

THE GUARDIANS OF THE WELLS

WATER, PROPERTY AND POWER IN AMMAN

**Thesis submitted in partial fulfilment of the
requirements of the Degree of Master of Philosophy in
Culture, Environment, and Sustainability**

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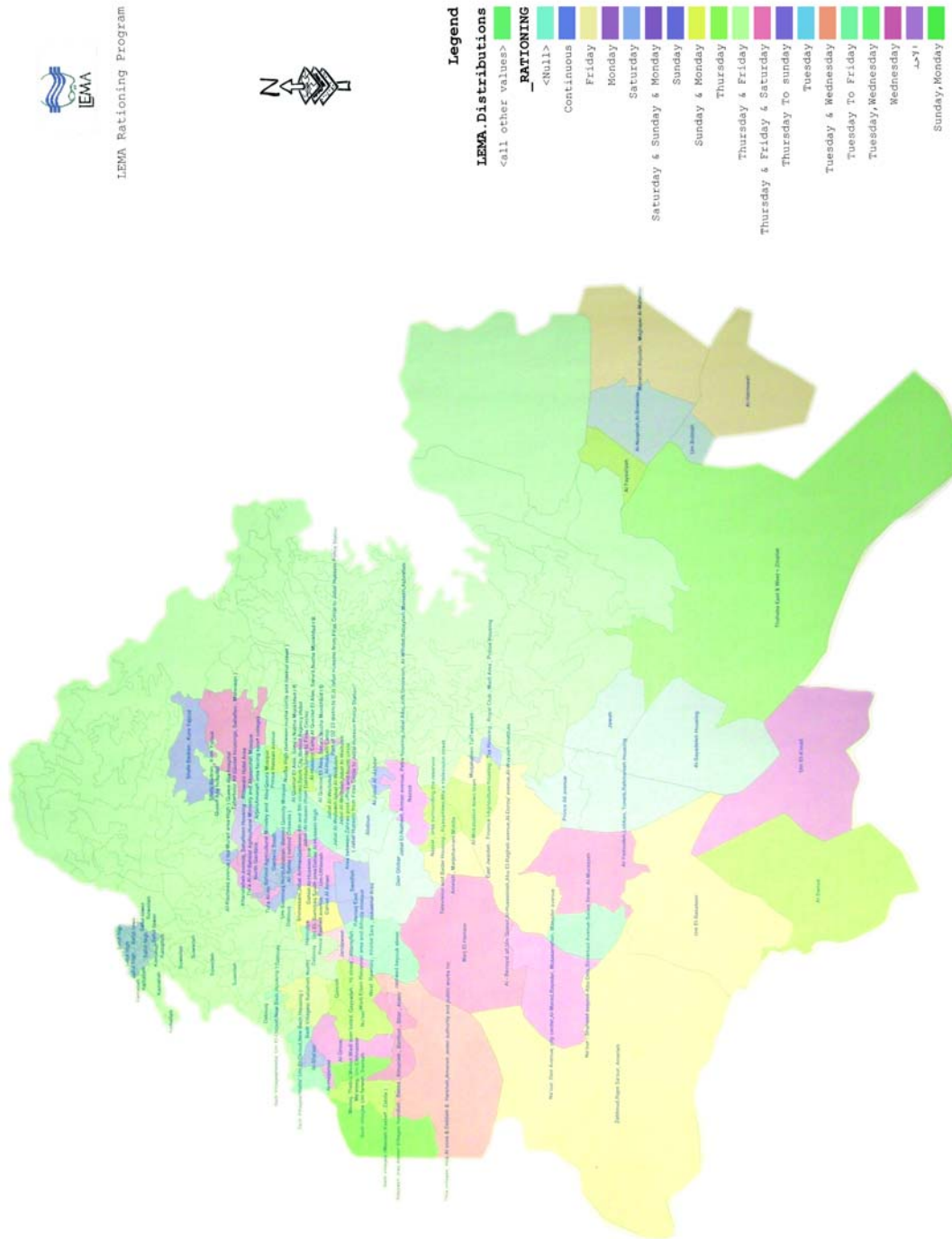
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LIST OF ACRONYMS AND ABBREVIATIONS

AHDR	Arab Human Development Report
AED	Academy for Educational Development
CIP	Capital Investment Project
DoS	Department of Statistics
FOEME	Friends of the Earth Middle East
GDP	Gross Domestic Product
HDR	Human Development Report
ICJ	International Court of Justice
IDB	Islamic Development Bank
IMF	International Monetary Fund
JD /JDs	Jordanian Dinar / Jordanian Dinars
JT	The Jordan Times
LEMA	Lyonnaise des Eaux Montgomery Watson-Arabtech Jardaneh
(S)LdE	(Suez) Lyonnaise des Eaux
MWI	Ministry of Water and Irrigation
IWRM	Integrated Water Resource Management
GAM	Greater Amman Municipality
GEO	Global Environmental Outlook
GGDP	Good Governance for Development Programme (See also OECD)
MENA	Middle East North Africa
MDG	Millennium Development Goals
NWC	National Water Carrier
OECD	Organisation for Economic Co-operation and Development
PAD	Project Appraisal Document
PMU	Programme Management Unit
RSCN	The Royal Society for the Conservation of Water
ToR	Terms of Reference
USAID	United States Agency for International Development
WAJ	Water Authority of Jordan
WB	The World Bank
WEPIA	The Water Efficiency and Public Information for Action

MAP 1: THE LEMA DISTRIBUTION SYSTEM IN AMMAN



Map 1: LEMA’s water rationing schedule in Amman. The colours indicate which areas have supply which and how many days a week (source: LEMA).

Table 1: Non Commercial Tariff Structure 2001 onwards
Total charge for water, sewerage, meter fee and special charge
based on Q1 2003 Billing

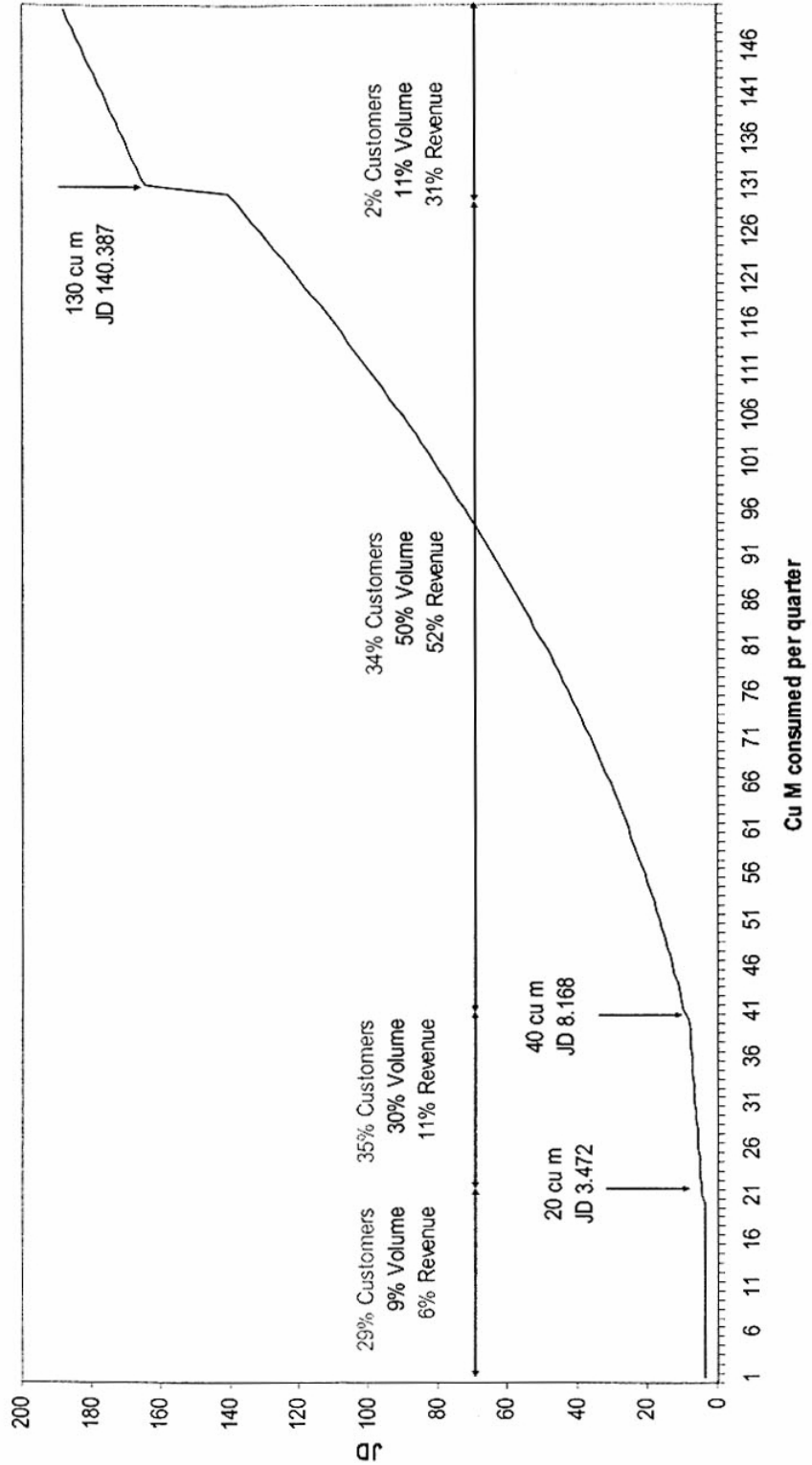


Table 1: The Tariff Structure created by the Ministry of Water and Irrigation on which LEMA base their prices (source: LEMA).

PREFACE

Jordan, according to Indo-Aryan origins of the name, means “the stream that descends rapidly”. In Arabic, another term for Jordan is Esh-Sheri’s – “the watering place” (Jordan River Foundation 2002: 3). It is interesting to study Jordan, due to its closeness in history, culture and geography to Palestine (as well as its geographical closeness to Israel and Iraq). Jordan is geographically positioned at the heart of the conflict in the Middle East, with a population supportive of Iraq and an economy dependent on foreign (US) aid. The country is also an intriguing object of study due to the diversity which Jordan represents – in terms of climate, people, culture – a diversity in all but natural resources, of which, arguably, Jordan has few, and least of all, water.

Much has been written on water scarcity in the Middle East, but far too little from a cultural perspective (Tvedt and Gravelseter Berg 2001: 2-3). In this thesis I explore implications of privatisation on people’s lives through an analysis of the relationship between water, power, and cultural perception. My point of departure is that in a country like Jordan, privatisation in the fragile water sector is by many people regarded as a controversial step, and one which will affect, in different ways, all layers of the community. The thesis is centred on LEMA, a private water company which is responsible for water distribution in the greater Amman area. My aim is to investigate knowledge, attitudes and perceptions around privatisation of water from

both the professionals working in and with LEMA, and users of LEMA water's points of view.

Jordan is currently undergoing several water development programmes, and is a place where privatisation is a fairly new and fast development. Therefore little is yet known on the impact this has on the local population. For this reason, I believe that this project will be a valuable contribution to the literature and knowledge on water. My main question is: "Has privatisation improved the water distribution and the water situation for the users of water in Amman?". To explain this question I draw on perspectives of users as well as professionals working in and around LEMA.

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INTRODUCTION

WATER FOR PEOPLE - WATER FOR LIFE?

It is done! I am Alpha and Omega, the beginning and the end. I will give until
him that is athirst of the fountain of the water of life freely.

(Revelations 21: 6)

Looking at the Earth from afar, it might strike a spectator that this “blue planet” might be more correctly named “Water” than “Earth”, as water is the one element which exists in plenty on it (Postel 1992). However, of all the water which covers our surface, only 2.5 percent is freshwater, and out of that, most freshwater either takes the form of permanent ice or is situated too deep to reach. According to *The Global Environmental Outlook*, the amount of water available for us is “less than one percent of all freshwater and only 0,001 per cent of all water on earth” (UNEP 2003: 150). Of this meagre percentage of available water, most can be found in scarcely populated areas, leaving the densely populated places on the planet with an unfair starting point. These areas are generally hot and poor, with short and relatively dry rainy seasons; not only is there a scant supply of naturally occurring water, but a significant amount is lost to evaporation, environmental damage, leaking pipes and general mismanagement of resources.

Hence we find ourselves in the midst of a ballooning *water crisis*. Water is generally acknowledged as being one of the main battlefields for a future in health, happiness, prosperity and sustainability for our generation as well as those to come. *Food security*, access to a reliable source of nutritious food including the

water required to grow the food could be considered a primary social right inseparable from water issues and water policies around the world.

One third of the world's population live in countries which suffer from *water stress* (Falkenmark)¹. *The Global Environmental Outlook* estimates that within 25 years, two thirds of the population will be stressed for water. Water stress is measured as ranging from “moderate” to “high”.

Jordan is situated in an area of “high” water stress according to the UNEP (ibid). The nation is ranked as number 170 out of 182 nations figuring in the “UNESCO List of Water Availability per Person per Year” (UNESCO 2003 70-74). In comparison, The West Bank is listed as number 182, The Gaza Strip 179, and Israel 167. On the other end of the spectrum, Norway is rated number 13 as the highest European nation on the list, topped by Greenland.

On a per capita basis, Jordan's freshwater reserve ranks among the lowest in the world. About 66% of the available water is used by the agricultural industry, an industry which according to the World Bank (WB) only provides 4% of the GDP in Jordan (Hassan and Al-Saci 2004). In addition to this, the World Bank maintains this water is being inefficiently used (ibid).

The little water in Jordan is being shared by a rapidly increasing population, mostly due to the many waves of immigrants. According to the World Bank, the most prominent waves of immigration to Jordan have been: In 1948-1950, 450, 000 people came from Palestine, 400, 000 came from the West Bank and Gaza in 1967 and 300,000 Jordanian nationals from various Gulf states post the 1991 Kuwait occupation (Hassan and Al-Saci 2004: 1). To this, we must add the unknown number of Iraqi citizens fleeing to Jordan during and after the 1991 Gulf War, as well as the number of Iraqis who are at presently coming to Jordan². In

¹ Water stress is defined as “where water consumption is more than 10 per cent of renewable freshwater resources” (UNEP 2003:150).

² According to UNHCR statistics from 2004, there are 1, 000 refugees and 11, 000 asylum seekers; the number of unaccounted for people who have passed through the open borders so far is officially estimated at around 400, 000. (*The Jordan Times* 17 April, 2005).

addition to this, the annual population growth rate is, although decreasing over the last few years, one of the highest in the world (ibid).

Water in the Middle East context is often phrased as a “security issue”, but little is mentioned about the perhaps most important reason why it is indeed an issue of security - food security. Access to safe drinking water and sanitation is not specifically defined as an intrinsic human right. However, it could be argued that it should be interpreted as a human right. This would be based on the General Assembly resolution 217 A (III) of 10 December 1948, article 25 (1), which states that:

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.

(The Universal Declaration of Human Rights, 1948)

The issue of water is not specifically mentioned in the above “Human Rights Convention”. However, in some accounts, the lack of mention of water is seen as a measure of the obviousness of water as a human right: “The exclusion of water as an explicit right was due more to its nature; like air, it was considered so fundamental its explicit inclusion was thought unnecessary” (Gleick, 2000). At a later stage, the water and sanitation issues have been elaborated and specified as a UN *goal* in itself. The “UN Millennium Development Goals for 2015” include a clause which aims “to halve the proportion of people without access to safe drinking water” (UNESCO 2003: 5) (Goal 7 of 8).

In 1997, Jordan reached its goal of 97% coverage of drinking water, according to the Jordan report on its achievements towards the Millennium Development Goals (2004). This figure was confirmed by Water Scientist Mohammed Saidam during a meeting with him on 24th November 2004. These figures give no indication of *other* water needs (primarily cooking and sanitation), and therefore give an inaccurate image of the water situation in Jordan. However, these figures do pinpoint a trend, where the focus is shifting from a main concern with *access* to water to an occupation with infrastructural, distributional and maintenance issues.

This perception finds backing in the *World Water Development Report* which holds that “whether concerning issues of health or sanitation, environment or cities, food, industry or energy production, the twenty-first century is one in which the overriding problem is one of water quality and management” (UNESCO 2003: 4).

This shift in focus is not unique to the water sector: economic restructuring and reorganising governmental institutions, in combination with combating corruption and opening up economies for external investments is presented widely as a solution to inefficient and non-economically sustainable public services around the world. Privatisation is a key element in this way of re-thinking the global economy, and the Middle East is no exception in the calculation. The OECD/MENA regional meeting which took place in Amman in October 2004 set out to revive the economy of Middle Eastern countries. The key recommendation which was included in all of the seven sectors which were looked at was to “open up for foreign and private investment” (OECD 2005).

The idea of water as a human right does not necessarily exclude the notion of private distribution of water. In “The Dublin Statement” of 1992, the “Fourth Principle”, it states that “it is vital to recognize the basic right of all human beings to have access to clean water at an affordable cost” (as quoted in UNESCO 2003: 326). The idea of a “basic human right” is here not seen as conflicting with the notion of “cost”.

Jordan is situated centrally in the Middle East, and it shares borders with Israel, the Palestinian Authorities, Saudi Arabia, Iraq, Egypt and Syria. Jordan is considered a front figure in the Middle East in the context of economic reform. The World Bank lists Jordan as “moderate success” in terms of the implementation of the Bank’s water privatisation programmes. The management contract for water supply in the greater Amman area, however, rates as one of the success stories of privatisation in Jordan, and in the Middle East generally. In this thesis, I will look at the theory and practice of privatisation of water from the perspectives of the providers and facilitators, as well as the users of water in Amman. The purpose of this dissertation is to investigate the effects on

privatisation of water, on the water sector as well as its impact on people who depend on water for their survival. I aim to investigate the official as well as the users' knowledge, attitudes and perceptions around privatisation of water in light of the presence of LEMA, the water company distributing water in Amman. I ask what implications it has for the Jordanian water sector and for inhabitants of Amman who use LEMA water. This thesis aims to contribute to the research and literature in fields of water and social development.

Outline of the Thesis

I have chosen to divide this thesis into three main parts. The first part looks at privatisation of water from a “larger” perspective, where I will discuss selected theoretical ideas involving water privatisation and its implications for people as well as corporations (chapter 1). I have also included a chapter presenting background on my case study and the kind of privatisation which is discussed in this thesis (chapter 2). The second part of the thesis consists of my fieldwork, and presents the experiences and perceptions of LEMA and other official participants in the Jordanian water scene (chapter 3) as well as water users (chapter 4). The third part of the study joins the two bodies of knowledge presented in parts I and II with each other, positioning the finding from the fieldwork in its appropriate cultural and theoretical context. Finally I conclude by pointing to some of the main points for the last time.

