost unit but they are needed to keep the service provision up and running. Plus, more workers imply that the state does not have to pay unemployment compensations. With a transparent and accountable organisation, the problem of bureaucracy can be avoided.

### 4.7 FINANCING PUPS

PUPs need external financing, either from the state, from international financial institutions or from aid agencies. The financing of a PUP should not only be left to the initiative and philanthropy of an individual water operator because this can lead to financial shortages. To reach real change, a real commitment by state-bodies is needed.

PSI proposes to use the pension funds in Europe to finance investment in clean water and sanitation. They argue, “A global water bond mechanism would be one way to enable these pension funds to be more fully invested in water and sanitation and this could include public-public partnerships”.\(^{279}\)

#### 4.7.1 THE ROLE OF THE FINANCIERS

Financiers can influence PUPs in a positive or in a negative way. The conditionalities of the financiers affect the outcome of a PUP considerably. The suitability of different aid conditions to the local socio-political and economic context should be ensured in order to be successful.\(^{280}\) A negative influence, for instance, can be a “projectisation” which means that external funders require concrete results within a short time frame. This applied pressure can

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\(^{277}\) OECD Glossary

\(^{278}\) Hall et al. 2009:4-5

\(^{279}\) TNI, CEO 2006:14

\(^{280}\) Lobina, Hall 2006:19-20
be counterproductive to an effective joint learning process. A positive trend is the fact that development financiers demand from national authorities the willingness to work with participatory structures and that they integrate the recognition of participatory instruments in terms of binding regulations in the overall project activities. Participatory structures, as aforementioned, can help to increase the sustainability of a project.

For the PUP between ABSA (Argentina) and SEDAM (Peru) some conditionalities imposed by donors figured out to be threats to the project. Several local civil society organisations were, because of that, trying to find alternative funding in order to avoid unintentional modifications and influences.

As seen in chapter one and two, IFIs usually give their money to projects with private sector involvement. Contrariwise, their agenda could really promote the public sector and enhance its efficiency. Particularly, because the conditions imposed by international (financial) organisations have a huge impact on countries in the South. It is clearly a challenge to convince donors to invest in capacity building and not only in infrastructure works. Miranda thinks that the costs of hundreds or maybe thousands of PUPs could be financed worldwide if the IFIs would only spend a small percentage of their annual investments budget on water and sanitation, and not purely on infrastructure.

### 4.8 A CASE STUDY: STOCKHOLM AND KAUNAS

The conceptual questions are answered and at this point an empirical example will be discussed. In the 1990s Swedish water companies helped municipal water operators in the Baltic States. This project was financed by the Swedish International Development Cooperation Agency (SIDA). Above all the partnership between Stockholm Vatten (Sweden) and Kaunas (Lithuania) was described as an overwhelming success. The partnership focused on building financial and managerial capacity and on sustainable environmental management. I give a brief overview over the project and assess it with respect to the PUP characteristics outlined in this chapter.

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281 Johnson, Wilson 2006:76  
282 Von Braunmühl 2008:42  
283 TNI 2007:3  
284 Miranda 2006:55  
285 Hall 2004:5
Kaunas is the second-largest city in Lithuania and had no waste-water treatment plant before the PUP project was launched. There were some attempts to build such and facility but only after the independence of the country in 1990 the municipality intensified its efforts. In 1991 first talks about Swedish support for the water company of Kaunas were held already. Three years later Kaunas Water Company (KWC) and Stockholm Water Company (SWC) established a twinning agreement. Overall objective of the project was to achieve long-term environmental effects of the investment project. This should work out using an independent self-sustaining municipal company.

In the first year, called Phase I, it was intended to prepare the project for financing and implementation, to prepare KWC for a joint venture with the Nordic Environment Finance Corporation (NEFCO) and SWC, and to initiate institutional development of KWC. The joint venture did however not come into effect because Kaunas City did not agree on a connection between loan financing and joint venture and because the political opinion stood against a privatisation of public entities. Furthermore SIDA informed that they could not finance such an arrangement. So the aim of phase II, which ran from January 1996 to the end of 1999, was to develop KWC into an autonomous, efficient, self-financing and self-managed but still public enterprise. The overall performance should be improved and SWC assisted to fulfill the obligations of the agreement. It was also intended to develop a commercial attitude within the company. Furthermore the idea that the consumers pay and not the municipality or the government was pursued.

KWC was transformed into a joint stock company and during 1996 the financial management, the bill collection, the administration and operation was improved. A company board was established but there were disagreements on tariff setting and other matters. This made it impossible to fulfill all financial covenants of the loans and some project activities had to be postponed. Nevertheless, one year later the company had a new organisational

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286 Pietilä 2005:3
287 Pietilä 2005:12
288 Lariola, Danielsson 1998:annex1
289 Lariola, Danielsson 1998: 11
290 Concerning the water tariffs the company cannot act by itself but the tariffs have to be approved by the municipal council. (Pietilä 2005:8)
chart, less staff, changed positions for managers, and an organisational development at multiple departments and units.\textsuperscript{291}

After the official partnership, the EU Commission agreed to finance a part of a water purification plant in 2001. It was expected to cost EUR 28.2 million. The EBRD granted a loan of EUR 9.57 million and the Lithuanian government paid EUR 6.38 million. The EBRD did this without any sovereign or municipal financial guarantee. This shows that they were satisfied with the outcome of the PUP so far.\textsuperscript{292}

4.8.2 THE PARTNERS AND THE PARTNERSHIP TYPE

Stockholm Vatten is a water supply and sanitation company owned to 100% by the municipality of Stockholm.\textsuperscript{293} KWC (originally Kauno Vandens) is a joint-stock company and the city of Kaunas is the sole shareholder.\textsuperscript{294} Thus, the partnership is multinational and between two publicAuthorities. Two municipal operators cooperate in order to improve the situation of one partner. The two water providers lie in the global North. SWC had set up guidelines and a policy for international cooperation and was thus interested in a twinning agreement with a Baltic city. There had been contacts between a consultant (K-Konsult) and the EBRD which lead to the conduction of a feasibility study. The study suggested working with SWC as a twinning partner. One more reason was that the city of Stockholm was strongly committed to the positive development of the Baltic Sea region.\textsuperscript{295}

4.8.3 PARTNERSHIP ARRANGEMENTS AND ACTIVITIES

An important role concerning the partnership agreement was played by the loan arrangements. The papers included loan covenants concerning project execution, financial, operational management, reporting and loan effectiveness. Further covenant topics deal with targets for good management or operational requirements such as special departments or minimum balances. Moreover, several studies on water consumption, leakages, effluents, sewerage and other point of interests had to be conducted. These studies had to be discussed with the lenders.\textsuperscript{296} Altogether, a multitude of studies, plans, programmes and

\textsuperscript{291} Lariola, Danielsson 1998:4, 8-9
\textsuperscript{292} Lobina, Hall 2006:12
\textsuperscript{293} Hall 2000:5
\textsuperscript{294} Pietilä 2005:5
\textsuperscript{295} Lariola, Danielsson 1998:annex1
\textsuperscript{296} Pietilä 2005:8
agreements had been defined as tasks which had to be conducted, ranging from a business plan to quarterly reports. The paperwork fully employed the personnel of KWC and SWC.\textsuperscript{297}