My main aim has been to focus on people's knowledge, attitudes and perceptions of water privatisation. In order to do that in a manner as “fair” and inclusive as possible to all the parties involved, a large part of this thesis is dedicated to the somewhat “technical” and “professional” aspects of LEMA. Such a solution serves to put the user perspective in a larger discourse (Foucault in Barrett 1991). I have chosen to lay out the chapters in the manner that I have because they represent the order in which I acquired information and conducted interviews. For this reason I believe this is the best way to show the progression within my work, as each chapter becomes part of the background for the next. If I had conducted

my interviews in a different order, I would most probably have asked different questions, and this thesis would not have been the same today.

Implications of capitalism and privatisation on the monopolistic nature of water are not discussed here, as the management contract cannot be defined as “privatisation” as such. There are several important differences between the concept of “privatisation” in the terms of the contract I debate in this thesis, and what most people would define as “privatisation”, as will become clear in my selected description of the Terms of Reference in “chapter 2: The Guardians of the Wells: The case study: LEMA”. LEMA does not have the right to concentrate merely on the profitable aspects of water distribution, and cannot set its price-tariff itself. In other words, public ownership is not abolished, merely modified. I am not in this thesis trying to uncover the “beast” of privatisation; there are numerous examples of such attempts in the water privatisation body of literature. In this thesis I look at one way of managing the water distribution, the one endorsed by the World Bank and personified by LEMA. By looking at opinions of users and professionals, I will provide a cultural, personal and people-oriented version of the story about LEMA, and the culture of private water supply in Amman.

Not enough has been written on the cultural perspective of water in the Middle East (Tvedt and Gravelseter Berg 2001: 2-3). Privatisation of the crucial water sector in a nation like Jordan can be considered a controversial step, and one which will affect, in different ways, all layers of society. The thesis is centred on understanding the workings of LEMA. Jordan is at present undergoing several water development projects, and is a country in which the notion of privatisation is fairly new and developing quickly. Therefore little is yet known on the impact this has on the local population. For this reason, I believe that this project will be a valuable contribution to the literature and knowledge on water.

Culture and Mythology of Water Found Among Jordanian People

The Hashemites, the ruling family in Jordan, are of desert Bedouin origins. They are known in history since the days of the Prophet Mohammed (as mentioned, for example in Momen 1985: 4), if not longer. Since the Jordanians *do* know the meaning of the word “drought”, it is perhaps no wonder that we in this area find numerous stories, beliefs and superstitions surrounding water.

We know that the availability of water shapes beliefs (Tvedt 1997). In the deserts of the Middle East, the myths that surround drought have had mythical significance at least since the Old Testament. Water is a substance capable of changing its form. It is unreliable, yet necessary, capable of maintaining life or taking it. Tvedt (1997) describes how, in the Old Testament, water could either be a reward for good conduct and religious faith, or it could just as well punish and destroy, overflow and drown.

Water is the Islamic purifier. It is also the substance from which man and everything was made by God. The Qur’anic³ sayings underpin the centrality of water in the passage: “are the disbelievers unaware that the heavens and the earth were but one solid mass that we tore asunder, and that We made every living thing from water?” (The Prophets 21:30) Myths of the wonders of water are a major essence in the descriptions of paradise as a place in which drought and thirst would never be experienced and gardens would bloom always (De Chatel 2005).

There is a lot of truth in the saying that the perspective from which one approaches a context shapes the objects one sees. This is also the case in Jordan where water is scarce. However, one does not need to be a water researcher in order to find water apparent in multiple contexts in Jordan. Just crossing the border into Syria we find a significantly more fertile land. The Dead Sea’s sea level decreases by one meter each year, transforming the landscape around the lake as it increasingly dries out. A historical deal between Saudi Arabia and

³ There is no official transcription from Arabic to Roman letters. I have chosen to use “the Qur’an as the Q-sound is closer to the Arabic letter used in the word, despite the fact that my two Qur’anic sources use a K to spell “Koran”. For this reason there is some inconsistent spelling in this thesis.

neighbouring Jordan in 1965 extended Jordan's small strip of sea in the Gulf of Aqaba from eight to about 26 kilometres in return for a desert strip (Salabi 1998: 3). Moreover, the "Blue Gold" (Barlow) is an evident part of the ongoing divergence between Israel and neighbouring states. Water exists in Jordanian people's minds as a concept signifying something more than a necessary nurturing and cleansing substance. The Hammam, or public bath, for example, represents an ancient tradition of cleansing in the Middle East, but one which still today also maintains social bonds and functions as an informal same-sex meeting place.

Water has a significance which is hard to miss in Jordan. From the way people talk about the rain as auspicious to the strict societal and religious codes demanding cleanliness, it is obvious that water has a strong personal symbolic meaning for Jordanians. Water naturally cleans, refreshes and provides essential moisture. A winter of heavy rain, like the one we experienced in 2004-2005 when I did my fieldwork, symbolises prosperity and life for Jordanians, as it promises a summer without the threat of drought.

Myths and superstitions were resented by the Prophet Mohammed. He classified many kinds of superstitions with "idolisation", which is illegal according to the first rule of Islam: "Do not worship more than one God, and reject all idols" (Momen 1985: 8). This kind of rejection of all things "magic" in Islam is also apparent in the many denunciations and bans on the "mystic" branch of Islam, the Sufis (Vogt). This rejection of "idols" also refers to water. Myth, however, cannot that easily be eradicated, and in many ways it is possible to argue that the "Islamic myth" revolves around the "holy". Seen in this light, there are numerous examples of "mythic" (holy) water.

The element of water is highly present in the Qur'an and it represents life, creation and power. Water was the element from which man and the world was created, which existed prior to the heavens and the earth:

God created every beast from water. Some creep upon their bellies, others walk on two legs, and others yet on four. God creates what He pleases. God has power over all things.

(The Koran, the chapter of the Light, 24:45)

On several occasions water is used as a threat in the Qur'an. In a passage from the Qur'an describing hell, for example, water symbolised decay and punishment: "Hell will stretch behind him, and putrid water shall he drink" (The Koran, the chapter of Abraham, 14.16).

In this way we can say that all water is holy in Islam, unlike in Christianity, where "holy water" only refers to a specific kind of water:

In Islam, all water is sacred and sent as a gift from Allah. This is repeated many times in the Qur'an: "*We provided you with sweet water (77:27)*". All water, as long as it is *mutlaq* (free from impurities), can be used for ablution. The holy water that is used in Christian baptism is of a different nature; it is not just any water, but water that has been blessed in the name of Christ. This blessing gives the water a special quality, an added value that sets it apart and elevates it above other water.

(De Chatel 2002)

In the Qur'anic perception of water, water must be handled carefully and unwastefully, and it is specified in the Qur'an that water is to be shared equally between all the living, including plants and animals. How does this idea unite with the idea of paying for water, and a price which in effect excludes some people and surely all wild animals and plants from getting their share?⁴

There are two kinds of cleansing rituals in Islam: The *wudu*, the cleansing prior to prayer, and the *ghusl*, the deep cleansing required in situations like after childbirth, menstruation and before converting to Islam: Francesca De Chatel explains that:

Wudu and *ghusl* are both part of the act of worship, rituals that are mandatory before starting prayers, reading, or even touching the Qur'an. As such, these rituals include a spiritual component, which means that even if one is physically clean, but has not carried out the purification in ritual fashion, it is not permitted to read the Qur'an or even touch it.

(De Chatel 2002)

⁴ The literature on water in Islam deals with the *Qur'an* and the writings about the Prophet Mohammed's life and teachings in the religious texts the *Suras*. I have not come across adequate studies on cultural appropriation from religion in its use today.

Water is also important in the celebrations of the *Hajj* (the pilgrimage to Mecca). The journeys towards Mecca were designed to pass through several “holy wells”, several of which lie in today’s Jordan. Here, “Guardians of the Wells” provided water for the pilgrims on their way, and provided safe havens from otherwise unrestful and sometimes dangerous areas. (Saudi Aramco World 2005). Upon arrival in Mecca, the pilgrims would again visit holy wells, most notably the Zamzam-well which miraculously is supposed to have appeared in front of Ishmael, son of Abraham. A visit to this place is part of the *Hajj* ritual.

These are just some examples of the fundamental importance which water has in Islam. It is clear that in a country where the majority of the population belongs to a religion where water is described as sacred in such ways as above, Islamic ideas are bound to shape the perceptions of water among the inhabitants.

Take a trip to the Dead Sea with a local Jordanian and you very well might be told a version of the biblical story of Lot and his family who lived in the town of Sodom, believed to have been situated around the area where the Dead Sea now lies. Lot and his family lived in heterosexuality, unlike most of the inhabitants of Sodom, and for this reason Jehovah sent angels to exterminate the town of Sodom as well as the Sodomites. Lot and his family were spared, provided they would “look not behind thee” (Genesis, 19:17). Most people know the tragic story of Lot’s wife who became a pillar of salt when she could not resist the temptation of a last look at her town. Jordanians tell this story with great pride, as a background for the explanation of the salinity of the Dead Sea.

Nowadays, the horror stories, urban legends and myths surrounding the sea are still deadly: The border with Israel lies in the actual Dead Sea, yet it is not marked by signs in the water. Stories of people swimming too far and becoming victims of Israeli Defence Force snipers can be heard across the beaches in the Jordanian shores of the salty sea.

Source 3 of LEMA mentions in “chapter 3” of this thesis that people are vary of Israeli forces poisoning Jordanian water. He touches upon a conception which to my knowledge is a widespread story of lies, deceit, theft, power and control of the

water in the Middle East since the existence of Israel. The state of Israel was built on the mission to “make the desert bloom”, and as Tvedt points out, biblical descriptions of what land Jehovah gave the Jews still today has a strong impact on the fight between Israelis and Arabs (Tvedt 1997: 85).

As a result of the Independence-claim of the state of Israel in 1947, and the humiliating Arab defeats in the Israeli-Arab wars between 1948 and 1973, water has been mythologically linked with power, sovereignty and national pride in the Middle East. There is a strong perception among Arabs that if only the Israelis will move out of the Middle East, there will be enough water for all the people living there.

In this thesis, profound and sacred ideas of water are clearly present, water *is* myth and religion. Yet, in daily conversations I have been engaged in during research for this paper, water has been talked about as an everyday reality related to price and bill payment. In the empirical research I have done, water has been discussed on an everyday-level, as a necessity rather than as a symbol. Therefore, a definition of “water culture” for my purposes here must reflect the mundane, the practical, the necessity, and the everyday life of the people I have interviewed. When I have looked at how people use and reflect on water, I have glimpsed into one aspect of their “water culture”.

Development

Privatisation of water in Jordan is also about development. In development theory, the classical split between the *modernisation-school*, claiming the aim of development is to raise the level of consumption and production to the level of “developed nations”, as opposed to *dependency theories* which hold that the problem for the developing nations is this exact yearning for higher standards. This split touches on the issues at stake at the “Rio Conference on Sustainable Development” in 1992 where the “developing” and the “developed” nations came into conflict over living standards and levels of pollution (Guha 2002). These two strands of theories, according to Denis Goulet, can both be seen as an exclusion of

the local culture, practice and experiences which, Goulet holds should be included into a framework of development. Amartya Sen points out the fundamental importance of freedom in order for development to boost. He argues that:

The intrinsic importance of human freedom, in general, as the pre-eminent objective of development is strongly supplemented by the instrumental effectiveness of freedoms of particular kinds to promote freedoms of other kinds. (...) the main object of development, the reach of the policy analysis lies in establishing the empirical linkage that make the viewpoint of freedom coherent and cogent as the guiding perspective of the process of development.

(Sen 2001: xii)

In this thesis, I find empirical examples which may indicate that the structure of water distribution in Amman limits an important freedom for some women: the freedom to be a part of the workforce. I have found that some women who live in areas where water is supplied only one day a week find it necessary to take that day a week off work to make use of the water while it is available. If this is a common practice, it may be one factor which holds women back from participating fully in the workplace. This can be said to be an important development issue, especially in the Arab world which, according to the *Arab Human Development Report (AHDR)*, “suffers a glaring deficit in women’s empowerment. Among regions in the world, the Arab region ranks next to last” (AHDR 2002: 28).

Brief History of Amman and Water

Even if “everything” in Jordan is related to water, this thesis is not the forum for a water related description of the Hashemite kingdom. I have therefore limited myself to pointing out a few historical and geographical events which I find to be the most important to form a background understanding as to the current water distribution situation in Amman, well aware that others might have chosen to include more or different factors in such an explanation.

Amman, a city which has been noted in history since the Bronze Age, has been the capital of Jordan, formerly named Transjordan, since 1921. However, for a Middle Eastern city; it has always been fairly small, due, perhaps, to the geographical positioning of Amman, also called the “city of the seven hills”. The Municipality of Amman governs a fairly large area for its population, consisting, as its nickname describes of hills and valleys (there are today 19 hills) making communication and infrastructure a challenge. The population increase over the last few decades, as I have mentioned earlier, is also an important factor in a water-related description of Amman, as it means more lips to moist from the same sources.

To provide water for the Amman-area, many possibilities have been tried and exhausted. One such exhaustion was the area of Azraq, east of Amman, close to the border with Iraq and Saudi Arabia. As The Royal Society for the Conservation of Nature (RSCN) points out:

The Azraq area has a rich cultural history due to its strategic location and water resources. It was used as a station for pilgrims travelling to Mecca and Medina, as well as a military site for many armies.

(RSCN 2005)

Azraq used to be a large wetland, incorporating many species of animals, fish and birds that thrived in the Azraq eco system. Azraq was named an international wetland heritage site in 1977 (RSCN 2005). “However”, as Barlow describes, “desperate for water, the Jordanians started pumping from the Azraq 20 years ago, sending about 900 cubic meters an hour to Amman, the capital. Within a few years, many wells had been built and were pumping almost three times that amount of fresh water, double what the basin can sustain.” (Barlow and Clarke 2002: 21). Nowadays, there is no more water for the Ammanian population to be found in Azraq. The little there is left, however, leaves Azraq as one of the wettest areas in Jordan, and the Royal Society for the Conservation of Nature has done a good job at maintaining the area for some of the animal life. The wetland reserve has been created into a museum documenting what happened to a thirsty nation (see “figure 2” page 14). The story of Azraq is important to understand just how in need of water Jordan, and especially Amman, really is. There are not many

unused water sources for Amman to use. The solution, it is generally agreed, must be to use rationally and unwastefully the ones there are.

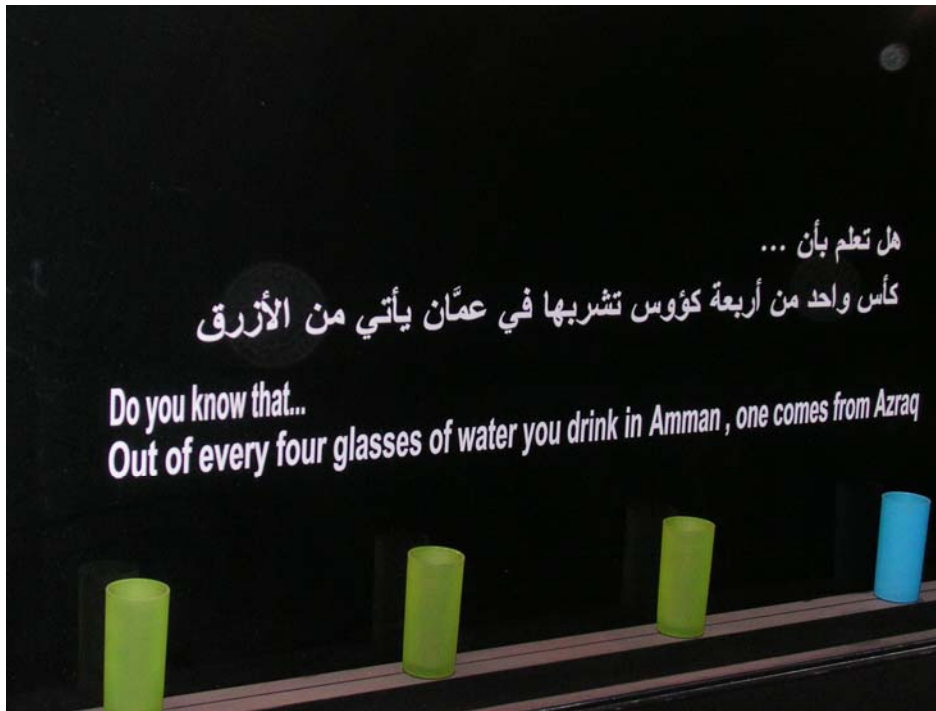


Figure 2: *Do you know that.. Out of every four glasses of water you drink in Amman, one comes from Azraq.* This picture was taken winter 2004 in the Royal Society for the Conservation of Nature's museum in the Azraq Nature Reserve, in the South of Jordan. Nowadays there is no more water in Azraq for Ammanians, or anyone else, to drink.

Patterns of Water Usage in Jordan and Amman

When travelling in Jordan, one is bound to notice the large, red, green, blue or black water containers situated on top almost every single house. Newly built houses typically have these containers built into special rooms in connection with gas and electrical equipment in basements. On apartment buildings, you will find such containers are separate for each apartment, and LEMA's meters measure flows in these containers. The water is rationed in a system which changes from the hot and low-flowing summer season to the (sometimes) rainy winter. The rationing system (a map of which can be found on page vi) is designed so that all

areas receive water at least once a week, most twice a week, and some, usually less densely populated but large consumption areas, receive continuous supply in the winter. Water distribution in the summertime is naturally less in all areas, as there is less water available.

There is, in my opinion, surprisingly little water conservation in Jordan. There are few gardens and swimming pools, but there are numerous other aspects in which the Jordanians are heavy water users. I was told on several occasions by housewives that the normal spin-cycles on their washing machines were insufficient, so they would add additional water to the machine prior to rinsing. It is not uncommon to find garden hoses unattended with the water running, or to fall from slippery stone floors in apartment buildings washed by a technique of overflowing the floors and “scraping” off the surplus water. Busted water pipes cause streets to flood all over the city, which often can remain unrepaired for days. Practices such as these, although insignificant if counted from the individual perspective, add up to a larger than necessary use of water when counted on the population in total. This is the view of the Academy for Educational Development (AED), an agency working to raise awareness of the need for water conservation in Jordan. Another area where restraint in water use is hardly found is the car. I learned fast upon arrival in Jordan that a person’s car functions as an unusually strong social indicator, and washing the car is a frequent occupation; perhaps not surprising when the amount of dirt and dust in such a dry land is taken into account. In fact, according to the Academy for Educational Development, more than half of the respondents to a 2001 questionnaire said they washed their cars “once a week or more” (AED 2001: 2). The Academy for Educational Development also attributes this fact to “cultural factors” and claim that “a nice, clean car is highly valued from a socio-cultural perspective” (ibid). Another report created by the Water Efficiency and Public Information for Action (WEPIA) concludes that “unfortunately, some Jordanians appear to have the impression that by building dams and exploiting wells, the government will be able to solve the problem” (WEPIA 2002: 5). The report goes on to say that in the case of Jordan:

It is evident from the research that there is a long way to go before meaningful saving in water usage can be achieved. Efforts to date appear to have been effective in creating awareness of the problem but have apparently failed to convey its seriousness to the extent of engendering meaningful action. Effect on the pocket is a more powerful motivator to conserve than social concern.
(WEPIA 2002: 7)

The last sentence in this quotation refers to a very important point for water conservation purposes: research conducted by the Water Efficiency and Public Information for Action has found that people are much less willing to conserve water for the sake of preservation in a nation in stress of water than they are to save money for their households. On the basis of my own research, I am left with a strong feeling that this is a cultural factor which should not be ignored in later policy decisions in Jordan. Although money saving perhaps is a less morally and collectively valid reason to conserve water, this knowledge may give an indication as to the kinds of conservation projects which might give the best results.

The Water Crisis in the Middle East and Jordan

“Out of the 22 countries defined by the World Bank as being below the poverty line in terms of water, 15 are Arab”(Gresh and Vidal 2004: 20). Jordan’s water stress, in other words, cannot be seen in isolation from the dry, arid region in which it is situated. Historically, the Middle East consists of relatively new nations, mostly “created” by Great Britain and France during the period between the first and the second world wars. When Great Britain withdrew from the Middle East, it left behind a shattered region which was war-torn and with a devastated Arab pride. Israel has, during the wars between 1948 and 1973, occupied several areas of land, rivers and underground aquifers, from what is now the Hashemite Kingdom of Jordan. The Jordan river, which is the kingdom’s main water resource (providing 70% of it’s drinking water, as well as 50% of Israel’s), is shared between Lebanon, Syria, as well as Palestine, Israel and Jordan. The river is dammed from its source on the Yarmouk River (also called Sea of Galilee) to the extent that less than ten percent of the water ends up in the Dead Sea, its natural destination.

Some Jordanians might attribute much of Jordan's water shortages to the founding of the state of Israel and the subsequent wars in the region: causing not only shame to the Arab world, but also less access to water. However, this is not the whole story. Israel suffers from water shortages too, and mismanagement must be ascribed some responsibility as well as regional difficulties in sharing. One of the problems in solving regional water disputes might be said to stem from the texts of various existing treaties and water laws⁵. These laws contain principles which serve the interest of both or all nations in a clash over water, and therefore can be used to support both parties in an argument. The Jordan River is, as mentioned earlier, shared by Lebanon, Syria and Israel (which are "upstream states", as the sources of the river exists in their territories) and Palestine and Jordan (considered "downstream states"⁶, as the river runs into their territories). Since the technology to make dams came into existence, "upstream nations" gained a significant amount of power over the water which could now be contained rather than running into the territories of "downstream nations" at the receiving end of the river in question. This is the case of the Jordan River, heavily dammed by all nations involved. The International Court of Justice (ICJ)'s "List of International Law which Govern Water Sharing Amongst Nations", the rights of all the parties involved, without giving preference to either up or downstream, occupied or occupier. The problem is that this implies that all parties involved can claim their right to the river. For this reason it is extremely difficult to find a legal way of sharing the river. Jordan, therefore, can maintain the position that Israel is responsible for its current water situation, a point which has some validity but very little use in terms of solving its problems.

Research and literature on water issues in the Middle East is traditionally divided into two categories; on the one hand water is seen as a source of conflict and war,

⁵ For example, the "Helsinki Convention" of 1996 or the "UN Convention of the Law of Non-Navigational Uses of International Watercourses" of 1997, which among other international statutes of law have formed The International Court of Justice (ICJ)'s "List of International Law which Govern Water Sharing Amongst Nations" (UNESCO 2003: 302).

⁶ Israel has in fact been both a downstream and an upstream state in this scenario; the strategic position of the Golan Heights and Israel's occupation of the area making the difference for its position as "upstream" or "downstream" on the Jordan River. I choose to define Israel as having an "upstream" position now, due to its "National Water Carrier" (NWC), a pipeline construction which transports water from the Yarmouk/Galilee to irrigate south and central Israel (Mideast.org, 2005). The NWC is a permanent construction, irrespective of an Israeli withdrawal from the Golan Heights.

while on the other, water is considered a common resource of such high importance that it may be the *one* factor which can cause cooperation and peace. In other words, the choice lies between “water for peace” and “water wars”. Water is often considered a secondary, or “low”, political issue in the political science view of international conflict (the realist tradition) which distinguishes between “international security” as a “high political issue” while economic, social and communication-related issues are seen as “low politics” (Østerud 1991: 262). The opposing views on water contribute little in terms of understanding the vital importance of water (from a health perspective), and they also teach us little of the cultural importance which water has for people who depend on it for their survival. From a political science perspective, the whole Middle East water issue can be boiled down to a traditional realist idea of *power struggle*. The state which holds the most power (in terms of money, weapons and strong allies) will ultimately win the struggle.

There have been many suggestions on how to solve the Middle East water crisis: desalination of sea water, for example, used by Israel and the Gulf states (and planned in Jordan’s short strip of sea at the Gulf of Aqaba, pending foreign funding) is a costly but plausible way of gaining more water. Importing water, in the way which Israel buys water shipped from Turkey, is another. “Virtual water” is the concept of importing grains and other water dependent crops and spending the water saved on less water intensive agriculture, as well as industry and technology to finance import of grains. Such a policy might work for Israel, which is rich in merchandise (for example intellectual capacity and computer literacy) to trade for the grains, but will be of little use for Jordan where agriculture is the main source of income for 20 per cent of the 5, 3 million population (*The Jordan Times* August 31, 2000) and few alternatives are foreseeable in the near future. In fact, ranked by “knowledge capital” (a measure of knowledge in a society based on literacy, amount of books and newspapers read, number of university students, patents taken, et cetera) we find Jordan among the “stagnant” group, while Israel ranks among the “leading” group in terms of knowledge capital (AHDR 2003: 93)

Privatisation of Water in the Middle East

Privatisation, commonly seen as a product of the Thatcher and Reagan regimes was not a new thought in their heyday. The ideas that society is better run based on common ideologies of “profit”, “invested economic interest” and “private ownership” and with an “invisible hand” kind of self-supervision implicit in this system (Adam Smith) are the founding theories of capitalism. Since privatisation, and perhaps especially privatisation of natural resources, is seen by representatives of both sides of the political spectrum as an expression of the “ultimate capitalism”, it might not be surprising that there are many and conflicting ideas about it.

William Cleveland argues that the Middle East was opened up for foreign investment as early as in 1838 with the treaty of *Balta Liman*, which abolished “all monopolies within the Ottoman Empire and granted foreign goods entry at the favourable tariff rate of 3 percent“(Cleveland 1999: 74). Generally in the Middle East, privatisation is still largely presented in the media as an almost uniquely positive and a necessary improvement from the current economic situation. This may be attributed to the fact that the Middle East has had little economic development save the oil industry. Some nations without oil, like Jordan, are granted World Bank development loans which come with specific directives to reform the economy. After the OECD/MENA Steering Group Meeting in Amman 14-15 September 2004, it was noted in the working notes from the meeting that privatisation was considered an important tool in the development of the region (OECD 2005).

The people of the Middle East have a long history of economising and making efficient their use of water. The Mesopotamians living around the Euphrates and Tigris “built both urban water supply systems and a network of water highways for navigation” (Falkenmark and Rockström 2004). It is also assumed that the use of canals, dams, weirs, and reservoirs for the distribution, control, and storage of water was first initiated in ancient Egypt (Answers.com). Thinking water efficiency is not new in the Middle East, but privatisation is a new idea within thoughts of effective use of water in the region. This may be because water in the

Middle East has traditionally been regarded as a free good to be enjoyed by all. Therefore, the idea of private contracting (and the fear of a resulting increase in cost) as a means to achieve efficient use of water may not go down all too well with all inhabitants of the Middle East.

Methodology

My decision to explore how the existence of a water company run on corporate profit-making ideas will influence knowledge, attitudes and perceptions of professionals and users raise some methodological questions which must be addressed before proceeding. In terms of methodology, interdisciplinarity presents a challenge which could take the form of either an obstacle or an exciting opportunity. The opportunity is for me to be able to mix between many widely used methods without limiting myself to either one. I started my research by conducting *textual analysis*: critical analysis of published information on water in Jordan, the Middle East in general as well as a whole body of literature concerned with privatisation theories. The first things to notice about this literature are the biases and the political agendas presented. Figures and estimates vary from one publication to another in the sensitive area of water in the Middle East, whether related to which nations use how much water, or of which nations *need* how much water, or how nations use their water for recycling⁷. Since water has risen to a vital issue of national security, there is little “objectivity” in water figures for the area. These are strongly linked to political and ideological contexts. The same goes for privatisation theories: privatisation is frequently either presented as the only means of economic salvation, or as “the devil impersonated”. As often is the case where such strong positions contradict each other, the truth might be somewhere halfway. However, it is neither my task here to uncover the “truth”, nor to claim to be the “objective observer”. My concern with privatisation of water is mainly with the *culture* of water and the culture of knowledge and usage of water. I will therefore focus less on the statistical aspects of these bodies of

⁷ As Wolf points out about two of the sources listed in the “References” of this paper “note the widely contrasting interpretations of even common history between Soffer and Mustafa, let alone the most basic hydrological data” (Wolf 2002: 4).

literature, and rather seek out the cultural and personal aspects relevant for my study.

During my research for this thesis I came across a problem of definitions: how to talk about the people who are using water distributed by LEMA. It is a political decision whether to refer to these people as “consumers”, “customers”, “users”, or “recipients”, for example. The term “citizens” would be useful if the water had been free of charge for all users and therefore something to which any citizen would automatically be entitled. However, this is rarely the case anywhere in 2005. Rather, in Amman as most other cities in the world today, one has to pay for the water one uses (either in a meter-system or as a lump sum, the latter being the practice in Amman for large consumers like hotels and hospitals, which I have not concerned myself with in this context). For reasons of simplicity, I have chosen to use the term “users” in this thesis, as this seems to me the most straightforward and apolitical reference to people’s use of water.

I have conducted extensive research within the archives of *The Jordan Times* (JT), the only English daily newspaper in Jordan. While in Jordan, I received my background information, on which most of my thesis is based, from interviews with a broad spectrum of people, including cleaning personnel, academics, employees in various Non-governmental Organisations (NGOs), taxi drivers, Bedouins, as well as people within the tourism industry. On the basis of the outcome of such interviews, I have made a framework on which to conduct *qualitative research*: formal and less formal interviews with consumers, as well as representatives from LEMA, the municipality, the Ministry of Water and Irrigation (MWI), the World Bank, and other parties in the area about their views. My Arabic is very elementary; and as a foreigner I cannot easily approach non-English speakers. I have therefore based myself mostly on English-speaking middle class Ammanians. To get a feeling for the other end of the economic spectrum, I got the help of UNICEF’s Project Assistant in Community Development, Rawan Ababneh, who is trained in fieldwork and an expert at communicating with people of various backgrounds and cultural ideas. Ababneh not only helped me modify my questions to be less sensitive, she also translated nine interviews with non-English speakers, eight women and one man.

These interviews took place in the area of Al-Nasser, in and just outside a refugee camp in East Amman. This is an old refugee camp (1948 onwards) and houses some of Jordan's 1, 7 million regional refugees (there are many more which are integrated in the society). Because many people have lived here their entire lives, these people should not be primarily seen as "refugees" in this context, but rather as people living in a poor neighbourhood, and most often with Palestinian origins. I have taken their opinion to represent working class people living in Amman, and not focused on their (mostly) Palestinian origins. More than half the population of Jordan originates from Palestine, and it therefore makes little sense to make a point of this fact for my purposes here. All the participants have agreed to let me quote them using their names. However, as there are some sensitive issues being raised, I have decided to refer to them by their first names only. In two cases, a man and a woman have called themselves by their son's names (Um Hammad and Abu Karim). I have kept their names intact, as it will not be possible to trace either one of them from these names. In one case, two women have the same name. Since there are several ways of transcribing Arabic to English, I have solved this by spelling the names differently, Ala and Alla.

I have altogether conducted interviews with 22 "water users", 15 women and 7 men. Initially, I had planned to do a qualitative questionnaire from which to deduct some "facts". However, the fact that a similar study was done recently in a bigger scope than I could hope for (Suleiman 2002) made me change my mind. I have therefore talked to fewer persons but in much more depth. The list of names of interviewees listed alongside the sizes of their families can be found in "Appendix D". I have used the provided questionnaire ("Appendix E") as a basis for questions only. The ages of the men and women I talked to range from 19-56. Of the men, two are non-Jordanians (German and Italian) who have lived in Jordan for more than three years. This enabled me to get an "outside perspective" to contrast the Jordanian ones.

I conducted interviews with "professionals" in the period between September 2004 and February 2005, and "user" interviews in February 2005. Of the ten interviews with "professionals", six have asked to remain unidentified. For that

reason I have named them sources 1- 6. Behind these numbers hide two high ranking professionals from LEMA, three prominent managers from the Ministry of Water and Irrigation, as well as a high ranking figure from the expert diplomatic community of Amman. In addition to the unidentified sources, I have also interviewed Dr Mohammed Saidam from the Royal Scientific Society, the Deputy Mayor of the Greater Amman Municipality (GAM), Mr Abdel Rahim F. Boucai, and Mr Suhail Jme'an, who is a Senior Financial Analyst of Finance, Private sector and Infrastructure with the World Bank, and a key figure behind the management contract with LEMA. In addition to these, I have also conducted interviews with the Water Efficiency and Public Information for Action, a United States Agency for International Development-funded research institute concerned with patterns of water use and conservation, the national environmental and conservation organisation the Royal Society for the Conservation of Nature (RSCN) as well as the international Non-Governmental Organisation Friends of the Earth Middle East (FOEME). These interviews have been part of my background research.

There are several limitations to my research. First, my scope is limited to 32 formal interviews (but several informal ones supply them). My non-proficient knowledge of the Arabic language has limited my potential to conduct informal conversations in Arabic. For this reason, my background research has been only in English, and the Arabic interviews I have made have been with a translator, with the restrictions on closeness and intimacy this brings to an interview. I have conducted interviews with two groups of people, as discussed above, with different views on the water situation in Amman. However, both these groups are too small to make my findings as generally applicable as I believe they might be. I have also made interviews mostly with women, and can therefore in no way claim to present here any “objective” or “universal” ideas about water. I have not performed quantitative research myself, as it is a very demanding and time consuming task which would be better done by someone local and a native Arabic speaker. However, I do not see this as a weakness, as I have been comparing two very different bodies of quantitative research recently conducted on the subject. One is the research by Rebhieh Suleiman for the Royal Technical College in Sweden in 2002, the other is the unpublished but kindly provided “Costumer

Survey” done by LEMA researchers in October 2004. I have not had the funds, the time, or the scope to override or challenge either one of these materials. I have specifically chosen *not* to present a graphic outline of the answers to my questionnaire, as the number of respondents in my study serves to make an unrepresentative group. Considering this fact I am well aware of my relative high reliance on the smaller, “poorer” group among my interviews in my discussion. This may be attributed to the fact that the less wealthy people I interviewed seemed to care more deeply and personally about water issues than did the wealthier ones; for them access to water is a budget-related matter of survival, and therefore they have stronger feelings about the provision of water, where it comes from, and by whom and how it is distributed.

Ideally, I would have liked to interview a considerably larger proportion of the citizens of Amman, on a larger geographic scope. This is because, based on background research as well as feedback from various Jordanians on some of the issues that have been raised in this thesis; I think there are points raised here which deserve to be treated in more depth (and quantitatively backed) than my research to date would allow.

Furthermore, as I have performed in depth interviews alongside the questionnaire, the answers to the questionnaire are not representative of the extent of my conversations. I have still added the questionnaires as “Appendix E” to indicate what questions all of my interviewees have been asked, and provided a short summary of the findings from these questions in the beginning of “chapter 4”. The period of study for this thesis was from spring 2004 until August 2005, with my fieldwork taking place during my stay in Jordan from August 2004 until February 2005. The most intensive interview period was between December and February.

This thesis, as I have mentioned above, is not a gender study, yet it is gendered because my selection of “users” were mostly women. This is because the questions I wanted answered demanded that I speak to the person in the household who deals with LEMA (through paying the water bill et cetera). I wanted to get information from the people who were concerned with water and who dealt with it in their everyday lives. The cultural history of Jordan is inspired and influenced

by Bedouin culture where water is a critical aspect of survival in a hostile desert land. Collecting water for drinking, cleaning, cooking and feeding animals have traditionally been a part of a woman's responsibilities in the family, making survival a woman's issue. Fetching water still falls under the obligations of women, although the methods of doing so have changed. Therefore, having mostly spoken to women can be seen to be productive: the fact that I am a woman myself might have made the conversations more personal and fruitful than had I talked mostly to men. Women have been easier to contact because I myself am a woman. For example (and in fear of reconstituting traditional ideas of gender) I have had numerous conversations about washing machines, baby care and doing dishes when speaking to women on the topic of water conservation. Men I've talked to typically would mention carwash and brushing teeth when asked the same question: "Have you or your family made any attempt to save/ reuse/ economise water during the last six years" and "if yes, what actions have you taken?"⁸

Along similar lines it must be pointed out that although I have tried to include all aspects of Ammanian society, due to my language barriers and having lived and worked in Der Ghbar, Abdoun (a rich, West Amman area) the background information behind this thesis and therefore some of the questions I have asked rely on information provided by middle class, West Amman female inhabitants. Moreover, all of the nine interviews conducted in the East of Amman were conducted on a quite small radius from each others, perhaps ten or 12 streets (two women lived outside of this area, in Alia and in Marka, also working class neighbourhoods). This could be the reason why many similar points have been repeated to me from different people. However, it should perhaps not be accredited solely to this fact, as Al-Nasser is a densely populated area. Apart from the people interviewed in Al-Nasser, I have also conducted one interview with a person residing in another and less poor part of East Amman, Tla al Ali, behind the University Road.