4.8.4 TRANSPARENCY AND ACCOUNTABILITY

The strict loan covenants and the reporting scheme worked certainly in favour of a transparent and accountable PUP. KWC and SWC had both to report to SIDA. Furthermore, the project was assessed by external consultants.\textsuperscript{298}

4.8.5 KNOWLEDGE-TRANSFER

There has been an agreed general training programme. Working groups were formed on topics such as water saving or on the construction of the waste-water treatment plant.\textsuperscript{299} Staff of SWC was integrated into KWC. A resident assistant to the general director, a resident financial advisor, and experts either resident or visiting to assist in the institutional development were working for KWC. SWC wanted to treat the project as part of the ordinary structure. An exchange took place at all levels: between the boards, the trade unions, the management teams and between the different specialists. SWC had only little experience in international cooperation and this put considerable pressure on the organisation. Key resources concerning institutional and management development needed to be hired from outside.\textsuperscript{300}

There were trainings for the board of KWC in Kaunas and Stockholm, study tours to Sweden took place. The new financial director was trained by SWC. Notably, the computer department of KWC was in some areas more advanced than the one of SWC.\textsuperscript{301} Hence, for the aid-giving partner there was a chance to learn.

A worthwhile outcome was the fact that the exchanges and knowledge-transfer has continued, however more sporadically, after closing of the PUP.\textsuperscript{302}

\begin{flushend}
\footnotesize
\begin{itemize}
  \item \textsuperscript{297} Lariola, Danielsson 1998: 15
  \item \textsuperscript{298} Lobina, Hall 2006:16
  \item \textsuperscript{299} Bjerregaard 2006:6
  \item \textsuperscript{300} Lariola, Danielsson 1998:13-15
  \item \textsuperscript{301} Lariola, Danielsson 1998:21-22
  \item \textsuperscript{302} Lobina, Hall 2006:8
\end{itemize}
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4.8.6 INSTITUTIONAL AND ORGANISATIONAL CHANGES

The newly appointed change manager divided KWC’s activities into core and non-core functions, introduced cost savings plans and support packages for voluntary leavers, and decentralised the decision-making. SWC helped to design concrete tasks for organisational change. SIDA speaks of “often painful” organisational changes. For example, staff of KWC was reduced by 20% from 1994 to 1998. A small reduction compared to e.g. Jakarta where a water privatisation took place in 1997 and over a thousand workers have been laid off. Furthermore, the working conditions worsened for those who stayed.

The Board of KWC was introduced in 1997 on the grounds of corporatisation. NEFCO, EBRD and SWC lobbied for this. The board of the company consisted then of members representing the ruling political parties, the city administration, the Kaunas region, the local energy utility and the university. As stated above, this kind of outsourcing is a broad trend in the public sector.

4.8.7 POLITICS, PARTICIPATION AND POWER RELATIONS

Due to unstable political circumstances, the project was delayed and it came to other difficulties because of local political decision-making. The rules were to a great extent dedicated from abroad and thus the local politicians felt left out. Another problem was the frequent change of the municipal politicians. SIDA argues that the benefits of the foreign loan and grant package were not fully understood by the local politicians and the local population. A lot of time was spent on persuading the municipality politicians to comply with the contractual agreements. Additionally, SIDA acknowledges that the public should have been better informed before the conclusion of the contract and the twinning proposal should have been publicly debated. This represents only the level “consultation” in consideration of the ladder of participation. The PUP could have gained large support in the population. For instance, the Green movement in Kaunas was a strong supporter of the construction of a waste-water treatment plant. It seemed that everybody in the city understood that this plant was needed. Only about the location there were struggles.

303 Lariola, Danielsson 1998:18-21
304 Belén et al. 2005:231
305 Lariola, Danielsson 1998: 17
306 Lariola, Danielsson 1998: 15-17
307 Pietilä 2005:13
4.8.8 OBJECTIVES AND INCENTIVES

As we have seen, the main goals for KWC were training and developing of human resources, technical support, improving efficiency and building institutional capacity, environmental goals, and financing water services through revised cost-revenue structures. Protecting against privatization was an aim by the political parties and the general public. For KWC it was crucial that their twinning partner was a water utility. SIDA finds another argument in favour of a PUP: "This utility-to-utility relationship increases the credibility and impact of foreign advisers."\(^{308}\)

Two aims of the ones specified in 3.4 were not of interest for this PUP: it was not intended to improve public participation. As mentioned, SIDA argues that there should have been more effort to inform the public in order to get public support for the project. They add "In this context, also the twinning proposal should have been presented to public scrutiny and debate."\(^{309}\) Improving the access to water services was also no issue in this context. A reason can be that there were no marginalised communities in Kaunas or that they were ignored.

SWC offered knowledge and time because they received remuneration for their services and they did so in order to learn and to gain valuable experience. SWC is proud of its international assignments and of its possibility to improve the environment of the Baltic. The organisation believes that it can succeed in running an efficient waterworks and that the existent knowledge and experience can be transferred to other water utilities. Most of the staff seems to share this vision.\(^{310}\)

In 1991 SWC launched the first Stockholm Water Symposium and invited research scientists, civil servants, politicians and other decision-makers. In 1997 the Stockholm International Water Institute (SIWI) was formed as an interim organisational unit link between SWC and the Symposium.\(^{311}\) This illustrates that SWC shows corporate social responsibility. Gustafsson states in a conference publication, "Throughout the years a great number of water professionals have got acquaintance with the good competence and performance of the Stockholm Water Company, for instance by arranged study tours inside its service area.

\(^{308}\) Lariola, Danielsson 1998:21
\(^{309}\) Lariola, Danielsson 1998:26
\(^{310}\) Lariola, Danielsson 1998: 13
\(^{311}\) SIWI
The report by Steen Bjerggaard also demonstrates that SWC has a clear public sector ethos: “It is Stockholm Water Company’s experience that twinning programmes are best arranged between public water companies knowing each other and understanding the way of operating a water utility. Such collaboration, based on close relations and mutual understanding, certainly improves the chances for success and is a very strong option compared to privatisation schemes or consultancy contracts procured in competition.”

It was not possible to detect any altruistic reasons for joining the partnership within the documentation. But this does not mean that there has not been such kind of stimulus.

### 4.8.9 COSTS, RISKS AND FINANCIERS

The costs of the human resources of SWC were covered by SIDA. The investment programme was funded by the EBRD. Furthermore, EU/Phare, the Finnish and the Swedish governments and local sources contributed shares. The first phase lasted for one year and had cost SEK 4,1 million. (approx. USD 640.000). The second phase took three to four years and the costs were SEK 12,3 million (approx. USD 1.910.000) KWC had to fulfil strict financial loan covenants. In 1997 the financial result was, however, negative. SIDA supposes that without SWC the company would have been in a far worse condition. Altogether, the PUP is seen as cost-effective because the impact in relation to the costs is high. Alternative ways of delivering the same services would have been more expensive.

Obviously the financiers influenced the PUP. The loan covenants of the EBRD dictated to a great extent the technical, financial and institutional objectives that KWC and the other stakeholders had to pursue. In addition it defined the scope and content of the twinning.