⁸ See question 6 in "Appendix E: The Consumer Questionnaire".

As a non-Jordanian writing on the subject of “culture” in the Middle East, a few points must not be ignored. It is impossible not to pay tribute in this respect to the late Edward Said who pointed out the “oriental” gaze with which “western” spectators enclose and shape our impression of the “oriental other” as “exotic” and perhaps “mystical”, and thus providing the “Orientals” with a new meaning based on western ideas and interpretations. I have kept with me this criticism and in the following I attempt to avoid any “orientalist” assumptions and interpretations of the Jordanian “locals”. Meanwhile, in the perspective of the people I have talked to, I am a foreigner; and my intentions could thus be questionable. Also, the fact that I in some of the interviews brought along an interpreter might have made the situation more “formal” than otherwise necessary. I do not think this has been a major aspect in this context, but it is one which I’ve kept in the back of my mind throughout. I have tried to be fair and to give “both sides” (the “professionals” and the “users”) the opportunity to speak freely and without disturbing the “original intent” (as I have understood it) of any of the opinions presented in this thesis.

There is no doubt that the topic for my thesis is one of importance to the people I have spoken to. When my translator, Miss Rawan Ababneh, introduced the topic for our interview for Mrs Um Hammad, she immediately burst out in English:

I am so happy that you’re coming to talk to me about this. I will tell you everything you want to know. This is so important for us in Jordan. I only hope that your investigations will lead to something. Who will read your book?

I told her it was not a book, but that I would send my paper to the Ministry of Water and Irrigation and to LEMA. I hope Mrs Um Hammad will be satisfied with my efforts.

PART I

CHAPTER 1:

THE LARGER PICTURE: THE THEORY AND PRACTICE OF WATER AND PRIVATISATION IN JORDAN

Most people aren't aware of water's value and therefore waste it without thinking. I would like the people who are in charge of water management to run educational programmes for consumers to make them aware that we face a big problem in Jordan due to lack of resources.

(Ekky)

Privatisation of Water: The Theory

We know that “five million people die each year from water-related diseases or inadequate sanitation” (Wolf 2005: 29). There is little international disagreement that something must be done to improve and extend infrastructure, reduce leakage, improve the technology and the quality of water. Furthermore, there is little argument as to the fact that this must be done quickly, and in a reliable and transparent matter. However, this is as far as everyone agrees.

The political world divides into two, strongly opposing poles: On the one hand, privatisation is being advocated as the sole means of effectively improving water systems in nations where poor, corrupt or otherwise incapable state systems have failed to provide adequate, cheap and reliable water to their populations. On the

other hand, it is argued that privatisation implies the removal of sovereign power and will result in governments' inability to make decisions regarding their own populations. For this reason, opponents of privatisation hold that states must maintain possession and control of the water, as water is a human right. Access to water for poor people at affordable prices will not be a priority for private companies. These companies are invested in profits, not societal stability and quality of life, the privatisation opposition argues.

Karl Wittfogel in 1957 introduced the idea that water can be used as a political tool, in his concept of the Hydraulic Society which he lays out in his study of *Oriental Despotism*. The main idea is that in dry lands such as the deserts in the Middle East, the creation of waterways can be a political tool for controlling how land is used (agriculture, et cetera.) and what land is used (the land which has access to water). In this way, being able to manipulate the water is a way to manipulate the people who depend on it. When water is laid in pipes and distributed, it changes the patterns of how people access water, and provides new areas for people to settle. Once settled in an area where water is accessed from pipes, this creates a relationship of dependence between the providers and the receivers of water. Karl Wittfogel noted that in this way, decentralised water distribution systems were linking otherwise remote areas to the central political powers. Individuals who controlled rivers, therefore, could control people (Wittfogel 1970).

According to Vandana Shiva, privatisation has its roots in what she coins "the cowboy sentiment "might is right" (2002: 23). The new settlers in America appropriated land on the basis of "who came first". In doing so, the cowboys ignored the people who were there first, the Native Americans, who were not granted rights of access to land or water under this "cowboy law" (Shiva 2002).

The argument which is still underlying the rhetoric of private possession of natural resources is the powerful tale of the *Tragedy of the Commons* (Hardin 2002). Its proposal is that everyone wants to expand their realm of access. Therefore, if the natural resource (the example Hardin uses is grass) is common, the greedy and selfish "nature of man" will see to it that everyone sharing the

commons will take a little more than their share. The result is overuse and ruin of the common resource. The very basic idea for water privatisation theory is that when water is granted economic value, it will be treated and maintained as a valuable, and will therefore be less wasted and mismanaged (Morrison and Gleick 2004: 5). Furthermore, an argument which many environmentalists also use holds that consumers as well will value the resource higher and treat it with more respect and care if it has a price that they must pay in order to access it.

According to the World Bank, privatisation, or what the Bank calls “private sector participation” can take several forms (the “management contract”, as is the case with LEMA, being one of six different shapes privatisation can take, ranked according to the level of ownership and freedom the private actor is given to conduct its business. The “management contract” is in such a view seen as a “mild” form of privatisation, while “full privatisation” is the strongest form). The theory is that the more risks and responsibility passed to the private sector, the more powerful the incentives to improve services (Saghir et al 2000: 13). In this view, the management contract represents the smallest incentive to improve, as it gives little freedom to the actor, LEMA.

Basically, the forms of privatisation ranges from handing over a company or industry completely to one or more private corporations, to more regulated forms of privatisation, with time-based contracts of various levels of responsibility and power. The basic argument behind so-called “neo-liberal politics” goes:

The dominant ideology was that one set of rules should apply to all countries, and the major representation of these rules was the idea that the proper role of the state was to provide a framework for private sector activity in a financial system based on private capital.

(Bøås and McNeill 2003: 26)

The problem with selling formally state-run companies, or parts of companies, which had a monopolistic hold of a given market, is that this could create a new monopoly in which the state does not have the power to intervene. It is obviously very important, therefore, to create sufficient controlling institutions so that the state would under no circumstances lose control of areas of vital human rights

such as water distribution. Water, because of its very nature, as was pointed out by UNESCO (2003) is such a “natural monopoly”.

The World Bank argues for increased openings for private parties into the water development sector. Some of the arguments in favour of private investment are inefficient operation of state-owned companies, corruption and financial difficulties of non-profit areas such as subsidised water distribution, causing, amongst other things, deficient pipes. In cases of water stress, such as in Jordan, the World Bank argues that a “fair price on water” will regulate the usage of this insufficient resource (Saghir et al 2000). Subsidies, in this model, should be given only to the poor. Problems with privatisation of a public good such as water would include the issue of ownership of water, local participation in government of water distribution and pricing of water.

Integrated Water Resource Management

Integrated Water Resource Management (IWRM) has, according to Falkenmark and Rockström (2004) four main aspects: first, water is “not divisible into different types of water”. Water may be groundwater, precipitation, surface water or soil moisture at various stages. The point is that use of one form of water may directly impact the level of another form, and as such, a division of various water types for different purposes without a “holistic” overview is unsustainable. The second aspect of Integrated Water Resource Management is that economic aspects of water use should be a part of the “water equation” but should not be (and seldom is) the main aspect when managing water. Societal, political, cultural and sometimes environmental aspects, whilst not always economically liable, are factors in “most, if not all societies” (ibid). Third, the *value* of water in the broadest sense of the word must be taken into account when dealing with management of water in a sustainable long term aspect. Fourth, the participation of all parties, directly or indirectly involved, must be required in decision-making regarding water. (Falkenmark and Rockström 2004: 208-209).

The United Nations, the World Bank, several non-governmental organisations (Non-governmental Organisations) and many national governments, including Jordan, call for Integrated Water Resource Management to resolve some of the issues related to inadequate management of water. According to UNESCO:

Historically, water managers have tended to see themselves in a neutral role, managing the natural system to provide supplies to meet externally determined needs. Integrated Water Resource Management approaches should assist them in recognizing that their behaviour also affects water demands. In effect, if Integrated Water Resource Management were adopted as a standard approach everywhere, it would help to foresee and avoid issues that could create conflicts.

(UNESCO 2003: 299-300)

This is, in my opinion, a valid point. Water resource management is an area which could use integration. As the World Bank points out in its Jordan report, one of the reasons for lower-than-expected outcome in its Jordan water plan was the fact that agriculture and irrigation had not been incorporated into the Bank's water strategies until 1990 but rather separated out as "agriculture". The report admits that: "even though agriculture uses the most water, the Bank's attention to water use in the sector was notably absent during 1961-90, as it focused on urban use." Hassan and Al-Saci 2004: 23). Several sources (for example Soffer 1995) point to the waste which has been carried out in Jordanian agriculture. The picture might look different had more attention been given to the very wasteful and widespread irrigation-method of over-flooding dry lands at an earlier point in time. This example illustrates the necessity of an approach such as Integrated Water Resource Management. This approach does not exclude private participation; it merely invites the private companies to work closer with other sectors in the water industry. Integrated Water Resource Management is important because policies with good intentions may very well be interfering with other, parallel policies unless they are seen as a whole, as the above example illustrates. There is a need, therefore, and more than anywhere in countries like Jordan where water is too scarce to waste, for all activities related to water to be coordinated and balanced off against one another. The goal must be a "utilitarian" one where the most water is distributed and shared among people, animals, land, industries and agriculture, in the way which will make all parties as content as possible at all times.

However, the main concern must be to satisfy the needs of people and animals⁹, but it is worth noting that the natural cycle of water (of evaporation, rain and harvest, which, ideally, if not interfered with, can be self-sustainable) may be severely interrupted or destroyed entirely if the ecological cycle is not allowed enough water to run to its “natural destinations”. In desert Jordan, this cycle may be said to be already interrupted to an extent of no return¹⁰. “Damage control” might be the main aim in this respect. I am not covering here the debates on man’s responsibility towards nature’s intrinsic right to sustain itself with water. Such a debate is an important one, but would be more appropriate in other contexts than this one.

An attempt at a definition of Integrated Water Resource Management would go towards a holistic method which incorporates all areas and approaches to water management, use and conservation equally concerned with the administration of water demand as with its supply. Obviously, from this definition, my understanding of Integrated Water Resource Management is of an approach which is easier in theory than in practice. As Aaron Wolf puts it; “Water is a powerfully unifying source, so it is ironic to the point of absurdity that water education, management, and discourse is so fragmented” (2003: 6).

Privatisation of Water: The Practice

Water, as it is noted as early as in the 7th Century in the writings of the Prophet Mohammed, is a valuable not to be mistreated, and one which must be shared by all, but owned by no one (Özdemir 2003: 15). For this reason, it is of vital importance that the source of life which is water is appropriately handled. After all, mismanagement of water today may result in further difficulties and sometimes irretrievable misfortunes upon the water sources for the thirsty of tomorrow. Populations of the Middle East have been long credited for making

⁹ On this point, please refer to my discussion of water as a human right in the “Introduction”, a fundamental notion on which this thesis is based.

¹⁰ This can be said on the basis, for example, of the River Jordan’s flow towards the Dead Sea which is heavily dammed to the extent that only ten percent of the river water flows into the “natural destination” that is the Dead Sea. I have pointed this out elsewhere in this thesis, see “Introduction: Culture and Mythology of Water Found among Jordanian People”.

good use of their water sources. The culture of damming, collecting and maintaining water is ancient knowledge of survival in the desert lands of Arabia. Moreover, as part of the silk and spice trades which have passed through these lands since the legends of *The Arabian Nights*, and with its more recent history of foreign intervention by the colonial powers France and Britain, it should seem the people of the Middle East would be open to new ideas and means of managing water. However, privatisation had a late start in the Middle East. The Arab world, until recently, seemed to be doing well with its oil and its old ways. Only very recently has “western” economic theory gained listeners and impact across the Middle East. Perhaps this is the reason why privatisation is seen (by many) as a new and welcome idea in the Middle East of today. In the case of Jordan, privatisation policies entered the economic field, as is the case with many developing nations, as a term attached to World Bank and other institutional loans.

Privatisation can be coined either as an economic salvation or as a curse - all depending on who is talking. Few issues are presented in a fashion as “black or white” as privatisation, and it is a theory which divides the political world promptly into “left” and “right”. If we add to this the elements of human rights and public good and water to all as a basic necessity, we find conflicting positions based on convictions not likely to disappear any time soon, leaving little room for negotiations or compromise.

On the one side we will find leftist privatisation opposition, represented for example by Maude Barlow when she states that: “the privatisation of municipal water services has a terrible record that is well documented. Customer rates are doubled or tripled, corporate profits rise as much as 700 percent, corruption and bribery is rampant, water quality standards drop, sometimes dramatically; overuse is promoted to make money; and customers who can’t pay are cut off (...) when privatisation hits the third world, those who can’t pay will die.” (Barlow as quoted in UNESCO 2003: 335).

The anti-privatisation movement is even stronger opposed to privatisation when global parties get involved in the scene. The presence of multinational companies

in the global water scene is a relatively recent phenomenon which goes back only a few decades. Until the 1980's World Bank loans to developing country governments focused on the creation and expansion of public water utilities (Grusky and Fill-Flynn as quoted in Johnsen 2005). Johnsen, quoting Lewis (2003), claims that "worldwide investigation have demonstrated that the enormous expansion of multinational water companies, such as Vivendi, Suez, and Thames Water could not have been possible without the help of the World Bank and other international institutions, such as the International Monetary Fund, the Inter-American Development Bank, the Asian and the European Bank for Reconstruction" (2005: 21). In this way, global water parties are aided by the World Bank and the International Monetary Fund (IMF) to expand and get acceptance in large parts of the world. Due to the sheer size of these companies and the knowledge and efficiency which follows from such large infrastructure and global experience, the global competition is threatened, as smaller investors will not be able to compete in price and expertise, the anti-globalisation and the anti-privatisation movements argue. Moreover, this "expertise" is very seldom local, but brought in from around the world. This represents a threat to local employment and fails to consider the specific local context, opponents of global privatisation point out.

Multi-national privatisation *has* hit the third world, as my case study shows, but whilst Maude Barlow sees this as a doom for all the poor people in Jordan, there are people and institutions who will readily argue that privatisation will actually provide more efficiently larger amounts of water at a reasonable cost than public sector alternatives. Furthermore, supporters of the ethos of privatisation say, the free market and competition will regulate prices for the benefit of the poor. They claim that privatisation is in fact the only answer to the problem of wasteful and corrupt management in the water sector, as private (and often global) parties possess huge experiential and technological advantages which public sectors around the world do not. Not only the obvious followers of this latter philosophy (the World Bank, the International Monetary Fund and the private sector) but also United Nations agencies are increasingly tending towards public-private (also known as "privatisation light") solutions. Is this because it might actually be true that privatisation holds some solutions to problems commonly associated with the

public sector (such as inefficiency, waste and corruption), or are the followers of privatisation guilty of “giving up the responsibility” and putting the future of people into greedy investor’s hands?

The renowned UNESCO publication *Water for people, Water for life* states that privatisation indeed must be considered more seriously as examples show that the water sector *can* be run more efficiently, and more sustainably (UNESCO 2003: 335). However, as the UNESCO-report goes on to say, this does not solve the problems with water privatisation which spring from the unique nature of water and water sources, pipes, and distribution which in effect causes it to become a “natural monopoly” (ibid). For this reason it is particularly important to maintain fool-proof monitoring of the private parties involved. As World Bank Economic Advisor and water scholar Ariel Dinar writes:

Although water has several characteristics that make it different than other commodities, water-pricing reforms are affected by the same parameters as reform in other sectors. A balance is sought between supply and demand, and the market mechanism can play an important role in doing that, although governments may need to provide some form of check-and-control.

(Dinar as quoted in UNESCO 2003: 338)

Privatisation of Water: The Ethics

Most arguments for pricing of water arise from an inefficient and wasteful use of the precious resource as a result of the fact that it is “free”. Paying for water should teach the users an idea of “value” of water. It is “important to distinguish between the *value* of water, which is measured in terms of its benefits to the beneficiaries, the *price* of water (the charges to the consumers) and the *cost* of supplying the water (the capital and operational costs of the works needed to abstract, treat and transfer the water to the location at which it is used). (UNESCO 2003: 327). In Jordan, water is priced at an average of JDs 0, 52 (\$ 0, 7)¹¹ a cubic

¹¹ All the currency exchanges between JD and US\$ in this thesis are exchanged on the basis of the official exchange rate of 0, 708 (as listed in *The Jordan Times* August 27, 2005).

metre¹², while it costs the Water Authority JDs 78 (\$ 110) to provide (*The Jordan Times*, 24 June, 2005). According to this figure, quoted by the Water Authority of Jordan (WAJ) in *The Jordan times*, water is subsidised by approximately JDs 77 (\$ 109) a cubic metre. This is done precisely because of the high *value* of water.

Water, although it should ideally (that is: if undisturbed by human interference) be sustainable, is in practice an exhaustible, finite resource which is fundamental for all forms of life, but also for commercial interests such as industry, agriculture and tourism. So whether we define access to water as a human *right* or as a *need* is more than a semantic detail. As I have pointed out earlier in this thesis, access to safe drinking water has been specified as a UN Development Goal, but *it has never been specifically coined a human right*. The World Bank, the International Monetary Fund and the UN, as well as many governments and Non-governmental Organisations share a basic belief that water shortages cannot be solved unless we change our attitudes towards water, respecting it more, developing it more efficiently, wasting less and recycling wastewater. One way to do this, it is argued (by the World Bank) is putting a cost on the water we use, making us treat it better. However, this is a commodification of water, and is in effect the opposite of treating it as a human right. If, as Maude Barlow forcefully points out, water is continuously treated as a commodity by private companies and Non-governmental Organisations, then the poorest people might end up with less access to water than before. If power over water comes into private hands, access to it might become a service for those who can pay (the most) for it, while as a *right* there must be public access for all.