### 4.8.10 OUTCOMES

Twinning was taken as the tool to achieve institutional strengthening. A Water Time case study indicates, “Twinning with Stockholm Water already before and during the investment

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312 Gustafsson 2008:3
313 Bjerggaard 2006:10
314 Lobina, Hall 2006:8
315 Lariola, Danielsson 1998:1
316 Lariola, Danielsson 1998:annex1; exchange rate by 1.1.1995 (0.155273)
317 Pietilä 2005:14
318 Olesen, Revke, Permin 2001:26
319 Lariola, Danielsson 1998::25
programme was a big help in making Kaunas Water Company into a modern self-sustaining water company.” SIDA believes that the institutional and management changes are sustainable. The EBRD loan covenants have been fulfilled and a new wastewater treatment plant was built. The plant fulfils the Helcom and EU standards. Significant energy savings could be achieved. Moreover, the billing system as well as the whole organisation has been changed drastically.

Though, SIDA feels that the twinning input was not fully utilised by KWC because of delays, the absorptive capacity of KWC and a lack of adequate support by the SWC home office. They state further that a higher number of experts do not lead to a faster development. SIDA notes further that there were maybe too many covenants and that these did not form a consistent plan. They conclude that the studies, plans and programmes remained fragmented and were not connected to the utility’s overall performance targets. However, the distinct and measurable specification facilitated benchmarking and working towards concrete goals. A proposition would be to do less reporting and give the partnership more free space to evolve. This would maybe also help to keep the personnel motivated in order to maintain the standard and keep the new knowledge inside KWC as SIDA urges for.

It was also intended to develop a commercial attitude within the company and moreover the idea rose that the consumers should pay and not the municipality or the government. This idea together with corporatisation leads to a separation of the municipal council, the public sphere, and local parliamentary control, transforming the citizen into a customer. As stated above, a PUP with a corporatised entity as one partner is not free of the profit-maximization aim. This is a problem but this case example can be a way to learn from it.

This PUP experience is definitely representative and therefore presentable. Hypothesis 1 and 2 are fulfilled. Kaunas was modernised, not taken over and became a self-sustaining water operator. The institutional changes would have been very different in the case of a PPP because, dealing with a PUP, the supported operator could gain new knowledge and has still the annual income of the water tariffs. Also the supporting side could learn and develop new skills.

320 Pietilä 2005:14
322 Lariola, Danielsson 1998:15, 23-25
323 Lariola, Danielsson 1998: 11
The municipality maintained the overview over the water provision and the PUP was transparent and accountable, at least to the funders. A waste-water treatment plant was installed and the EU and Helcom environmental standards were met. It seems that in this case service levels, coverage levels and environmental regulation are positively influenced by the PUP. It is altogether a low cost solution because a new plant was constructed plus the workers and the management of Kaunas received trainings and know-how. Thus the impact compared to the costs is high. Kaunas really could gain the capacity to run a modern utility after the end of the PUP. Bjerggaard explains effusively, “The water companies in Kaunas and Riga stand today as successful role models for twinning arrangements between public water entities, where goals were met timely and within budget.”

4.9 SUMMARY

In a PUP the aim is to achieve a transfer of knowledge in order to build up skills in operational, technical and financial management of the badly performing utility. This helps to speed up the expansion and improvement of public water supply. PUPs can cover the full range of water and sanitation services and lead to technical improvements and/or know-how transfer. Different water actors of the public sphere work together on a non-profit basis in order to improve the water services of one of them. Operators in need often do not have the financial resources to hire consultancy services. Hence, PUPs are one very relevant way to provide safe water and adequate sanitation. Cooperating with genuine public partners the disadvantages of PPPs like the extraction of profits or the exclusion of already marginalised groups are avoided.

Chapter one showed that most water projects focus mostly on infrastructure development and only rarely on capacity building. The concept of a PUP is contrary to that as it is focussing on this particular key issue. Capacities are built following the use of counselling, training, management, financial restructuring, joint investment, etc. The most common type of a PUP is arranged between two municipalities (e.g. cities) which either located within the same or within different countries. The case example shows that modernisation can bring very good results and that there is no need to privatise a water operator in a poor condition.

This is just a short summary because the success factors, the benefits and challenges of PUPs are summarized and discussed in chapter five. In this chapter, a closer look is given to

324 Bjerggaard 2006:2
325 Miranda 2006:53
a comparison between PUPs and PPPs. The next chapter deals with Water Operator Partnerships which is an initiative by the UN. It is similar to PUPs but has a great conceptual problem.
5. WATER OPERATOR PARTNERSHIPS

Not only practitioners and several scientists are fond of PUPs, also the UN pushes for partnerships between water operators. The UN Secretary General’s Board on Water and Sanitation (UNSGAB) has even launched an initiative called Water Operator Partnerships (WOPs). In this chapter I give a brief overview over the origins of this initiative and the work of the Global Water Operators' Partnership Alliance (GWOPA). I clarify the objectives and incentives regarding such a partnership and compare WOPs to PUPs.

5.1 HISTORY OF ORIGINS

The UN advocates water partnerships. In 2006 the UNSGAB has launched the mentioned initiative Water Operator Partnerships (WOPs). The idea behind this was that the greatest potential to improve the public water utilities rests upon at the public suppliers themselves since most water utilities are organized locally or community-wide. It was seen as a way to reach the MDGs. The WOP model was included in the Hashimoto Action Plan in 2006. The water operator partnerships were meant to provide support for capacity building of public water operators.

WOPs are clearly modelled after PUPs but in the UNSGAB literature there is no reference to the original partnership model. Only in one meeting protocol, documented on the UNSGAB website, one can find the quote “Water Operator Partnerships (WOPs), previously called Public-Public-Partnerships (PUPs)”.

Originally, the concept of WOPs has been the same as that of PUPs but meanwhile it was expanded and includes by now also private water suppliers. The UNSGAB states that most WOPs will be between public operators. But “private sector operators, NGOs or those who can contribute to the performance of public water undertakings on a not-for-profit basis” are not excluded.

There were members of the UNSGAB for and against the idea of taking private companies into the concept. It seems that the proponents have prevailed.

Boag and McDonald found an answer for the inclusion of the private sector, “The most obvious answer is that the UNSGAB was dominated by individuals who are either in the private sector or have supported private-sector participation in the water sector in the past, including Michel Camdessus (former Director of the IMF),

326 The Hashimoto Action Plan was launched at the 4th World Water Forum in Mexico City. It is a compendium of actions which should be set to reach the water-related MDGs. [UNSGAB]
327 Boag, McDonald 2010:9
328 Lobina, Hall 2006:22
329 UNSGAB: WOPs
330 Lobina, Hall 2006:22
Margaret Catley-Carlson (advisor for the multinational water company Suez Lyonnaise des Eaux), Angel Gurria (former member of the Camdessus Panel on Financing Water Infrastructure) and Gerard Payen (former VP at Suez Lyonnaise des Eaux). The other members of the board who were proponents of the public sector have probably authorised the inclusion in order to promote the creation of a database storing information on utility partners.

To subsume, a WOP is defined as “any form of simple or structured partnership between two (or more) water operators that provides professional support for capacity building based on mutual trust, is based on not-for-profit principles (though costs should be recovered, partly or in full), is results-oriented according to agreed terms, and is based on good governance principles (integrity, transparency and accountability).” The WOP concept focuses on capacity-building without cashing profits. The partnership works under transparent and accountable conditions. Results and cost-recovery are important targets.

5.2 GWOPA

The Global Water Operators’ Partnership Alliance (GWOPA) is a network of international agencies, regional development banks and funding agencies, utilities and their associations and other stakeholders from the water supply and sanitation sector worldwide. In 2009, it held its foundation meeting in Nairobi, Kenya. “GWOPA’s mandate is to build on ongoing efforts and provide financial, technical, and advocacy support for WOPs at the global level.”

GWOPA works in six activity areas: First, they support regional WOPs with funding and organisational help. Second, they are concerned with knowledge-management to assist WOPs. Third, they have developed a benchmarking system (GRUBS) for data on utilities. Fourth, they are investing into capacity building and training of the workers of water operators. Fifth, they give financial guidance and raise funds. Sixth, they take care of communication activities and try to build alliances.

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331 Boag, McDonald 2010:9. Suez Lyonnaise des Eaux merged and was renamed to GDF Suez.
332 Boag, McDonald 2010:9
333 IWA, GWOPA 2009:6
334 GWOPA 2010:3
335 The Geo Referenced Utility Benchmarking System (GRUBS) includes only African water operators until now but will be updated soon.
336 GWOPA 2010:9
In partnership with GWOPA a Code of Conduct has to be signed and is observed by all parties involved in WOPs activities. Its principles include the topics of good governance, integrity, social and cultural values, resolution of conflicts, result-orientation, cost-sharing and not-for-profit as well as shared incentives. The partners have to agree on not withholding any information to other parties in order to realise commercial gains, and that no confidential information of one party is used by another for its commercial benefit. Furthermore, it is stated that neither one should use WOPs as “a vehicle for commercial activities”\(^{337}\)

GWOPA divides the existing WOP initiatives into the following regional groups: Asia, Africa, the Arab region, Europe, Latin America and the Caribbean, North America, and Oceania. I give a brief overview over the activities taking place in these regional groups.

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**5.2.1 ASIA**

USAid, ADB and IWA established an Asia-wide regional partnership network called Waterlinks. On their website are 27 WOPs listed. Waterlinks considers two partnerships to very successful. The first one was arranged between the Da Nang Water Supply Company (DAWACO) and the Manila Water Company of the Philippines which is a PPP. The second mentioned partnership was established between Metro Cebu Water District (MCWD) in the Philippines and City West Water (CWW), a water utility owned by the government of the Australian state Victoria.\(^{338}\) Research by TNI and PSIRU revealed that four out of eight partnerships in the regional WOP initiative organized by the Asian Development Bank involve private companies as expert partners. USAid financed twinning arrangements in Asia too. Within this connection commercial contracts are explicitly allowed after an ending of a WOP. In these cases seven out of ten partnerships involve private partners, even when public operators serve 90% of the people in this region.\(^{339}\)

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**5.2.2 AFRICA**

The Africa Water Association manages the WOP-Africa programme. IWA and GWOPA state that a first WOP between NWSC in Uganda and Kisumu Water and Sanitation Company (KIWASCO) in Kenya was established. KIWASCO is a private company.\(^{340}\)

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\(^{337}\) GWOPA 2010:5  
\(^{338}\) Waterlinks Website  
\(^{339}\) Hall et al. 2009:12  
\(^{340}\) IWA, GWOPA 2009:27
5.2.3 THE ARAB REGION

The Arab Countries Water Utilities Association (ACWUA) was established with the support of GTZ (meanwhile called Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH, short GIZ) and United Nations Economic and Social Commission for Western Asia (UN-ESCWA). The aims of this association are first, bringing together water experts and utilities in the Arab region and second, representing and promoting technical, managerial, legal, scientific and economic interests of water utilities in the Arab region.341

5.2.4 EUROPE

A South-East European WOP platform (WOP-SEE) is planned.342 There are no WOPs indicated in the WOP papers or on the GWOPA website.

5.2.5 LATIN AMERICA AND THE CARIBBEAN

Four WOPs are listed in the publication of IWA and GWOPA343:

- EPM (Colombia) & ENACAL (Nicaragua) on information systems
- SABESP (Brazil) & SEDAPAL (Peru) on e-procurement
- AGUAS ANDINAS (Chile) & SEDAPAR (Peru) on management efficiency
- DIGAP (Chile), EMAC (Ecuador) & COSMOL (Bolivia) on solid waste

The first WOP seems to be one between public partners. The second partnership is different though. SABESP is also majority-owned by the State of Sao Paulo and thus not public in the sense of this paper.344 The third partnership is again no PUP because Aguas Andinas is a private company.345 The fourth WOP is a multi-partnership between DIGAP, a public body, EMAC, a corporatised water unit and COSMOL, a cooperative.346

5.2.6 NORTH AMERICA

There are no WOPs indicated in the papers of IWA and GWOPA or on the GWOPA-website.

341 IWA, GWOPA 2009:30, ACWUA
342 IWA, GWOPA 2009:31
343 Unfortunately there is not more information on these WOPs.
344 Reuters
345 Inversiones Aguas Metropolitanas
346 Constance 2005, de La Torre 2009, DIGAP
5.2.7 OCEANIA

There are two WOPs that have taken place in Oceania and both of them count as WOPs in Asia. The first one is Hai Phong Water Supply Company (Vietnam) & Yarra Valley Water (Australia) on asset management in 2010. This WOP seems to be a public one. The second and already mentioned above one is Metro Cebu Water District (Philippines) & City West Water District (Australia) on non-revenue water in 2009.

So we see that there exists only a small number of WOPs and furthermore only a small number of pure public partnerships among them.

5.3 OBJECTIVES AND INCENTIVES

Why would private companies work on a not-for-profit basis? Do they really give expertise for free? For them knowledge is something valuable and not a free-floating good because a private company maybe loses a commercial advantage compared to rivals. Why should it provide valuable information and loose, by doing so, prospects?

Dealing with a private partner in a WOP some objectives, mentioned in chapter 3.4, change compared to PUPs. On the supporting side the motivation is nearly the same except that protecting against privatization and the promotion of the public sector ethos drop out. Also the financial incentives differ because in those cases follow-up orders are probably expected or the work is very well-paid and this motivates to join such a partnership. On the supported side we see the same picture. Here, an additional reason can be the goal to receive inputs from the private and not the public sector.

Firms have an incentive to prevent PUPs because these partnerships take away chances to do business and gain profits. When a public operator is not privatised or does not commission a company to do a certain service for them but contrary receives help to do the job on its own, then a market opportunity is lost. It can be expected that private water suppliers will lobby against PUPs.