Since many states and governmental institutions cannot afford to maintain, or even construct, a water service at a low cost for its citizens, especially in rural areas, the state may be tempted to enter into contracts with the International Monetary Fund and/or the World Bank. Such contracts typically stipulate the need to open up for foreign investment. Privatisation may be contractually imposed on nations through the distribution of such loans. The World Bank is run on a “dollar-a-vote basis”, which means that “voting power fluctuates, and is weighed

¹² Water is measured in cubic meters –According to www.earthcarecanada.com, “[1 m³ = 1000 litres] - [1 m³ = 220 imperial gallons] - [1 m³ = mass of 1000 kilograms]” (Earth Care 2005).

according to financial contribution” which results in the “voting weight of the North as a whole is well over 60% while that of the South (excluding the affluent east Asian countries such as South Korea) counts for around 30%” (Allan and Thomas 2000: 204). Since the 1990s, poverty has again shifted to being the Bank's prime consideration, and “at the turn of the millennium, the Bank is keen to reinvent itself as the world's major repository of knowledge on poverty and how to eradicate it” (Ibid: 206). The World Bank's position is that “governments need to do less in those areas where markets work or can be made to work reasonably well” (World Bank as quoted in Turner and Humle 1997: 183). In other words: where the market can do *reasonably well*, the market model of privatisation should be imposed. Going by LEMA and the Ministry of Water and Irrigation's claims of the profits which LEMA is making, we could say that the management contract of water supply in Amman is a good investment by World Bank's standards.

The fundamental question remains: is it at all possible to “own” water? And if it is possible, *who* can own it? The highest political body, what Plato would call “The State”? And if so, when water reaches across state borders, will the so called super-national or international organisations be able to solve issues of possession in a fair and objective manner? Shall we grant ownership to the person who came first, like the cowboys? (Shiva 2002). When historical data contradict themselves, how do we know who really was there first? In the light of the modern world's colonial history and the changing power-structures which history has brought to the present, we must question whether it is at all possible to establish “ownership” on such grounds. Jordan is a young nation with an old history, and it borders with even younger nation Israel, also in possession of an old history. Issues of ethnicity and religion are linked to land, and land is linked to water. *Who came first* in this context, becomes another way of debating *who has the right*. These kinds of debates are often linked to notions of ethnicity¹³, and can raise potentially dangerous issues. An example of this is when the discovery that the Native

¹³ It has been argued that ethnicity, originally an (unclear) anthropological concept, has changed its definition after it became a “public word” in the 1990's. The concept has, according to Bromark and Herbjørnsrud, been used to “normalise” racist, socio-cultural and political separations within populations, for example when brutal mass-murders become defined as “ethnic cleansing” (2002: 151-55).

Americans were probably not the first people on the American continent, and thus the newly granted Native American people's rights to land was put in question (for debate on this, see for example Bromark and Herbjørnsrud 2002). Such debates can easily be "translated" into the Arab-Israeli arguments over land. The point here is that trying to find "originality" and "rights" in terms of "we were here first", as indeed the wars and hostility between Israelis and Arabs have proven, will often cause more confusion than clarity, and it certainly will not bring water to the people.

Regardless of who can "own" the water, it is clear that it must be distributed in a manner as fair, accessible and sustainable as possible. The issue here is management: Falkenmark and Rockström point out that:

Water for drinking and sanitation constitutes such a small proportion of human water needs, around 2-3 percent, that there will always be enough water on Earth to enable us to secure domestic water needs, irrespective of population size.
(Falkenmark and Rockström 2004: 63)

They go onto argue that "approximately 4000 litres of water are required each day to supply an adequate diet for a human being. This is an annual water requirement of 1300 m³ per person and is almost ten times higher than the per person water need for domestic and industrial purposes added together" (Falkenmark and Rockström 2004: 181). The proper and sustainable management of the existing water resources of the world is the only way to ensure such requirements are met.

In "chapter 2" I will introduce and discuss the company which my case study revolves around, LEMA, as well as the other "guardians" of water in Amman, the Ministry of Water and Irrigation and the Water Authority of Jordan, which this thesis revolves around. "Chapter 2" will outline the background for the private involvement in the Amman water sector, and LEMA's approach to the challenge of supplying adequate water for the people of Jordan.

CHAPTER 2: THE GUARDIANS OF THE WELLS THE CASE STUDY: LEMA

Background

The Jordanian government takes great pride in presenting itself as a front-figure in the context of economic reform the Middle East (i.e. the Arab Countries). It has hosted several OECD/MENA regional conferences designed to change economic structures in the region, the latest of these being the new initiative “Good Governance for Development Programme” (GGDP). This programme which, according to the Organisation for Economic Co-operation and Development “is being carried out in cooperation with a broad range of regional and multinational organisations, including the Arab League, World Bank, European Union, as well as the private sector and civil society (...) will focus on the development and implementation of a series of reform initiatives” (OECD 2005). One of the reforms which are considered to have been a success is Jordan’s privatisation programme. The official website of the Jordanian embassy to Washington DC holds that, according to the World Bank, “Jordan’s privatisation programme ranks as one, if not the most successful programmes in the Middle East region” (2004). Jordan started its privatisation programme in 1996, which includes the Jordan Telecom, agricultural programmes, postal services, as well as public transport. Since then many new companies and sectors have followed in their tracks.

There is little doubt that one of the reasons for this trend in economic approach is Jordan’s financial situation. Although Jordan experienced economic growth in the period between 1973 and 1982, as a result of among other factors high levels of

grants and economic concessions from the World Bank after the oil boom and the various Arab-Israeli conflicts, the country was unable to meet the needs of a population on the increase and with a rising expectation towards standard of living. In 1989 the International Monetary Fund, the World Bank as well as the Paris Club were seriously involved in stabilization programmes and debt-rescheduling in Jordan. (Hassan and Al-Saci 2004: 2). Since then, poverty is still a significant factor. In 2004, 14, 6 percent of the population were estimated to live below the poverty line (Department of Statistics 2005) and Jordan remains in high debt, at a ratio of debt to total Gross Domestic Product (GDP) of 105 percent in 2000 (Hassan and Al-Saci 2004: 2). Jordan is in other words not a rich country, and it receives a yearly sum of \$290 million from the USA, of which two thirds are economic aid (Gresh and Vidal 2004: 15). In Jordan, poverty is found in “pockets” around the country, where some places have up to 70 percent of the population living below the poverty line. Amman is no such “pocket” (Department of Statistics 2005). Jordan is considered a “medium human development nation” by the United Nations (ranking as the 90th best nation to live in of 175 on the “UN Human development Index of 2004”, unchanged from 2003). There are strong and powerful investments in the Jordanian development sector, Non-governmental Organisations, national government’s foreign aid budgets, as well as private companies all have interests in the country.

There is little secrecy surrounding the complex international diplomatic ties which links Jordan to the Arab world, including Iraq and Saudi Arabia as well as to the UK, Israel and the US. Water is a politically sensitive question in Jordan, closely tied to the fragile relations with neighbour Israel. Jordan is in a highly dependent water-situation: the country uses over 30% more water than it can supply from inside its borders. The situation is not made any easier by the fact that 93% of the precipitation in Jordan is lost to evaporation (Lama Sidawi of WEPIA).

For these reasons, it is crucial for Jordan to have a coherent, rational and future-adept strategy for water use and rationalisation. This is one of the main ideas behind the highly ambitious *2002-2011 Government Water Sector Planning and Associated Investment Programme* published by the Ministry of Water and Irrigation (2002). In this document, the privatisation programme in Amman has a

prominent and promising feature. As the Ministry of Water and Irrigation write in their report:

The government of Jordan intends to transfer infrastructure and services from the public to the private sector in order to improve performance and efficiency in the water sector. The use of management contract and other private sector participation in water utilities is envisioned. The principles of build/operate/transfer (BOT) and build/operate/own (BOO) are being considered for private sector participation.

(MWI 2002: 19)

From this we can see that the idea of the private sector owning water utilities is not unthinkable for the Ministry, although this is not the case with LEMA's private involvement. However, as we shall see, not everyone is as happy with the privatisation part of the plan as the Ministry of Water and Irrigation.

LEMA's Role in Amman

In 1999, the World Bank approved a US\$ 55 million loan "for an Amman water and sanitation management contract". This private contract is a part of a large investment towards improving the infrastructure and the management of water in Amman and in Jordan. In cooperation with the Jordanian Ministry of Water and Irrigation, a bid was set out to: "(i) Improve the efficiency, management, operation and delivery of water and wastewater services for the Amman Service Area; and (ii) lay the groundwork for the sustainable involvement for the private sector in the overall management of these services." (WB 1999: 2). The background for this move towards private involvement, according to the World Bank, was that "scarce water is one of Jordan's constraints to sustainable economic growth and that the [water] sector will require substantial recognition before it can efficiently manage this resource and provide efficient and sustainable services." Furthermore, World Bank studies had found that "inefficient institutional arrangements are at the heart of the country's water resources management problem" (WB 1999: 2-3). Three years prior to the publishing of this World Bank report, the Minister of Water and Irrigation, Mr Munther Haddadin, stated that "the government has decided to choose a local firm to distribute water

in Amman on behalf of the Water Authority and to improve the water network system in the Greater Amman region”. This local firm, Mr Haddadin added, would be “chosen through free competition” (*The Jordan Times* May 14, 1996).

On June 10, 1997, readers of *The Jordan Times* were presented with a statement from Mr Joubrane Owayshech, the director of regional development in the Middle East and North Africa for the French company Lyonnaise des Eaux (LdE). This company was in 1996 “serving more than 76 million inhabitants in over 80 cities around the world.” Mr Owayshech stated that if Lyonnaise des Eaux “wins the bid for the Greater Amman project, it will create a local affiliate company to handle the contract. Our policy is to establish an affiliate with local partners for the management of the successful contract”, he added (*The Jordan Times* June 10, 1997).

Thus LEMA, an affiliate of Lyonnaise des Eaux, came into existence. LEMA is an abbreviation for **Lyonnaise des Eaux Montgomery Watson-Arabtech Jardaneh**, where the French Lyonnaise des Eaux holds 75 percent of the shares, and the Jordanian Multi-group Mongomery Watson-Arabtech Jardaneh owns the remaining 25 percent. LEMA was contracted to supply water and get rid of wastewater for a population of 2 million Jordanians residing in the greater Amman-area. This number represents 45 percent of the total drinking water consumption in Jordan (Suleiman 2002: 16).

Suez Lyonnaise des Eaux

During my interviews with LEMA, all references to its “mother company” have been as Lyonnaise des Eaux. In fact, the name of the company is Suez Lyonnaise des Eaux, Suez being one of the three major players in the global private water market. The Suez group, together with the British Thames Water and French Vivendi, control more than 40 percent of the global private market. Presently, around five percent of the world’s water services are run by private companies, a figure that has increased rapidly over the last decade, and is predicted to increase largely in the near future. These three major companies have expanded since 1990

to every region of the world. Suez Lyonnaise des Eaux has doubled its proportion of customers over the last ten years (Johnsen 2005). The fact that the French company is one of the main global water parties is significant. Even more significant is the fact that this point has not been mentioned in any of the articles I came across during my search of *The Jordan Times*' water files. Jordan is not among the nations which are primarily said to benefit from a free press. The International Press Institute in their 2004 press freedom review, say about Jordan that "the press freedom situation in Jordan is dominated by government censorship as well as self-censorship"(2005). Therefore the lack of mention of LEMA's global family may be hardly surprising. Furthermore, LEMA's global ties were not mentioned in any of the professional interviews I made. This could mean one of the three following; either this fact had no importance for any of the professional parties involved, or it might have an importance but not one worth mentioning if I did not bring it up. Thirdly, not mentioning the Suez group could indicate that the knowledge of LEMA's global connections might somehow put LEMA's reputation in a less favourable light.

The LEMA Contract

Under the Terms of Reference (ToR) for the Management Contract of 1999, LEMA, the operator of the water contract, is responsible for "managing water and wastewater services in the Service Area [Greater Amman] under a 4-year performance-based management contract." (WB 1999: 5) The executing agency is the Water Authority of Jordan, while the institution which carries the "overall responsibility for project coordination" (ibid) is the Ministry of Water and Irrigation. Furthermore, a Programme Management Unit (PMU) which reports directly to the Water Authority of Jordan overlooks the day-to day actions of LEMA and coordinates relations between LEMA, the Water Authority of Jordan and the Ministry of Water and Irrigation. The offices of the Programme Management Unit are located inside the Ministry of Water and Irrigation-building. In practice this means that the Water Authority of Jordan owns the water resources in Jordan, the Ministry of Water and Irrigation holds the political responsibility and controls the supervising body, while LEMA's job is to provide

water, customer services, handle complaints, and do some of the maintenance of water pipes. It is important to mention that LEMA is not responsible for (nor has it got any access to) the main pipeline-system bringing water to Amman from various dams around the country. This is the Water Authority of Jordan's territory. LEMA handles pipelines within 500 meters of houses only. According to the Ministry of Water and Irrigation:

“The water and sewage system is not a part of LEMA's commissioning, and according to their contract, they are only responsible for the pipelines 500 meters away from houses and up to the buildings. Inside it is the people who live who are responsible, and more than 500 meters away from the houses, it is the Water Authority of Jordan who are responsible. The 500 meter zone is LEMA's responsibility with money from us [MWI] to carry it out.”

(Source 2)

LEMA also does not set its own prices, nor does the company have any say in political aspects such as from where the water is brought into Amman. LEMA has 1, 250 employees, of which four are expatriates within the administration.

Although a private company, LEMA is contractually obligated to uphold the politically imposed employment system. A bonus system to improve efficiency has been installed, which according to LEMA professionals has proven effective to get employees to work harder. However, according to the contract, LEMA is not entitled to fire any unproductive staff member, but rather to relocate any unwanted person to the Ministry of Water and Irrigation. Such a policy ensures job security despite the new (foreign) ownership, and is inasmuch a good one. However, this also causes potential difficulties in ridding the water sector from corruption and inefficiency, as it means that potentially corrupt or inefficient people cannot be let go, but are merely moved to another position within the water system where they still might cause problems.

Under the Terms of References, the contract should be renegotiated with an open bid from water companies interested in the distribution contract in Amman every four years. However, after 6 years there have been no such renegotiations. A rumour of an open bid to commence early 2005 was denied

by Ministry of Water and Irrigation, with the comment that:

LEMA was granted a two year extension on their contract for many reasons. The LEMA contract is a part of the large project called the Capital Investment Project which will end next year. The Capital Investment Project is concerned with the rehabilitation and restructuring of the network of all of Amman.

(Source 2)

The failure to uphold the conditions initially set by the World Bank is being explained by the state of affairs in the Jordanian water sector at the time of LEMA's entrance into the field. Worries that these conditions might be used to extend the contract even longer, and implications this might have for the transparency within the water sector, as well as for the free-market ideals imprinted in the capitalist economy, do exist. However, according to Mr Suhail Jme'an of the World Bank, debates about the phrasing of the next contract have long been going on, so it may be wise to wait till the end of 2006 before uttering such fears too loudly.

I will not discuss implications of capitalism and privatisation on the monopolistic nature of water here, as the management contract cannot be defined as privatisation as such. There are several important differences between the terms of the contract I debate in this thesis and what most people would define as "privatisation", as has become clear in my selected description of the Terms of References above. LEMA, from the Terms of References, does not have the right to concentrate merely on the profitable aspects of water distribution, and, as mentioned earlier, cannot set its own prices. In other words, public ownership is not threatened, merely modified. Management contracts may be seen as the initial stages of privatisation (Johnsen 2005). However, this is not necessarily the case here. In fact, based on the statement of source 4, a senior manager within LEMA, "fully private" ownership of Amman's water resources will probably never be profitable, and therefore not considered worth the risk for a private company¹⁴. The contract can be seen as cooperation between the Water Authority of Jordan, the Ministry of Water and Irrigation and LEMA, in which the two former pay LEMA to perform a service, and the latter perform this with a larger and more

¹⁴ See "chapter 3: Privatisation of Water in Jordan: The Professional Perspective of LEMA"

international expertise than the public water company benefited from. However, the contract also allows for more freedom for LEMA to conduct its business than the public water company had. One such freedom is the “freedom” to cut off people from water supply if they fail to pay their bills. In this respect, the contract takes a less people-oriented shape.

So although I am not discussing a “hard” form of privatisation, it is privatisation nevertheless. The following chapters in part II discuss dimensions of privatisation of water from two perspectives; the views of the professionals and the users of LEMA are discussed respectively.

PART II

CHAPTER 3: PRIVATISATION OF WATER IN JORDAN: THE PROFESSIONAL PERSPECTIVE OF LEMA

LEMA – the Introduction of the Private Water Company to Amman

The management contract in Amman is the first contract, and the first step towards total privatisation. The future of the Water Authority is to privatise the public sector and there is no way to return.

(Source 2)

This chapter presents comments from experts within the Amman water field¹⁵. In a country like Jordan, privatisation in the fragile water sector is by many people regarded as a controversial step. However, among the professionals I spoke to, only two voiced sympathy for this sceptical view. All made a distinction between “full privatisation” and a management contract. A senior manager in the water company LEMA explained:

The water issue in Amman is solved by a management contract because full privatisation cannot be the solution for a middle-developed country. Rather, the solution must be a partnership between public and private.

(Source 4)

Not only that, this LEMA manager says, but “since water is a social and a political right, privatisation cannot be the solution as private companies will not

¹⁵ Details about persons interviewed can be found in “Appendix A List of “professionals”.

accept the risks involved in such an ordeal” (Source 4). Implied here is that a highly regulated and prize-controlled enterprise such as water distribution will hardly be profitable, and that the responsibility for maintenance will require too much of the budget for a fully private company to be interested in taking the risk. “It will simply not be profitable”, source 4 tells me.

The way this LEMA officer uses the term “privatisation” tends towards what the World Bank would define as “full privatisation”, and in effect serves to clear LEMA of the responsibility of being “private”. Source 4 is keen to make this distinction so clear to avoid being attacked by what he calls the “demonization of private activities”: In France, for example, he said: “The French documented position is that privatisation is the devil” (Source 4). In France in 2004, Suez was, together with Vivendi warned of “uncompetitive behaviour”. According to Johnsen, “The French Competition Council ruled that they had been abusing their market dominance in France, where they control 85 % of the private water. The two companies had created joint subsidiaries in 12 areas, sharing the profits of a water concession instead of competing for it” (2005: 27). This may be an example of the mentioned “French demonization”. Perhaps this is why one of the factors of success for LEMA’s French “mother-company” Suez Lyonnaise des Eaux can be said to have been to extend its operations outside France, to nations where privatisation is less widespread and perhaps therefore less rigorously opposed.