5.4 PROBLEMS

It makes no sense to include the private sector into the WOP concept. This contradicts the idea of promoting the public sector. Lobina and Hall sum this up, “[...] the effectiveness of
PUPs is to be promoted by fostering their public-ness and enhancing their distinctive characteristics rather than relying on mechanisms, such as the competitive selection of partners and mimicking of commercial contracts, which risk to prejudice the dynamics on which the success of PUPs rests.\textsuperscript{348} The private sector is already favoured through mechanisms at global or regional level. Mechanisms that favour the interests of public operators are rare.\textsuperscript{349} The private sector provides many possibilities for doing business. But as we see in the examples above, there are barely any pure public partnerships. Miranda argues that the inclusion of private companies into the WOP initiative will cause confusion and problems.\textsuperscript{350} It is risky to use the initiative as a pure marketing strategy or that the private sector actually confronts the idea that the potential to improve the public water utilities lies at the public suppliers themselves. They claim that PUPs block their market opportunities.\textsuperscript{351} Another problem is the compliance with the code of conduct. There are apparently no consequences when it is not observed.

Hall et al. propose to install a quarantine preventing commercial business between WOP partners for a certain period of time after the WOP itself. This should prevent that a WOP is just used to gather information on an operator. It is also possible that public operators or NGOs try to use such a partnership to accumulate capital from outside their boundaries. Such quarantine would help to keep the partnership non-profit. GWOPA actually wanted to include a quarantine rule but the private companies inside this programme were against it.\textsuperscript{352}

IWA and GWOPA themselves state that partnerships at best can be developed between water operators. They describe a WOP case where one partner (Stockholm Water) was considered to be a consultant and not as an equal partners. This led to a lack of openness and trust which is needed for sustainable results.\textsuperscript{353} A real partnership is about sharing ideas, not consulting anybody.

The inclusion of private companies could also lead to a competitive selection of WOP partners, similar to commercial contracts.\textsuperscript{354} It may happen that public operators have to present them to be in a somewhat good shape in order to receive help. Furthermore, WOP

\textsuperscript{348} Lobina, Hall 2006:27
\textsuperscript{349} Hall et al. 2009:22
\textsuperscript{350} Miranda 2006:59
\textsuperscript{351} Hall et al. 2009:12
\textsuperscript{352} Hall et al. 2009:22
\textsuperscript{353} IWA, GWOPA 2009:12
\textsuperscript{354} Lobina, Hall 2006:27
arrangement seem to favour corporatisation\textsuperscript{355}, which chapter two has shown to be customer- and not citizens-oriented as well as oriented towards short-term and monetary goals.

\begin{footnote}
\textsuperscript{355} Boag, McDonald 2010:10
\end{footnote}
Chapter one has shown that more and more water is used, above all for agriculture. A great problem is the fact that a lot of regions suffer or will suffer from water shortage. Moreover, conflicts of water use can occur because cities and industries require of this resource very much. Later on was a strong concentration of multinational private water-suppliers but a lot of them sold their shares and went out of the water provision market. In developing countries we can rather find small-scale private suppliers if the provision is not done by the state or municipalities. When there are water management problems, they comprise usually a lack of political support, poor governance, under-resourcing and under-investment. This leads to a non-transparent, non-accountable, economically unsustainable water provision going along with water losses and low revenue collection. The UN pushes for the achievement of the Millennium Development Goals and proposes to invest not solely in infrastructure but to increase the efficiency of the infrastructure already built.

Chapter two illustrated that in theory, privatisation brings enormous benefits if cases of market failure are disregarded. It was shown that the water industry does not fit into standard economic theory. In practice the private ownership or private involvement in the water sector can be highly problematic. Governments and municipalities have favoured privatization, trustfully seeking to receive an efficient service. Governments in developing countries often had no other chance as to sell off or lease public assets in order to receive desperately needed development funding. What is often overlooked: budgetary constraints on government borrowing are political decisions and not immovable conditions. Furthermore, governments constantly raise taxes, even in difficult economic periods. So the argument that governments are unable to raise funds is not true. Even more, private companies pay more for credits as they are more prone to bankruptcy. It often seems that PPPs or corporatisation are used to simply move debts off the public balance sheet.

International organisations and IFIs have been and still are very in favour of private solutions that should help to reach the MDGs. Yet, they have realized that the financial resources will not come from the private sector as companies are interested in profitable but low-risk markets. In many cases, companies have even allowed social, political, economic or environmental damage resulting from their own activities even though they were fully aware of the impacts. Leakages for example are not seen as an urgent matter by companies. It is,

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Hall 2008:14
Hall 2008:16
however, clear that not every corporate involvement produces negative outcomes. More, it depends on the individual case.\textsuperscript{358} Hall and Lobina summarize, “Expectations of private companies should be based on economic realism: the range of actions available to corporations is limited by the rate of return acceptable to shareholders.”\textsuperscript{359}

The involvement of the private sector can evolve in different forms ranging from a mere service contract to a full privatisation. The latter is not popular anymore and the general trend leads to having public operators run as a business. PPPs are widely adopted, but the costs and risks are relatively high. High transaction costs occur as well as the costs for an effective regulation. Bribery and corruption has often been the case in the area of water services as well as hidden costs in form of subsidies and guarantees. The costs for citizens are also susceptible to rise. The investment into the water sector is due to decline because profits are extracted and not reinvested. Furthermore, the risks of a PPP are high because not all possible circumstances can be covered in a contract, moreover when the contract’s time frame is up to 30 years. The final risk, that a PPP fails, has to be bared by the state because the water services are vital to society, above all, because the demand for water is price-inelastic. Hall thinks, “\textit{In all cases, the expenditure of public money needs to be justified by expected improvements in the general economic and/or social well-being of the country or region. In terms of public policy, no PPP can ever be justified only by reference to the profits made by the private company.}\textsuperscript{460}

In summary, it is proven that privatisation increases the microeconomic performance which includes the profitability of companies and the productivity. In contrast, the impacts on efficiency and of the performance increase on the broader economy and on poverty are ambiguous.\textsuperscript{361} Above all, privatisation has negative effects on poor groups of the population. These groups are not an attractive clientèle of private companies. Furthermore, setting up an effective regulation is a problem, not only for developing countries. Plus, privatisation distances the government from providing a basic need.

All in all, private sector involvement did not lead to the desired results or outcomes and we find numerous examples of failures and difficulties, especially in the South. Prasad says, “\textit{Those who were putting pressure on governments to privatise now recognise that infrastructure privatisation failed to bring the expected gains and growth to the economy. [...]}

\textsuperscript{358} Hall, Lobina 2004:274  
\textsuperscript{359} Hall, Lobina 2004:275  
\textsuperscript{360} Hall 2008:15  
\textsuperscript{361} Prasad 2006:675
Very few privatisations were successful, while the majority did not achieve what was intended. The Netherlands and Uganda have even made water privatisation illegal. In 2004 both countries have passed laws that stipulate the water entities need to be public or publicly-owned. Developing countries undergo a dramatic increase in water prices, low and socially asymmetrical expansion of the water supply, secret contracts, and a burden on public finances as a result of profit guarantees. Their very similar experiences are due to the development aid conditionalities of international financial institutions and because of allowing privatization to local elites. The argumentation, that privatisation of water would bring an enlarged and low-priced provision, is not correct. The World Bank recognised that in certain local contexts privatisation makes no sense. In general, World Bank staff has very different views and opinions on privatisation but as an institution the bank is still adhering rigidly on market approaches. The bank is highly promoting PPPs and the private management of public utilities. It recommends governments to involve the private sector in water services. So, the debate on private sector involvement is still vivid and seemingly not coming to a halt. Contrarily, it has turned to PPPs and community or locally based solutions.