As a consequence of not being fully privatised, but rather having a contractual agreement for water supply, the limitations on LEMA presented by what was by many professionals described as a “strict” contract, were mentioned as a problem. LEMA’s lack of free funds to invest, Suhail Jme’an of the World Bank pointed out, is a serious loss, since LEMA is the one with the best knowledge of the business it run. Instead, LEMA’s powers over investment are limited to advising the Water Authority of Jordan on areas which should be considered investment-wise. Suhail Jme’an of the World Bank informed me that for many reasons, including the one mentioned above, a revised and “adapted” version of the current management contract more along the lines of a full public-private partnership (a 100% state owned company running on private standards, as is currently being

tested by the water company in Aqaba, a city in South Jordan, by the Red Sea) is presently being discussed for the upcoming renewal of the contract.

Contractual problems aside, none of the professionals interviewed would argue against the many advantages of the current contract as apposed to the former, state run distribution. A higher manager with the Ministry of Water and Irrigation with a previous managerial position within LEMA is clear:

It is not easy to work with public regulations. The private sector, which takes greater risks and has more power and less bureaucracy, can be more flexible to find solutions and resolve problems. There used to be a rationing programme all year round. Seven years ago most areas were connected 24 hours a week, some 48, with the average of 32 hours a week. Nowadays, around 30% of the area is connected to continuous supply of water in the winter, less of course, in the summer season. In 2003, the average was of 40-45 hours a week. In 2004, 90.000 customers have a continuous supply of water. Experience has undoubtedly benefited the situation. I know. I know EXACTLY the situation before.

(Source 2)

Undoubtedly, the access to water has improved in many areas of Amman in the time since LEMA has been in office. The credit for this should be shared with the Water Authority of Jordan for undergoing some serious pipe repairs during this period and before, as well as a few relatively good rainy seasons, and more importantly, exchange agreements with Israel, allowing some more water to be used for distribution in Amman.

The “Foreign” Versus the “Native”

One of the main issues which was raised during my interviews, was the one concerning LEMA being “French”. As one of the former Middle Eastern colonial powers, the French are not seen as having the cleanest of records among (some) Jordanian nationals. Much can be said about Suez Lyonnaise des Eaux, of which LEMA is a part, but the company can hardly be accused of a “McDonalds” approach (Ritzer 1998), treating every place as the same and enforcing standard procedures and actions regardless of local culture, tradition, religion and custom. Is it therefore of any significance whether LEMA is of non-Jordanian origin? During my conversations, I noticed the contradiction between the strong

inclination to describe LEMA as a *Jordanian* company and the stressing of the benefit of *outside expertise*. Despite these contradictions, neither of the arguments is wrong: LEMA can be said to be a “Jordanian branch of Suez Lyonnaise des Eaux, which does benefit from an “outside expertise” management:

LEMA is a Jordanian company. Only 4 of its employees are foreigners. They are here so we can learn from their experience of how to manage in the water business. As you know there is a big shortage of water, bad networks, and no money. We Jordanians work in this situation. Anyone can work where there’s network, money, and water in the pipes. We have a very good experience to deal with the situation, but we will get even better with outside help.

(Source 2)

However, as we will see in the next chapter, this may not be the perspective of the consumers. The Deputy Mayor of Amman, Abdel Rahim F. Boucai, from his experience of conversations with inhabitants of Amman said: “For me, and the citizens, they see no difference between LEMA and any foreign company. And in this situation – they are privatising everything.” And symbolic issues of being an “outsider” can be real obstacles for water professionals in Jordan dealing with LEMA when matters of trust in the water company are debated. This is an important point, and one which is discussed more in depth later in this chapter¹⁶.

LEMA and Human Rights

I’ve grown to realise that privatisation is the only solution. Prices, frankly, are not our problem. The company must get paid. The government must give out subsidies. There’s no way any company will work without getting nothing. If the tariff is increased, the customers must pay. It’s not our problem. I think they [the government] will resolve that. We don’t have another choice.

(Source 2)

A high official within the Programme Management Unit pointed out to me that “one of the main advantages of the LEMA contract is that it provides LEMA with a right which the government previously did not have – the right to cut off the access to water if people do not pay their bills.” In my view this is a dubious right to be in possession of, as it effectively removes the fundamental right to water –

¹⁶ See sub-heading “Working Culture: Good Management Goes a Long Way...”

or so it would seem at first glance. As a matter of fact, the reason why cutting off the supply can be LEMA's right, is that in Jordan it is possible to rent a water tank-car to provide fresh drinking water which can be filled onto the water containers which most people have fitted onto their rooftops¹⁷. It is therefore possible to argue that *no* right to water is being removed, as a person or a family cut from LEMA's supply can simply order one of these tanks, albeit at a higher price (it is worth noting here that some people with large consumption, like Abdel Rahim Al Bucai, find the prices of containers more reasonable than LEMA's¹⁸). In this way, LEMA cannot be held responsible for supplying water to non-paying customers, as LEMA theoretically is not the only provider of water in Amman. In practice, however, there is little water in Jordan and the mentioned water tanks are expensive and unable to supply a large number of people.¹⁹ Therefore, in the name of human rights, I find it hard to agree with the idea that LEMA's ability to cut off water from customers, who for whatever reason do not pay, is an advantage.

According to the LEMA report presented to the Ministry of Water and Irrigation for October 2004²⁰, there were 2,800 disconnections and 2,300 reconnections during that month. This means that 500 families were left without access to the cheapest alternative of water in October 2004. When I presented this issue to source 4 of LEMA, he was keen to point out that this is a relatively small number, and that the ability to threaten with disconnection is a crucial tool in making people pay. "We do around 40 000 disconnection visits each year, two thirds of those pay on the spot. This out of the 350 000 meters we currently have." (Source 4). Also, source 4 justifies this activity by pointing out the corruption and lack of confidence in LEMA among some Jordanians: "The fact that people can afford to pay the bills, doesn't necessarily mean they will actually pay," source 4 told me. Whether or not this applies only to a small number of people, this issue is in my

¹⁷ As described in "Introduction".

¹⁸ See Mr Bucai's statement under the sub-heading "Privatisation and the Price of Water" later in this chapter.

¹⁹ After watching a driver of such a green tank (they are green to be distinguished from tanks carrying oil, for example which otherwise look similar) filling from a dirty pond on the countryside, I have reasons to suspect the water from such tanks is not always clean, either.

²⁰ Not published, but quoted to me during a meeting with source 3 on 20th December 2004.

opinion one of high importance, as it uncovers a fundamental aspect of privatisation: *who* are the ones to make decisions about water.

Can the fact that some people are not considered “trustworthy” in the opinion of the private water company grant the right to deal only with the ones proven “worthy” of such a trust? If we are to believe LEMA’s customer service, 92, 2 percent of the people asked thought “illegal use” to be “unacceptable”. (LEMA 2004). This may serve as an indicator that the problem of illegitimate connections to pipelines is indeed small, as LEMA claims. However, one should be sceptical as to the accuracy of the result of the LEMA questionnaire for two reasons: firstly, the respondents knew that they were being interviewed on behalf of LEMA (and might therefore be afraid of repercussions of answering favourably of illegitimate connections); secondly the phrasing of the question “Do you believe illegal use to be acceptable” (question 53a) can be seen to be leading the respondent towards a negative answer.

Nevertheless, if 11 percent of the customers faced with disconnection pay on the spot as LEMA claim, then it cannot be denied that a lot of people who don’t pay are in fact able to pay their bills, and as such, LEMA must be allowed to insist on their right to get paid for their services. However, this must be done in a way in which it does not violate in any way the human rights of (poor) people to access water. As blatant as it may seem, the real question here is: Whose benefit is the water for: the private company to make money in the most efficient way, or for the people to drink?

Developmental Aspects of Access to Water

There is hardly enough water in Jordan for sustainable use. And, although there are currently good programmes in the national school curriculum teaching the

need for preservation of water²¹, the older generation does not seem to have gotten the message about conserving the precious drops. Not only is there not enough water to run through the pipes continuously, but, although there has been considerable improvements on the leakage front, 43% of the water will still be lost to leakage. So is it a good thing at all to aim for continuous supply? As one LEMA official pointed out, “seven days a week supply means seven times the leakage. Since everyone has got a huge container on their roofs, they don’t need water every day. Three days a week is good in my opinion. But the amount of supply is a measure of development; this is why the goal is continuous supply, like there is in Europe.” (Source 5). This is a valid point. Despite improvements during recent years, almost half of the water still leaks out of the pipes in Amman, long before the water can benefit land, animals or people. And it may be true that it would be irresponsible towards the limited water resources there are to aim for continuous supply to all of Amman until the piping system has improved significantly. The issue therefore must be a complete renovation of the old pipes. The Water Authority of Jordan is currently working on improvement of the pipeline system (in cooperation with numerous donors, most notably the World Bank and the United States Agency for International Development, according to Abt Associates 2005) as part of the Capital Investment Project, due to end 2006. As mentioned in “chapter 2: The Guardians of the Wells: The Case Study: LEMA”, piping is not part of LEMA’s jurisdiction. For this reason, LEMA can not be held accountable for this aspect of the water management system. However, there are other ways to look at this water supply in terms of development.

In the next chapter, “The Story of LEMA from Below”, we will hear stories of professional women who see no choice but to take the whole day off work, the one day a week when the water comes to their neighbourhood. According to these women, if they do not spend the whole day washing clothes, dishes, and the house, there will simply not be enough water for the family for the week, despite the capacity of their water containers. If this is the case for more women in Jordan, this can have potential application for the entire national economy. On the

²¹ One example of such work is WEPIAs project on awareness-raising in schools (see <http://www.aed.org/Projects/wepia.cfm> for more information)

basis of Amartya Sen's ideas of *Development as Freedom* (2001) we can say that there are two important lacks of "freedom" here: The lack of freedom to choose freely how to organise the day, and perhaps more importantly, the issue of freedom to enable women to be a productive part of the working force. These are important aspects for women's freedom to develop.

Privatisation and the Price of Water

The tariff system (in Table 1 on page vii) is designed to make large users pay for the water, and to leave small users with a minimum sum of only JD 3.50 (\$ 5) a quarter. This is for 20 cubic metres of water²². In the words of one Ministry of Water and Irrigation official: "the system is developed so that those who spend more than 20 cubic meters subsidise those who do not" (Source 3). One of the reasons for the higher bills, according to LEMA, is this payment structure which was outlined by the Water Authority of Jordan and used before LEMA's entry into the water field. "People are experiencing bigger bills because more water is available. If you double your usage from 40 to 80 cubic meters, your bill will multiply by 6" (Source 5). The problem with this way of thinking is that large families on one meter easily will use more than 20 cubic metres per month. However, according to source 3, "60 percent of the consumers pay the minimum rate of JD 3.50 per quarter." The main human right involved, he therefore suggested, is in fact *access* to water. And, he said, "People *do* have more access now, although they have a higher bill. We now have 340 000 customers out of two million people" (Source 3). Nevertheless, as a LEMA representative told me: "we discover around 700 illegal connections every month" (Source 5).

Abdel Rahim F. Boucai, the Deputy Mayor of Amman, owns the family gas station and is clearly not among those 60 percent with a bill of JD 3.50: "I personally buy water from tanks because I use a lot of water for my gas station and feel the tanks are much cheaper than LEMA's water", he explained. "Many industries and other big users think like me." Abdel Rahim F. Boucai told me that

²² Water is measured in cubic meters. According to Earth Care, "[1 m³ = 1000 litres] - [1 m³ = 220 imperial gallons] - [1 m³ = mass of 1000 kilograms]" (Earth Care 2005).

the municipality received several complaints about faulty water meters: “People are complaining to us about LEMA all the time. The meters especially are a big problem. People, who used to have bills of 42-50 JDs [\$ 59-71], suddenly see bills of 3-400 JDs [\$ 424-565]. This is because the pipes pump air, which is read by the meters as water, and in this way litres and litres of air are being calculated as used water,” he says. Complaints along these lines are common also among the users presented in the next chapter.

Several of the people I have interviewed complain about bills rising since LEMA took over the water distribution. Although this is not an issue of LEMA *per se*, since prices are, as mentioned earlier, not set by LEMA, and the current price tariff was in place prior to LEMA’s takeover in 1999 (MWI). Furthermore, since LEMA entered the field, major work on meter improvements has taken place (with financial help from the French government, among others, according to LEMA). However, LEMA professionals admit there is still a problem with accurate meter readings but claim the problem is smaller than complaints indicate (Source 5). The high number of complaints about inaccurate meters is by LEMA accredited to the rising bills caused by the larger amount of water available in the pipes. In this way, LEMA turns one of the primary objections against them into something positive for the company. Meanwhile, regardless of the actual reason for this problem, people do not seem to want to stop blaming their high bills on LEMA.

This is an example of what I have termed the “passing of blame”. Some of the people in my study, as well as the interviewed representative for the Municipality, blame LEMA’s faulty meters for their misfortunes. LEMA in turn blames the accusers of exaggerating the problem, and of inability to realise that their higher bills are caused by their own increased consumption. At the same time, LEMA’s source 5 expresses resentment towards the Ministry of Water and Irrigation and the Water Authority of Jordan for failing to donate money towards further meter improvements. The contract, source 4 told me prior to this, does not enable LEMA to act freely in going ahead on investments they see as fundamental. Rather, LEMA, according to source 4, has merely got the possibility to suggest towards the Water Authority of Jordan and the Ministry of Water and Irrigation

areas LEMA sees as in need of improvement (Source 5 is presented with an accurate quotation on this issue under sub-heading “Power and Responsibility” later in this chapter).

Upon raising the concern of inflexibility of the contract presented by LEMA to the Ministry of Water and Irrigation’s source 3, I am told that “LEMA has a fixed fee and also gets five percent of the surplus value they can use for cash flow or towards any improvements they see as fundamental to their profits.” No admittance of responsibility on Ministry of Water and Irrigation’s part, in other words. This kind of shifting the responsibility leaves the reader (and certainly the LEMA user) in doubt as to who can be held accountable for concerns such as these. I will return to the implications of this later in this chapter.

Quality – Bottled Water and the Scare of Tap Water

Numbers vary, and can be somewhat unreliable²³, but there is no doubt that bottled water usage is on the increase in Jordan. This may be related to the (probably decreasing but) very real scare of the cleanliness of tap water in Amman. One of my sources with the Ministry of Water and Irrigation told me that “In 2003, bottled water increased more than ever. Technically, the [LEMA] water is better than ever, but perceptions about how the water is are worse. The reason for this is that people are increasingly wealthy in some parts of Amman while aggressive salespeople sell filters based on a misconception that the water is impure and dirty” (Source 3). According to two of my sources (3 and 4), filter sales was perceived to be the main problem behind this “misguided” idea of dirty tap water. However, as we will see in the next chapter, no evidence of this was found in my study²⁴.

²³ See “Introduction”.

²⁴ As I have mentioned in the Introduction, my study presents too small a section of the population to make any general claims. According to the LEMA survey (2004), 14, 1 percent of the people asked were using filters. It is therefore not surprising that I could find no evidence of it in my study. (Filtered water is not mentioned in Suleiman 2002).

Another reason for the increased bottled water consumption must be said to be a lack of confidence in the water company, as a consequence of a water contamination incident at the Zai water treatment plant in 1998, resulting in the resignation of the then Water Minister, Munther Haddadin. (*The Jordan Times* August 20, 1998). This did not involve LEMA, as they started operating in 1999, but the scandal, which involved several high-ranking professionals, was featured in Jordanian media over a long period of time, and was, according to *The Jordan Times*, handled badly by the water authorities.

The Jordan Times describes how contradictory messages as to the reasons for the incident had been given to the public (ibid). With this in mind, it might not be surprising that when one LEMA official was asked to rank some of the most important issues for LEMA customers, *water quality* came out on the top: “People’s concerns are water quality, water reliability, finally price and then service” (Source 5). Although a higher LEMA official holds that “the water in the Amman-area has in fact a higher degree of compliance with international water standards than Europe” (Source 4), LEMA is presented with a problem getting people to see this point:

Still, people think the water is dirty. And people think that privatisation is a part of the problem. People are suspicious. This is a problem of perception; and one much harder to deal with than if there was a *real* quality problem.
(Source 4).

I will return to this discussion of perception on water quality when I deal with the user’s perspective in the following chapter.

Another point about water quality which was raised from several official voices was dirty containers on people’s rooftops. The culture of storing large quantities of water on rooftops²⁵ has come out of a history of uneven supply and the crucial need to keep water for later use. For this reason, those who can afford it keep large containers which are filled once a week at a minimum according to LEMA’s rationing schedule (See Map 1 on page vi). The old water which may have stayed in the containers for months is then constantly mixed with new, clean water. This

²⁵ See also “Introduction”.

can result in dirty and brownish water in the taps. As a LEMA manager told me: “the quality of water may in fact be bad some places; but this is not related to the water in the pipes but rather to dirty water containers in which water is stored” (Source 4).

The water in Jordan comes from underground aquifers as well as from the Jordan River. However, there is far from enough water in Jordan to serve the rising population, and Jordan uses about 30 percent more water than it can supply itself with. Deals have been made with several nations, including Israel, about donation and exchange of water. However, Jordanians are generally sceptical towards any action from Israel. The fact that the Jordan River is shared with Israel (as well as with Lebanon, Syria and Palestine) is therefore seen as a sensitive national security issue. There have been many rumours of the Israelis poisoning the water, for example (*The Jordan Times* 20 August, 1998). Such rumours also contribute to a rising Jordanian suspicion of the purity of the water²⁶.

Sources 3, 4 and 5 all mentioned a company selling water filters by feeding on this scare of impure water. Apparently, this company approaches people with “scientific tests” which reveal tap water to be brown and with impurities. Undoubtedly, given the scandals and the suspicions, such a sales-technique would serve to emphasise and build on the scare of water. However, I have not been able to track down any such company or met anyone approached by it, and therefore cannot say anything about its alleged impact.

²⁶ As we will see in the following chapter, the ideas mentioned earlier on “passing blame” might be said to be a major issue, not just in water management but generally in Arab sentiment (and sometimes also in Arab politics). The construction of the state of Israel is blamed for all kinds of Arab shortcomings. In Water issues in the case of Jordan, these kinds of sentiments may be said to have some foundation, but little point. The Jordanian people need the water to be distributed in the best possible way. What is done is done, it is high time to move on and cooperate to make the best of what there is.

Success Story?