Chapter four presented the idea of the UN about Water Operator Partnerships. The problem of the concept is that private companies are explicitly included and this brings several risks. WOPs could be used as marketing tools only or private companies could just use them to explore new markets. Altogether it is reasonable that the UN puts money into partnerships between water operators and furthermore adds value to them. Water operators can receive help and funding allowing investment into capacity building and training of the workers. Maybe this leads to more support for PUPs within the UN and moreover among the group of IFIs. To give operators a platform networking surely assists public operators as the absence of a platform or forum for public operators is hindering a larger occurrence of PUPs. Despite, it is still difficult to find a suitable partner. The WOP Database is a useful tool to overcome this problem. Up to now, one cannot find a lot of information on GWOPA's website. Thus, is not yet foreseeable what the outcome of the benchmarking system (GRUBS) will be because there is not a lot of comparable data. The proposed quarantine rule should be introduced.

362 Prasad 2006:682
363 Hall, Lobina 2006b:10
364 Von Braunmühl 2008:44
365 Prasad 2006:686-687
367 Prasad 2006:670
368 Miranda 2006:54
In this last chapter, I will discuss the findings on PUPs and draw a conclusion. I will for this reason summarize the benefits of PUPs and mention the factors which lead to their success. I will also reflect on the difficulties and challenges of this approach.

### 6.1 THE BENEFITS OF PUBLIC-PUBLIC PARTNERSHIPS

Altogether, PUPs primarily provide know-how transfer at low cost, thus outmatching comparable sources for the enhancement of efficiency, effectiveness and productivity. Note, however, that a lot of the benefits of PUPs are context-specific and cannot be generalised.

**OFFERING EFFECTIVE KNOW-HOW TRANSFER:**
The focus of PUPs lies on knowledge-transfer and capacity building instead of gaining profit. They offer a long-term increase in capacity building and an effective way of know-how transfer. As know-how is not private amongst public partners, they can share it easily. In a PPP a general loss of training is possible because of an increased use of outsourcing which reduces the incentives and the capacity for training employers.\(^{369}\) In a PPP, know-how transfer is not even happening casually. Since the private partner takes over the water provision, it is not foreseen to improve the knowledge-base of the public part. The orientation of the workers changes towards short-term goals. Only the commercial objective is important any more.

In a PUP a multiplier effect is possible because the pool of public-sector entities, capable of providing support to others increases with each PUP. Boag and McDonald call this a vicious circle of capacity building.\(^{370}\) One example is Beheira in Egypt which was first supported by Amsterdam WaterNet and afterwards supporting partner of DZH and Gedaref in Sudan.\(^{371}\)

**IMPROVING OPERATOR CAPACITY AT LOW COST**
PUPs are able to improve water infrastructure and service delivery capacity at lower cost than Public-Private partnerships or a privatised operator. As we have seen in chapter two, the costs of PPPs for a national economy or, more locally, for the municipality are first of all high transaction costs as well as the costs for an effective regulation. In addition, there are most of the time hidden costs such as subsidies and guarantees. In the case of private provision, the tariffs are susceptible to rise.

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\(^{369}\) Hall, Lobina 2006b:14
\(^{370}\) Boag, McDonald 2010:11
\(^{371}\) Hall et al. 2009:4
The chapter on PUPs showed that the costs of them comprise expenses for the search of a partner, for human resources, for travelling, and, if it is the case, for new or enhanced infrastructure. Risks that could arise concerning a new infrastructure can be avoided by conducting feasibility studies. It is very unlikely for the supporting partner to give misinformation or to harm the partnership which arise costs. Therefore, PUPs cost less than PPPs. The assigning of expensive external consultants from in- or outside the country is generally not necessary. Experts can be acquired from the supporting partner. The skills of municipal workers are improved and the dependence on consulting companies is reduced.\(^{372}\)

Besides, the investment into the water sector is due to decline in the case of privatisation or of a PPP because profits are extracted and not reinvested. When an operator stays public it is more likely that investments are made. The extension of the water network is mainly done by public forces.\(^{373}\) Hall and Lobina explain this further, “Underinvestment by private water companies is also a feature of their behaviour in a high-income country like the UK, which suggests it is a systematic feature of the private sector’s behaviour.”\(^{374}\) Another characteristic disfavouring a private provision is the fact that the risks of a PPP are high because not all possible circumstances can be covered in a contract. Plus, it can cost a large sum of money to dissolve such an agreement. PUPs constitute flexible partnerships which bring lower risks for the municipality, community and the state. These fluid partnerships are less costly and cumbersome as takeover processes used by the private sector.\(^{375}\)

PROMOTING DEMOCRATIC AND MORE EQUITABLE WATER SERVICES

PUPs are a way of democratising water services by providing greater participation in decision-making and delivery for water users, front-line workers, and different levels of government. Likewise the unions and workers request a more democratic system. They call for a more rational and modern administration. They demand a timely personnel management, closeness to citizens, customer orientation and more involvement of the users of the public system. It is not the wish of more state but of a better state.\(^{376}\) FENTAP, the Peruvian water sector workers' federation points out that “PUPs are a technical tool and at the same time a political tool for those working towards effective public water delivery and the universalization of water services.”\(^{377}\)

\(^{372}\) Boag, McDonald 2010:10-11
\(^{373}\) Hall, Lobina 2006b:4
\(^{374}\) Hall, Lobina 2006a:50
\(^{375}\) Hall et al. 2009:5
\(^{376}\) Katzmayr 2005:135-136
\(^{377}\) Hall et al. 2009:5
Another feature of such cooperation is the possibility to increase service equity by expanding the network of connections to areas out of service and by ensuring that a basic amount of water is available for all. Equity can mean to distribute water according to demand by treating disparity unequally or by ensuring a minimum-package of benefits so that nobody falls under a certain level. Different countries can have different equity goals. Howsoever, private players do not have the aim to scale down system expenses in order to pass the savings on to weaker social sections. It is also contrary to the aim of private suppliers to ensure equitable supply to marginalized groups and people who are not able to pay for water. PUPs are able to reduce costs of supplying water while ensuring equitable supply to all citizens. But equity is not always a stated aim of a PUP and community participation is not a panacea for better service quality. However, with a PUP the decisions can take the time needed because of the larger time horizon and the larger political objectives. Besides, there is low or even no resistance by the public against a PUP.

BUILDING SOLIDARITY AMONGST MUNICIPAL OPERATORS

With PUPs it is possible to build solidarity amongst public-sector managers, workers and the communities on a local, regional and global scale. PUPs enable actors to increase and share their knowledge as well as to provide or raise confidence and pride in serving their citizens. There is a mutual understanding because two public partners cooperate and thus these partnerships are more efficient and cooperative. Not struggling with distrust, all partners can concentrate on the actual work.

In a PPP you experience a conflict of objectives between the public service mission and the focus on the shareholder value. Lobina and Hall point out, “The [water] services are too vital both socially and economically to rely on corporate self-regulation, and countries lack effective capacity to regulate such corporations.”

BRINGING THE PUBLIC-SECTOR INTO FOCUS

PUPs are proofing for the fact that the private sector is not inherently better at service provision than the public sector. PUPs provide concrete evidence of the ability of the public sector to outperform the private sector. The public sector is able to show tangible results rather than just using rhetoric. Boag and McDonald state, “PUPs are seen to help re-focus
policy-making attention on the public sector in general, and on ways to improve public-sector water services in particular. In doing so, PUPs take us beyond the false assertion that public-private partnerships are the only mechanism to resolve the stasis of private versus public water services. As already mentioned above, the public sector serves 90% of the world population with water and sanitation services. The focus on PUPs, and thus on the public sector, promotes the developing countries in improving and expanding their water services. In the case of a PPP or a privatisation, the municipalities lose their ability to control and maintain the water services. With a PUP the local control is supported.

SOLVE THE PROBLEMS OF WATER MANAGEMENT

The problems of water management, summed up before, can be solved with PUPs. Lack of political support can be overcome because politicians are explicitly involved. Transparency and accountability can clearly become a essential part of these partnerships. Usually, the aim of a PUP is not only to construct new infrastructure but to accumulate new knowledge for an operator. This is a sustainable way to improve water operators. Under-resourcing can be tackled with an improved management and financial help. Under-investment is better mastered by the public sector because private companies do not seem to put money into water programmes.

6.2 SUCCESS FACTORS

PUPs can outmatch PPPs or privatizations under specific circumstances. These reasons for this are more or less the success factors of a PUP.

There are several success factors which can be found in the literature and the case example. Obviously it needs conscious agency to make the partnership work. Success depends to a great part on the qualification of the people. The management and the advisers need to be trained in the areas of organisational development. The workers need to be well informed and sufficient staff is required. The administrative support has to be, of course, professional. This has been a problem in Kaunas. Experience with international or inter-organisational teamwork is also clearly a big advantage. Lobina and Hall believe, however, that the suitability to carry out the tasks identified under partnership design are probably more important than prior experience with working in such a context. Thus, finding an appropriate partner leads to success. The absence of a platform or forum for public operators

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383 Boag, McDonald 2010:11
384 Lobina, Hall 2006:23
is hindering a massive occurrence of PUPs. The WOP Database can be a useful tool to overcome this gap.

A fully financed PUP can become a triumph. However, it is a great challenge to find financiers since the majority of donor funding is directed to PPPs. Financiers highly influence PUPs and thus the success is depending on them. Another challenge is to convince governments, funders, and end users of the positive attributes and qualities of PUPs in the water sector. This paper is written with the intention to do so. One consideration of how to promote these partnerships to financiers is that it is probably easier to propose a partnership between two (or more) public-authorities to international financing institutes and to other donors because it is clear from the beginning what will be the outcome of this activity. It is a top-down process where the management keeps all its power and decision-making ability. This is useful when the civil society is not well-developed or when the water-problems are not too severe. When other partners such as civil society groups are involved, it is probably harder to find funds because of the unclear outcome. Furthermore, community involvement and participation by citizens usually do not start by a top-down command. Most of the time it is a bottom-up development when the civil society gets active and starts to work towards a change.

Public operators experience problems because of flaws in the institutional framework such as a lack of accountability of managers, staff or politicians. Thus, not only in private constellations but also in PUPs well-functioning accountability structures are needed. All the funds should be taken for the foreseen actions.

Concerning the know-how transfer, a receptive operator can enhance the outcome of the PUP. If a learning culture inside an operator already exists, then a sustainable long-lasting know-how-transfer is possible.

### 6.3 DIFFICULTIES AND CHALLENGES

There are several challenges to be mastered and difficulties to overcome in order to have a sound foundation of PUPs so that practitioners can easily form a PUP by themselves.

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385 Boag, McDonald 2010:12
386 Hall, Lobina 2004:275
NORMATIVE VALUES
Boag and McDonald criticize the confusing mix of normative values, empirical findings, and abstract concepts mentioned in literature. The objectives of PUPs are often just normative values like equity, democracy, participation, sustainability, transparency, solidarity and universality. What are missing are discussions on how to put these values into practice, how to measure or investigate them and what are the implications when there are competing norms. For practitioners it can be difficult to understand how to organise, implement and evaluate a successful PUP.\(^{387}\) I tried to be clear about these objectives and to avoid normative values. Important to know is for example if we reach equity at the expense of other goals such as sustainability or efficiency. All norms need to be clear to address them practically. It is also not evident that all norms are universal to all countries\(^ {388}\) but detailed analysis of this point would lead to far and is therefore omitted.

PARTNERSHIP
Apparently, logistical and political difficulties can occur in such a multifaceted partnership like a PUP. In international co-operations the workforce can encounter cultural and language difficulties, uneven technological skills, different hydrological contexts, varying labour-management relations, differing histories of water commodification or dissimilar interpretations of equity.

MARKET LOGIC
For some, the idea of corporatisation is a positive development. For others this idea undermines the discussed objectives of PUPs like equity and universality. The third group is worried about the further marginalisation of already weak social groups. Because who shouts the loudest is likely to receive more attention. Not to forget that today’s wants and needs are often being created by the market, e.g. bottled water, water-intensive appliances or water-intensive leisure activities.\(^ {389}\)

A problem is that even public initiatives can have the aim to maximize profits. Not only private companies are trying to reach this target. For example, Uganda’s National Water and Sewerage Company had run several South-South partnerships in sub-Saharan Africa. Observers say that the objective of NWSC has also been the attraction of more private-

\(^{387}\) Boag, McDonald 2010:13
\(^{388}\) ibid
\(^{389}\) Boag, McDonald 2010:16
sector participation.\textsuperscript{390} Market-orientation and profit-making are problematic in the field of water provision.

**WATER-USE EFFICIENCY**

When we look at the case of water privatisation in London we see that the private company had not the goal to save water. The pipelines have not been renewed and it came to very high leakage rates. There were weekly pipe bursts because the company increased the water pressure in order to provide the customers with enough water. This is definitely a not-sustainable use of water. The company had no incentive to save any water.\textsuperscript{391}

Water-use efficiency should also be improved to support both, the society and the environment. Private companies have no interest to save water when there are no regulations\textsuperscript{392}. But it seems that public utilities do not behave better than private companies in the case of water saving.\textsuperscript{393} Thus it needs stimuli or regulatory measures to improve the water-use efficiency.