The Jordan Times tells the story of LEMA, with some exceptions, as a success story. So does the World Bank, the OECD, as well as most of the Jordanian professionals I've met. The general mood was that LEMA had been a large success, especially given the challenges they were presented with at the initial phase²⁷. "The customer services have improved greatly since LEMA's entrance into the market. We have a good management contract in Amman. All the employees are former employees of the Water Authority of Jordan and Ministry of Water and Irrigation. LEMA has managed to change the mentality of our customers as well as their employees. They have good training programmes, a good and new computer system. Where there used to be 15 computers in all of the water distribution system there are now 150" (Source 2).

This kind of satisfaction was expressed all around during my interviews with professional sources. In fact, only one of my sources expressed dissatisfaction with LEMA. Abdel Rahim F. Boucai told me that in his opinion "LEMA is not really a success. They are very good at collecting money but not as good on service and controlling the actions of the companies they subcontract. Where's the supervision?" The fact that the only official I talked to who was not directly involved in the LEMA contract presented such a strong opposition is noteworthy. The fact that Mr Boucai is the only *elected* official in my study, is also telling. But of what? This may simply be an indicator that Mr Boucai in light of his work spends more time listening to people's complaints, and therefore is more sensitive to their perspective on such issues. Furthermore, as a politician and not a bureaucrat, Mr Boucai may be more inclined to using sensational language, and less prone to tone things down. Another aspect is that as an official who is not involved in the LEMA contract, he carries none of the responsibility for the contract to work out well, and therefore can allow himself to be more critical of the events taking place. It is not my place or intention, nor am I qualified to distribute credibility among my sources. Suffice to say that the differences of opinions may be worth taking note of.

²⁷ As described in "chapter 2: The Guardians of the Wells: The Case Study: LEMA".

Working Culture: Good Management Goes a Long Way...

Water rationing is not a problem of access per se, as much as a problem of water culture. Delays in water disorganise family life and disrupts habits and traditions.
(Source 4)

Access to water has undoubtedly improved, credited, for reasons I have already mentioned, mostly to LEMA. In 1999, the official estimate quoted in several books (notably Soffer 1999) was 55 percent of water which was unaccounted for. The water was, according to Soffer, mostly lost from leaking pipes. The same figure now, quoting official LEMA documents, is at 43 percent²⁸. Furthermore: the office efficiency has improved compared to what it was prior to LEMA. People have told me horror stories of long journeys and endless waiting just to pay their water bills. Today, most of LEMA's customers can pay at their own house, and even via SMS. A LEMA-official was proud to tell me that LEMA had computerised Amman's water company: "in 1999 we had two computers at LEMA headquarters, now we've 2-300 in our network" (Source 4).

But how does one go about such a process: Surely, it takes more than the four expatriots who are currently in LEMA's employment to turn over a working culture? A senior LEMA manager told me that "Changing a working culture is a slow and step-by-step process. We've introduced bonus based performances and crushed down on *wasta* (see definition in "Appendix F"). And the measures we've taken work." (Source 4). When *wasta* is mentioned in this context, he probably referred to a story which I was told by source 3 of the Ministry of Water and Irrigation. One of the best things that LEMA had accomplished, according to this source, was a transparent enough system to make even high ranking government professionals liable to pay their bills, an accomplishment which had not been seen previously in the rather non-transparent Jordanian society (Source 3).

But can corruption be eradicated that easily? Elsewhere in this thesis the professionals mention that none of the former employees of the water company can be fired. Following this logic it must mean that this unwanted staff is still

²⁸ According to an internal document I was shown during a meeting with source 3 of the Ministry of Water and irrigation on 20th December 2004. This document is not published.

around where they may do harm in the supervising sections of the Ministry of Water and Irrigation. Source 3 tells me that since LEMA took over the water distribution, politicians and other VIPs were suddenly forced to pay their bills. What is implicit in this statement is that prior to LEMA, some VIPs did not pay their water bills. LEMA's efforts against corruption and *wasta* should be encouraged and appreciated, but if the corrupt professionals are still working around LEMA, is there not still a potential problem?

These are internal decisions for the Ministry of Water and Irrigation, and for all I know, the professionals in question have been removed from positions of power. It is nevertheless a point worth mentioning in this context. Since water is a matter of life and death, then even the possibility of corruption in this field is a problem (indeed, if the LEMA management has managed to rid itself of corruption during its six years in office, then the methods used should be shared for the benefit of many aspects of Jordanian working culture. Certainly, beating corruption without giving away the state's ownership of the resource would mean a strong argument for management contracts all over the developing world, where corruption still ranks as a serious problem.)

Cracking down on corruption and introducing a new working culture based on achievements rather than on position and connections will, in LEMA's view, result in a new kind of appreciation and respect from the Jordanian people. One of LEMA's representatives admits this is a long term task. It is deeply rooted in the culture to be distrustful of authorities. As source 5 explained:

People associate paying for water with belief in authority. In Jordan there is not a great belief in authority. In Norway or the UK for example, the perception of the public water is good, here it is bad. People are distrustful. People are afraid, for example, that Israel will poison the Galilee water.

(Source 5)

Here again we find a reference to Israel. Source 5 presents the problem as a matter of people being incapable or unwilling to change their scapegoat and their worldview. Source 5 may have a point, but one which presents only half the truth. As a private company, LEMA is facing problems with implementations of new

ideas and structures, but does this mean that the distrust of people is not founded in reality? Feedback from some LEMA users mention that the company has done a great job in customer services (indeed, LEMA's own research concludes the same). However, the same users say that in their opinion, LEMA has not done such a good job of improving the water quality (see next chapter for more discussion on this). This is a classic matter of a "chicken or the egg" argument: which came first, the lack of confidence or the dirty water? Nevertheless, such a point must also be taken into account when discussing why there may be a lack of confidence in the water company, new or old, private or public.

Another aspect of LEMA's attempt at improving the relationship with customers is to make the bills more understandable for the users. Interviews with users in the next chapter support this attempt. In this respect, having reliable and accurate meters to document the usage is seen as a key aspect. Source 3 was proud to inform me that "80% of all meters in 2005 are hand-held." However there is, according to LEMA, still need for more and improved meters. Towards this end, a donation from the French government has been requested, and granted, but I was told that "The French government has agreed to give us more money, but far from enough. We need to invest in more meters. People still feel that the meters are bad but in fact they are not so bad" (Source 5). Having better and more accurate meters, this LEMA employee hopes, will ease suspicion such as the one mentioned by Abdel Rahim F. Boucai of the Municipality. His (and others') lack of confidence in the readings are deeply held convictions, which will remain even if it should turn out that the foundation for the suspicions does not hold.

Mr Mounir Oweis is the head of the Programme Management Unit. They are the ones who handle the supervision of, and cooperation with LEMA. The fact that Oweis is also the former deputy director of LEMA might be seen as a great advantage. Others again will see this as a concentration of power over water and question Oweis' neutrality in his dealings with LEMA.

LEMA professionals hold that there is a long way towards a smooth and efficient running of the water in Amman. Source 4 assures me that LEMA has improved the situation: "We've improved management skills and we've improved on

efficiency, but we have not been able to change the culture in the six years we have been active in Amman.”

Power and Responsibility

One major obstacle to LEMA’s freedom of action, according to a senior LEMA manager, is the “Amir Law” (the law of the prince), which stipulates that it is not possible to ever cancel any debt to the government. Source 3 of the Ministry of Water and Irrigation informed me that there are 18 million JDs outstanding from unpaid water bills. For this reason, LEMA is tied up in the business of old debt, and this locks some of their budget received from the Water Authority of Jordan. As source 4 told me: “Amir law is one obstacle. This public protection of the government is making it very hard for LEMA to have any control of the situation.”

The budget is also tied up by the contract itself:

The budget we receive is controlled by the Water Authority of Jordan. The World Bank is financing a fixed fee for LEMA in addition to the 5% of the profits we get from the Water Authority of Jordan. All profits, except the 5% are returned to them and redistributed as they wish, making it impossible for us to invest it where we think it is necessary. The cash result is not profitable for us, but for them. Water is a special, and politically sensitive case, there are many reservations. No foreigners can make any kind of decision on how to use the water, the government and the people have to be the ones. Therefore we have no power over our business, no power to invest, although we are the ones who see what is needed.

(Source 4)

From the Ministry of Water and Irrigation’s point of view this is not the case. Source 2 points out the “free” funds which LEMA gets from the World Bank: “The World Bank is supporting this project, providing yearly budgets according to World Bank procedures. This money is given directly to LEMA and they get to spend it on what they choose. The World Bank will continue to support LEMA in this project.” (Source 2)

On the side of the consumers, LEMA is not responsible for raising awareness on conservation of water. Therefore, it is easy to blame the consumers for not taking action when it comes to consumption: I was told that “the idea of personal responsibility is very low. People clean their cars seven days a week, although the tariff structure does not encourage more use.” In fact, I was told, “the more water is available, the more is being wasted” (Source 5).

There may be many advantages to the specific formulation of the current contract; most notably that the Ministry of Water and Irrigation and the Jordan authorities do not lose control over the water company. This is in my opinion a key aspect in private dealings within such a sensitive and crucial issue such as water. However, the fact that so many parties are involved provides an opportunity for confusion concerning who is responsible and accountable for what. The fact is that responsibility and accountability are both outlined in the contract, and as for who is responsible for the water situation in Amman in general; the Water Authority of Jordan clearly has the primary responsibility.

Since the Water Authority of Jordan is a sub-section of the Ministry of Water and Irrigation, this means that the Ministry of Water and Irrigation is responsible. *But who is responsible and accountable towards the consumers?* The Water Authority of Jordan again, in principle, but the Water Authority of Jordan does not deal directly with consumers in the way which LEMA’s bill-collectors and meter-readers do. On the lower, everyday level, my experiences taught me that reality of accountability and responsibility was somewhat confused. Many of my sources seemed to pass the responsibility towards the consumer to one of the other institutions involved. LEMA blames the Ministry of Water and Irrigation for not providing enough room for investment, the Municipality blames LEMA for insufficient supervision, and LEMA’s supervisors, the Ministry of Water and Irrigation, shuffle the supervision over to the World Bank, who in turn informs me that the supervision programme supplied by the World Bank has been rejected by the Ministry of Water and Irrigation, because they wanted to “do it their own way”(Suhail Jme’an). Meanwhile, the task of teaching the Jordanian population water conservation is given over to other parts of the Ministry of Water and Irrigation and other ministries, as well as several Non-governmental

Organisations, and to a large extent, the United States Agency for International Development.

The official website of the Ministry of Water and Irrigation states that “the establishment of the Ministry of Water and Irrigation was in response to Jordan’s recognition for the need of a more integrated approach to national water management” (MWI 2005). Based on this philosophy, I think the ministry would agree that there is all the more reason to achieve clarity in the relationship between the many different parties operating different aspects of the water, from production, conservation, via awareness-raising to distribution.

Integrated Water Management and structures of supervision are currently being discussed in the work towards assessing the present contract, and I’ve been told by the World Bank that a new version of the contract may incorporate redefined (and more integrated) power structures between the involved parties. I will therefore not comment this aspect further here. However, a redefinition of the contract between the Ministry of Water and Irrigation and LEMA is not enough to achieve integration. A whole new approach to cooperation on water issues including a forum in which all parties dealing with water-related issues can be heard is required to begin a debate towards an integrated water management.

In “chapter 4” I will change perspectives and consider the issue of privatisation seen from the views of the people using LEMA as their source of water. Their views on LEMA and water privatisation, as we shall see, differ from the professional perspectives.

CHAPTER 4: PRIVATISATION OF WATER IN JORDAN: THE USER PERSPECTIVE OF LEMA

Privatisation and Users of Water

Placing a vital source such as water into the hands of a foreign company - Just look at our history and you will understand why the idea is hard, and it doesn't feel good. Privatisation is a declaration of failure.

(Abu Karim)

During eight months of living in Jordan, and of all the conversations I had on the topic of access to and uses of water, everyone I talked to revealed an almost emotional opinion on water. Adding privatisation into this mix, I found I had a highly controversial and strongly engaging debate on my hands. This chapter presents and discusses the major findings from the interviews conducted among the LEMA users²⁹. The opinions and stories presented in this chapter must be considered the reality for the people involved, and should therefore be treated as such. "Objective truth" is a complicated concept in any case, and not one which bears meaning in this thesis, as I pointed out in the introduction.

²⁹ Details on who I have interviewed can be found in "Appendix D".

Summary of Findings from the Questionnaire

I have pointed out earlier that because of the relatively small number of respondents, the following cannot be generalised on a quantitative basis, and the numbers which follow represent a small portion of my conversations only. Nevertheless, because these figures are comparable, unlike other parts of the interviews, and because they are a foundation on which my discussions later in this chapter are based, I find it useful to provide hereunder a small summary of my findings in numbers. For the reader's convenience, this summary is put in the order of the questions in the questionnaire³⁰.

The average price which the people I interviewed paid on a three month cycle ranged between JDs 5 (\$ 7) for Yara with a household of four persons, and JDs 350 (\$ 494) for Ranna, with a household of three persons but which shares a water meter and bill with two other households, making them 50 persons in total. The next highest bill was for Noura, with a family of 16. Her family pays between JDs 70-100 (\$ 99-141) every three months. The average paid for three months was around JDs 30 (\$ 42) in my study. The significant difference in bills may be attributed, aside from the size of families ranging from three to 16 people³¹ to the tariff structure (see page vii) which increases drastically when a metre has passed 20 cubic metres in three months. This cycle, as I pointed out elsewhere, was designed to make those using more than 20 cubic metres of water in three months pay for those who use less than 20 cubic metres (an indirect aid to the poor). However, as we shall see later in this chapter, the tariff structure may not have allowed enough for large families (which are mostly poor) to enter into these calculations.

On the question whether the water prices had been raised over the last six years, 15 of the respondents answered that they had. Four answered that the prices had not risen, while three persons did not know. The people who answered that the prices had been raised were asked whether they found the price reasonable. Ten of them answered that the prices were *not* reasonable, while the remaining five

³⁰ Found in "Appendix E".

³¹ The number of family members for each person interviewed can be found in "Appendix D".

people thought they were. This is interesting as the current tariff was set by the Ministry of Water and Irrigation and utilized prior to LEMA's takeover. This means that according to the tariff, prices should not have risen during LEMA's existence. Nevertheless, the majority of the people I talked to were of the opinion that prices *had* risen regardless of the fact that the tariff in question was indeed a pre-LEMA invention.

One explanation for this apparent misunderstanding might be that six years is a long time, and it may be difficult to remember details that long ago, especially since the current tariff was imposed only months before LEMA's takeover.

Another possibility is that the fact that many answered that the prices had increased may reflect either mismanagement on LEMA's behalf (adding to bills or reading meters inaccurately) or, more probably, these answers reflect the lack of confidence in LEMA among its users. Either way it indicates a tough public relations job for LEMA in the future.

I asked the people whether they thought that the water services had improved. Seven answered that services *had* indeed improved, while 12 thought it had not. Three answered they did not know. The seven pointed out that such elements as easy bill payment (two pointed out telephone payments in particular), reliability and regularity in water services were the improvements they appreciated the most.

I asked whether they were satisfied with the water services. 12 persons were satisfied, while ten were not. The ten who were not satisfied listed lack of reliability of water supply in the summer, not being able to take water for granted and destroyed networks with much leakage as reasons for their dissatisfaction.

For the first time in the interview, I now came to the topic of privatisation: I asked whether the respondents thought the water distribution in Amman was private or public. 15 respondents answered "private" while seven thought the distribution was publicly run. Again there was a follow up question: people who had answered "private" were asked if this had affected the water situation for their families. Privatisation had "improved the situation" for the family of six respondents,

“worsened the situation” for four, and “made no difference” for four. One respondent did not know.

15 answered that their families economised with or reused water; while seven answered they did not. Among the typical ways of saving water was cleaning the stairs with used water, closing the tap while brushing teeth, economising with washing machine and dishwashing, not watering the garden while the sun is high, using buckets instead of hoses and doing laundry only on connection days. The last point is interesting, as “doing laundry only on connection days” is indeed water saving, but only of the amount of water in the individual water container, this is not a means of using less water. The fact that this answer came from Ekky, who lives in an area which receives water three times a week, indicates how embedded the scare of being out of water is to Jordanians.

All but one thought Jordan had a water problem. The one who disagreed, Yara, answered “not this year, no” while she looked out of the window onto the heavy rain [indeed, the winter of 2004/2005 was exceptionally rainy]. We should therefore assume she knows there is a water problem in general. Primary reasons for the water problem were given as “not enough water”, “too little rain”, “not enough dams”, and “theft” (referring to Israel).

On the issue of responsibility, there was disagreement as to who is responsible for the “proper and fair management of the water reserves in Amman”. Responsibility was distributed among all of my suggested parties (I indicated that people were free to choose as many as they liked from my list of suggestions, or add their own³²). The category “Municipality” as well as “the consumers” received less “votes” (one and three respectively) than did “the Government” (eight), “the Ministry of Water and Irrigation” (seven) “the Water Authority of Jordan” (five) and “LEMA” (five). Two respondents answered they did not know. It is apparent from this that LEMA was not granted more responsibility than other institutions (none of the respondents had LEMA as their only answer). Moreover it is possible to read from this confusion as to who is to be held accountable. Several of the

³² See “Appendix E: the Consumer Questionnaire”, question 8.

respondents answered “all of them”. Finally, people were asked if they drank bottled or filtered water³³. 13 answered that they drank bottled water, nine that they did not (but added that they would if they could afford it). None of my respondents filtered their water.

Who Cares?

The first thing to notice is that there is a surprisingly big difference in responses between the representatives from the (upper) “middle class” and the “working class” communities I interviewed³⁴. From satisfaction with, to knowledge about LEMA, the two parts of Amman – the “richer” and the “poorer” one - are divided to a large extent. I was surprised to find that the “middle class” layers of the community were less informed of where the water came from than were the representatives of the “working class”. Although most of my “middle class” respondents could name LEMA as the water company, several did not know that the water company was a private one; many described a water company run by the public sector or did not know who owned it³⁵. People from poorer areas not only *all* knew that LEMA is private, they also all knew that it is a French company and on three occasions, I got the strong impression that this fact was so obvious that even asking the question was seen to be patronising on my part. I had interviewed people from “middle class” areas first, and on this basis I had expected to find a similar trend in the “working class” neighbourhoods, that is: a tendency not to be concerned with who supplies the water or who owns the supplier, as long as it is done efficiently and in a convenient way. I had expected, in fact, the richer part of the population to be more aware of these issues as it generally will have better access to information and the media than its poorer counterparts. These findings indicate that those who are most aware of the issues concerning privatisation of

³³ I asked the question “do you filter your water” in lieu of the question which is written in the questionnaire, because I was told people might not understand the difference between filtered and bottled water. For reasons of accuracy, I have not changed the questionnaire.