**LEGISLATIONS**

Local legislations in the support-giving country can be an impediment to the spending of local water revenues, and thus parts of the municipal budget, to a water operator somewhere else. Politicians have to be convinced or the money comes from other sources.\textsuperscript{394}

**UNEVEN DISTRIBUTION**

The water supply systems vary strongly around the world and this constrains the transfer of technology and of governance models. The water systems work poorly in most sub-Saharan Africa and parts of Asia because the parts of the society served by networks are only small, and in a way an economic, cultural, and social elite.\textsuperscript{395}

**6.4 CONCLUSION**

The context in which water and water services are embedded is multifaceted. It is necessary that water and water services are seen in a political, social, cultural, technological, environmental and legislative context. Opschoor puts it this way, \textit{“Power asymmetries,}

\begin{itemize}
\item \textsuperscript{390} Boag, McDonald 2010:8
\item \textsuperscript{391} Lobina, Hall 2001:20
\item \textsuperscript{392} Gleick, Wolff, Chalecki, Reyes, Rachel 2002:5
\item \textsuperscript{393} Katzmayr 2005:212-
\item \textsuperscript{394} Miranda 2006:54
\item \textsuperscript{395} Bakker 2008: 239
\end{itemize}
preferences (social and private) and interests, as well as ideologically or opportunistically based preferences for institutional forms of decision making and management of water systems, all are behind current systems of water provision and water management; they also feature in debates about water sector reform. Different interests are behind each step taken in the direction towards more public or more private involvement. Underdevelopment is not only a problem of economic scarcity but also a political issue. It is in general required to determine how the provision of public goods is decided and funded. Who benefits and who pays? Also debates on water supply and sanitation are clearly focusing on the question “who is to pay for these services?” and not on where the water should come from or how to help the poor to get safe water. “The struggle for clean water and environmental preservation, therefore, is a political process whereby “who pays what” is defined and, in which public pressure plays a major role.

Using regulation it was attempted to turn a private company into a charitable being. This effort could have been better spent on modernising public operators. PPPs have failed too often and after all, water is such an important resource. It is a fundamental critique which is put forward in this paper: PPPs are not the best solution to receive an efficient water provision. They failed to deliver the expected benefits in urban water supply and sanitation. This is even argued by the IMF together with the World Bank within a publication. Both state that a PSP is not necessarily superior in providing water services than the public sector. As has been seen in this thesis, PUPs are completely different to PPPs. They avoid risks like high transaction costs, contract infringement, renegotiation, inadequate regulation, opportunism, monopoly prices, the obligation of secrecy, currency risk and the lack of popular legitimacy. Besides costs and risk, the impact of a PPP regarding the mission and objectives of the public service, their economic effects e.g. on employment or the fiscal impact on public authorities, and their relative willingness to pay of citizens have to be considered. A pure commercial comparison is insufficient.

The above summarised benefits of PUPs demonstrate that they can definitely outmatch PPPs or privatizations. Miranda argues, “PUPs are not the only way, but surely they are one of the most relevant ways to provide, universally and within the shortest timeframe, safe

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396 Opschoor 2006:427
397 Molle, Berkoff 2006:32
398 Molle, Berkoff 2006:32
399 Prasad 2006:674
400 Hall et al. 2009:2
401 Hall 2008:16
water and adequate sanitation – a human right that has been inexcusably neglected so far.  

PUPs enhance the public good in a sustainable way. A key point of this kind of partnership is that it works on a non-for profit basis and the earnings are reinvested inside the local water system. Their openness helps to create trust and allows the involved partners to learn effectively.

Private provision and PPPs are still seen as THE solution to global water problems. The results of the World Water Forum in Istanbul 2009 on the topic of financing and managing water clearly promote private solutions and pushes for private investors. An exemplary slogan in the report of the Forum says “There is money to be made in the water sector!”

They also state that, “The topic of “water as an economic good” was carefully avoided during the Forum due to its controversial nature. [...] However, the concept of “water as an economic good” was intrinsic to all discussions regarding pricing and public-private partnerships. We will see if there will ever be a shift towards promoting the public sector. The maxim worth following should at any rate be modernising not privatising. No privatization is required to achieve the goals of ecological, social and economic improvements. In the water sector know-how transfer should thus become more important instead of constructing and building new infrastructure when there are simple and cheap solutions faster to implement. It is for example projected that the MDG on sewage will not be met. A possible solution might be to have more PUPs rather than focusing on sewage services as shown within the case example. If we want a global well-running water provision, PUPs need to become more relevant and for this they need a better financial back-up.

Miranda 2006:60

Johnson, Wilson 2006:72

The World Water Forum is the largest event on the topic of water held every three years. [World Water Forum Website]

Erzi 2010:79

Erzi 2010:80
LITERATURE


[34] Hall, David / Lobina, Emanuele (2006a): Pipe dreams: The failure of the private sector to invest in water services in developing countries. Public Services International and the World Development


[36] Hall, David / Lobina, Emanuele / Corral, Violeta / Hoedeman, Olivier / Terhorst, Philip / Pigeon, Martin / Kishimoto, Satoko (2009): Public-public partnerships (PUPs) in water. PSI, PSIRU, TNI.


ILLUSTRATIONS AND TABLES


Illustration 2: Evolution of Freshwater Use; originally Shiklomanov, online: https://ih-igcse-geography.wikispaces.com/1.6.+Uses+of+water [05.03.2011]


Table 2: Types of Public-Public Partnerships; based on the illustration of Boag, Gemma / McDonald, David A. (2010): A Critical Review of Public-Public Partnerships in Water Services, Water Alternatives, 3(1).
ABSTRACT

A growing number of public water operators have started to help other public water suppliers to improve their services in order to become more efficient and better trained. Such a support agreement is called Public-Public Partnership (PUP). Such a cooperation is often created because of twin town arrangements between cities or municipalities. The water utilities or water companies work together on a non-profit basis to build up skills through the use of counselling, training, management, financial restructuring, joint investment and other measures.

These PUPs are a viable alternative to private sector involvement and primarily provide know-how transfer at low cost, thus outmatching comparable sources for the enhancement of efficiency, effectiveness and productivity. They can outperform PPPs or privatizations in the water sector under certain circumstances. This paper discusses the concept of PUPs, the different partnership types and partnership arrangements. Furthermore, the characteristics of PUPs and the associated ideas which are given in the literature are provided and their accuracy for the cases of a Swedish and a Lithuanian operator are analysed. Furthermore, the differences between PUPs and Water Operator Partnerships (WOPs) – an initiative by the UN Secretary General's Board on Water and Sanitation - are discussed.

ZUSAMMENFASSUNG


Diese PUPs stellen eine Alternative zur Beteiligung des privaten Sektors dar und bieten vor allem die Möglichkeit des Know-How Transfers zu geringen Kosten und übertreffen damit
andere Möglichkeiten der Steigerung der Effizienz, Effektivität und Produktivität. Im Wassersektor übertreffen sie PPPs oder Privatisierungen im Allgemeinen unter bestimmten Umständen. Diese Arbeit beschreibt das Konzept der PUPs, die verschiedenen Partnerschaftsarten und -abkommen. Darüber hinaus werden die Eigenschaften von PUPs und die damit verbundenen Ideen, die in der Literatur angegeben ist, dargestellt und deren Anwendbarkeit für die Kooperation eines schwedischen und eines litauischen Betreibers analysiert. Außerdem werden die Unterschiede zwischen PUPs und Water Operator Partnerships (WOPS) - eine Initiative des UN Secretary General's Board on Water and Sanitation - diskutiert.
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SPRACHKENNTNISSE
Englisch: fließend
Französisch: in Wort und Schrift
Russisch: Grundkenntnisse
EIDESSTATTLICHE ERKLÄRUNG

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[Unterschrift]

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