³⁴ The richer areas I have taken to be North, West and South and Central Amman, while large area of “East Amman (including Downtown) consists of poor areas (see initial information of questionnaire in “Appendix E”) When grouping in this way, I have also taken into account the monthly family income (see initial information of questionnaire in “Appendix E”). The average monthly income in East Amman was JDs 277 (\$ 390) and in the rest of Amman this figure was JDs 3542 (\$ 5000). This last number should be higher as several responded 3000+ or similar in their questionnaires. This figure therefore serves only to indicate a trend.

³⁵ When answering question 5 of the consumer questionnaire in “Appendix E”.

LEMA are in fact those who are most dependent on the prices: perhaps the poorer people can less afford not to be up to date with the movements and trends in such a vital aspect of their lives as the price of water.

The relations to LEMA as a private company were relatively hostile in most of the poorer respondents, words such as “theft”, “lawlessness” and “corruption” were used to describe feelings towards LEMA. A LEMA professional (Source 4) suggested that lack of access to information could result in gossip and rumours, and the creation of “truths about water” with strong hitting power, as these truths are imbedded in everyday talks between people (and mostly women) in their normal encounters. There were, for example, numerous stories of dirty water from taps that has made people sick. Only one of these stories involved the narrator herself, which could indicate that this might be a case of urban legends rather than actual facts in some of the reported incidents. No official data would indicate that the water is dirty, with the exception of the Zai contamination in 1998 (mentioned in the previous chapter), which happened prior to LEMA’s takeover of the water supply. Nevertheless, most of the respondents in the poverty-stricken areas said the water quality had become “worse” or “not improved” over the last six years. Several commented that the “water smelled”. It is not important for my findings here whether or not these stories are “true” in an “objective” sense. As source 4 of LEMA pointed out in the previous chapter, “this is a problem of perception; and one much harder to deal with than if there was a *real* quality problem.”

Based on the negativity I found towards the water company, seen alongside the fact that no one mentioned LEMA as the sole responsible for the water problems, I was surprised that none of the respondents had named *bad government* or *bad policies* as the reason for the water problem in Jordan. The primary reason for the water scarcity in Jordan was by all but three of the respondents explained by “lack of water”³⁶. This is such an obvious answer that I was not expecting it as an explanation factor, and is most likely a result of my wrongly phrasing the question³⁷. This may be an indication that people do not want to be seen as

³⁶ When answering question 7 in the questionnaire, see “Appendix E”.

³⁷ See question 7 in “Appendix E”.

blaming the government per se, as this would imply blaming King Abdullah who possesses the overall responsibility for the government, and who is known to be a direct ascendant of the prophet Mohammed. However, I have no evidence that this is indeed the case.

Drinking it Up?

Since water in Jordan is cheaper than in Germany, and I don't have to take a lot of care about the water prices, I use water in Jordan more carelessly than I do in Germany.

(Kay)

It is somewhat disturbing that prices of water should be more expensive in Europe than in the Middle East, where there is less of it and sources further apart.

However, taking into concern the differences in standards of living and wages, the price of water contributes a significant part of each month's expenses for some of the people I talked to.

A notable number of people in my interviews claimed that the price of water was unreasonable. Since similar questions have been asked in larger questionnaires conducted earlier, I would here like to compare Suleiman's (2002) results³⁸ with LEMAs own questionnaire. Out of 347 people asked by Suleiman, 73.2 percent said that the price of water was "not acceptable", while 26.8 percent said it was "acceptable". Suleiman asked only those who previously had answered "yes" to the question whether the prices had increased. 20.8 percent had answered that the price had *not* increased. Some or all of these 20.8 percent might have answered that the price was acceptable. Therefore, if we add this 20.8 percent to the 26.8, we get 47.6 percent who *might* have thought the price to be reasonable. The same year, LEMA researchers asked their respondents "do you believe that the service is good value for the money?" 70.7 percent answered "yes". These questions are not exactly the same, so a comparison will be superficial. However, it is clear to see that there is a significant difference between the figures presented in these two studies. Needless to say, more confidence should be attributed to an independent

³⁸ Suleiman's poll was conducted in August 2002.

study than to the company's own poll. In addition, Suleiman's findings are also supported by my own research.

Source 5 of LEMA tells me that the reason why people are getting large bills is that they are using more water because more of it is available.

The calculus of price (as shown in Table 1 on page vii) is designed so that the smaller (and poorer) users will have access to cheap water because the larger (and richer) users pay much more for their heavier flow. However, it is possible that the tariff has overlooked the fact that many poor families are large. In any case, the LEMA customer satisfaction poll does not detect stories such as the one of Ranna, whose water bill is a lot higher than it should have been, because there is just one meter in a large house shared by three families, resulting in a bigger bill after dividing it by three than it would be if the families could be billed individually. Most likely, this is not the only incident of such a form of over-billing of the people this tariff is designed to protect. Ranna told me that this problem had been raised with LEMA on three occasions, but nothing had been done about it. This is probably because the three families share the same last name (as they indeed are part of an extended family). While this example is not to be generalised from, it could form a part of an explanation why LEMA finds lack of confidence among its users. LEMA's own customer survey does not ask for the amount of "trust" from its users. But from its survey it is evident that customers are "less satisfied" with LEMA (5.7/10) than with the fixed telephone company (6.9/10), the electricity company (7.2/10) or the bank (7.8/10). It should be noted that this question was asked before the researchers revealed themselves as representing LEMA.

I found no indication that "working class" respondents had smaller bills than the "middle class" respondents. Rather, in my study, the larger bills were in direct proportion to the size of the family. As is evident from "Appendix D", the working class families (roughly those who live in East Amman) are most often the large families. If I were to consider, for this purpose, a "large family" to consist of "more than five individuals", we see that out of the seven "large families", five of those are "working class". Moreover, the people who reported a small water bill

(less than JDs 5 or \$ 7) all had a small family. We can gather from this information two things: first, there must be adequate access to water for the people in my study, since large families can use demonstrably more water than small ones. The question must rather be: access *when*, and *for how long*? The other thing we can conclude from this finding is that the tariff structure designed to enable the poorest inhabitants, seems to be preferential to small families. This might not have been what the Water Authority of Jordan had in mind when working out the tariff.

There is a major difference from area to area in Amman of how often water is supplied to the different areas. Some areas have supply 7 days a week, others only one (see map on page vi). Moreover, in areas with continuous supply, inhabitants tend to be richer and living in more scarcely populated areas with larger houses and gardens separating buildings. People in such areas, therefore, tend not to worry about water shortage and respond that the water company is effective and has improved. For people living in areas where water is supplied only once a week, on the other hand, water becomes an issue not to be taken lightly. Noura, in the Al-Nasser refugee camp, where water is supplied on Thursdays only, tells me that she always takes that day off work. Thursdays, for Noura, are spent filling her family's water containers, and to do all the house-cleaning and laundry. If she fails to do this, Noura tells me, there will not be enough water to last her family throughout the week. Noura comments that "LEMA has very good service in sending the bills, they are well organized, but sometimes there is no water on Thursdays *or* Fridays, sometimes there is no water for weeks". Another woman living in the same area, Um Hammad tells me that:

The water situation prevents me from thinking of my family, kids, from reading books. If water does not come, then all else must wait. If water does not come it is an emergency.

Um Hammad told me that she, too, takes leave from managing a charity organisation for the benefit of the people in the Al- Nasser Refugee Camp every Thursday for the same reason as described by Noura: to use the water while it's available. Here we can see in practice the implication of the ideas of development

and water access which was discussed in the previous chapter³⁹. If these two women are not alone in being professionals who lose one working day each week as a direct consequence of the limits to water supply, this is not only a development issue concerning the Jordanian national economy, but also an issue concerning women as part of the work force, an area in which numerous studies (notably *The Arab Human Development Report 2003*) have indicated that the Arab world is falling behind the rest of the world.

Another question is whether the limited water availability for some people may cause overuse. The fright of running out of water and knowing it is only available one day may result in using water *because it is there*, not necessarily because it is needed. Filling up too much water storage to keep “just in case”, for example, may impact the final bill. If this is the case, it is only one more indication of the vital aspect of water security – needing to know it will be there when necessary.

LEMA’s source 4 is aware of problems resulting from access, or lack thereof, when he points out that “delays in water disorganise family life and disrupt habits and traditions”⁴⁰. Constant access, or at least reliable access, to water in sufficient intervals is, for reasons mentioned above, of fundamental importance to the people I have talked to. In fact, as noted in the “Introduction”, one of the comments I got when I started to ask about water issues, was when a woman told me that she was happy to talk about water and that “this is so important for us in Jordan” (Um Hammad).

But Can We Drink It?

Although the Zai water contamination incident, mentioned in the previous chapter⁴¹, happened before LEMA entered the water scene of Amman, the scare-effect of it cannot be underestimated, in any layer of the population. All of my respondents answered that they either drank bottled water, or that they would have

³⁹ See “Developmental Aspects of Access to Water” in chapter 3 and “Development” in the “Introduction”.

⁴⁰ The entire quotation is presented on page 59 of this thesis.

⁴¹ See “Quality – Bottled Water and the Scare of Tap Water” in “chapter 3”.

if they could afford it. Again, the divide between the poorer and the richer areas is evident: all the “richer” respondents drank bottled water, while all the “poorer” respondents said they would have if they had the money (with one exception: Rabihah answered that her family drank bottled water because she was worried about her children’s health, although her family really could not afford it⁴²). Because of the problems indicated to me by LEMA professionals about the water-filter company discussed in the previous chapter⁴³, I asked everyone if they drank filtered water. None of my respondents did. The LEMA office has a policy of drinking tap water in the office but both the LEMA officers I talked to, as well as the only other “professional” I asked this question (Source 4) informed me they were drinking bottled water at home. In other words, only the poorer people in my study actually drink LEMA water, outside office hours. This can be attributed to the problem of dirty containers⁴⁴, but it nevertheless does not serve as advertising for the taste of LEMA’s water.

Ala told me that while she had been ill last year; her doctor had recommended that she drink bottled water. Since her family of seven could not afford her to drink bottled water on their total income of JDs 150 (\$ 212) a month, Ala tells me, the whole neighbourhood had chipped in for bottled water for her until she got better. The fact that a doctor would recommend bottled water, and that the neighbourhood would find it important enough to chip in, underpins the general lack of confidence in LEMA that I found during my interviews in the “poorer” parts of Amman.

Looking at the customer survey which was conducted in October 2004⁴⁵ by LEMA, where customers of LEMA answered the question “what is important to you in a water company” in order of importance (where 10/10 is “very important and 1/10 is “not important”) they answered the following:

⁴² This is notable, since I only asked people whether or not they drank bottled water, I did *not* follow up with a “would you have drunk bottled water if you could afford to. Nonetheless, all nine respondents answered that they would if they could.

⁴³ See “Quality – Bottled Water and the Scare of Tap Water” in “chapter 3”.

⁴⁴ See “Quality – Bottled Water and the Scare of Tap Water” in “chapter 3”.

⁴⁵ This survey is an internal document of LEMA, and is therefore not published. LEMA’s source 5 was so kind as to provide me with a copy, for me to use with discretion. This copy will be provided the examiner upon request.

Water quality	(8/10)
Supply reliability	(7.7/10)
Accurate water readings	(6.1/10)
Quick responses to problems	(5.7/10)
Regular billing	(5.1/10)
Easy to pay	(3.9/10)
Problems solved on phone	(3.2/10)
Accessible offices	(2.6/10)
Helpful and polite staff	(1.7/10)
Easy new connections	(1.1/10)

On the basis of my findings in this thesis, it is worth noting that the aspect of price is exempt from this otherwise inclusive list of possible things which could be important in a water company. It should be mentioned here that in LEMA's survey there are three other questions relating to price. What can be read out of these answers is that the kinds of things which made the "wealthier" layers of my respondents in general satisfied with LEMA (accessibility and easier billing) did not rate highly in LEMA's survey. Rather, quality, reliability and accuracy of metres, the concerns stressed mainly by the "working class" respondents, rated highly on LEMA's chart. This may serve as an indicator that a large proportion of the population of the Greater Amman Area has similar concerns as the "working class" representatives in my study. Issues such as quality, reliability and accuracy of metres can be said to be matters of more "vital" concern, as they have a direct impact on health and family economy. Most likely, when and if the people who are concerned with quality and reliability at present feel they are satisfied with these services, their concern will move to issues further down the list (which make life easier, but are not of "vital" importance), such as "phone accessibility" and "polite staff".

From the Customer Services point of LEMA, which has been a major focus for LEMA, their survey tells us that they are doing a good job in reaching people. When LEMA presented its latest survey to me, I was told that "the good news [from the customer survey] is that customer services are higher than ever. We've got to feel happy about that" (Source 5). But, as we have seen earlier in this chapter, some of the people I have interviewed have the impression that efficiency (and charging money) has priority over granting people's rights (Noura.)

Religion and Water

Notably, people did not mention religion in my study. Only two small factors may indicate religious-cultural undertones: When asked the question: “what do you think is the primary reason for the water problem in Jordan”⁴⁶ all but two (who both answered that “Israel taking all the water” was the reason), regardless of economic background or geography, gave an answer I had not anticipated: “because of lack of resources”. I had not anticipated this answer because I find it too obvious. I had expected, from my understanding of Jordanians and their love for elaborate (conspiracy) theories, that I would receive an explanation for an answer, not a statement of fact.

It is possible, from my knowledge of Islam, to interpret this as a religiously inspired way of “accepting the situation as it is”. This kind of acceptance can be seen in everyday talk based on Islamic culture. For example the much used word “Insh’alla” (which means “God willing”, or “if God will have it”). This word is a concept, and one which it can be hard to grasp as a foreigner in the Middle East. The answering of a question using “Insh’alla” can mean anything from “yes”, “we’ll see” to “no” as the word puts the answer into God’s hands. In my experience, the meaning tend to range from “yes, hopefully” to “maybe”.

When I asked about the water situation in Jordan, most of the answers received could be interpreted as if the water situation in Jordan was simply accepted as God-given. Adding an argument or values to anything “given” in such a way, may, in a religious way of thinking, be seen as blasphemy. Also notable from the same question, is that none of the respondents answered that the government was responsible for the water situation. This may also be religiously interpreted. The government has strong and direct link to the king. Therefore, naming the government as responsible could imply an accusation of the king. This is unheard of, both because he is believed to be a direct descendent of the Prophet Mohammed, as mentioned earlier, but also for the general respect which King Abdullah enjoys among the population of Jordan.

⁴⁶ See “Appendix D: The Consumer Questionnaire”, Question 7 part II.

I had expected to find a much stronger religious aspect to the interviews I conducted, based on the strong presence of religion in the Jordanian society, both Christian and Islamic, and because the Qur'an mentions the word "water" 95 times (the Koran Online 2005). In retrospect, however, I do not bear much faith in the above religious interpretation of the answers. I think the answers I received most likely are a matter of wrongly phrasing the question. It is very possible that I would receive different answers had I asked instead "what do you think is the primary reason for the *lack of water* in Jordan". On these grounds I conclude that religion has not figured in my study to any mentionable extent. Perhaps this has to do with the importance which water has in people's lives? It has become clear to me during the interviews that water may well be sacred, but it has in this context been talked about as a practical and political issue rather than a profound, abstract idea. This may be because of the kinds of questions I have asked, but to me, it illustrates again the necessity that surrounds water in people's talk, and therefore the strong interest which people take in the matter.

Who is Responsible?

One respondent did include a value-laded explanation to his answer⁴⁷:

Since the state of Israel came into existence, there has not been enough water for Jordan and Palestine and Israel. There may not have been enough in any case, but unfortunately, right now Israel suffers less for water than Palestine and Jordan does.

(Nart)

Based on the informal research conducted prior to the formal interviews on which this chapter is based, I would say that opinions such as the one presented above by Nart is commonly found among Jordanians. However, this cannot be concluded from this study. A possible suggestion why only two respondents pointed to the last decades of territorial disputes as a reason for Jordan's water problem is not known. One reason may be that I am a foreigner, and that my intentions could thus be questionable. Also, the fact that I in some of the interviews brought along

⁴⁷ See "Appendix D: The Consumer Questionnaire", Question 7 part II.

an interpreter might have made the situation more “formal” than otherwise necessary. It is also possible that one last reason why Israel did not figure more strongly in my study may also be lined to my being a foreigner. A sense of national pride might make people want to give a better impression of their country to an outsider than they might to a fellow countryman or woman. However, several respondents mentioned Israel in other contexts during the interview, so I have little reason to assume that my “otherness” is the reason for the answers above.

In the poorer areas of Amman, as described earlier in this chapter, many people strongly resented the idea of LEMA being a private company as well as holding it accountable for a perceived bad quality of water whilst simultaneously enforcing higher prices. I was told on several occasions that the water company LEMA was “not merciful” (Noura), showed “no understanding of the people’s situation” (Rabihah), that “the law doesn’t protect the rights of people” (Maram) and that “it’s theft” (Maram).

Given that LEMA is not setting the price of water, but rather acting on commission from the Ministry of Water and Irrigation and the Water Authority of Jordan, and that it cannot be held responsible for the current water situation in the kingdom of Jordan, it is my belief that these accusations are not legitimate. Rather, and perhaps more serious (and a lot more difficult to solve), it is possible that these feelings represent an unspoken bitterness about a situation they as individuals cannot but live with. This may be an indication of resentment towards the institutions that should be easing the situation and the many factors which contribute to the unstable water situation in the Middle East in general, and in Jordan in particular (for one, the uneven distribution of water from the Jordan river between Lebanon, Syria, Israel, Palestine and Jordan).

Ranna told me that the price of water had increased in the last six years, and that for her it was unacceptably high. Yet she answered that she was “satisfied with the water company”. When I pointed out to her this seeming inconsistency, she gave as a reason that:

The old pipes are not working. LEMA, the water company is now digging all over the city to improve them. This is very important, and they need to cover their costs. I hope this means we will get more for our money later.

(Ranna)

Such a statement shows an awareness of the problem of leaking pipes and also a democratically responsible idea that people also have to help cover the cost for their own benefit.

One of my respondents brought in the topic of integrated management. Siham asked me⁴⁸:

Isn't it supposed to be a process where everybody is related to each other? Our water needs our cooperation, not foreigners.

(Siham)

As the situation in Jordan is today, there are already foreigners involved. Nevertheless, Siham has a point not to be ignored: there urgently needs to be cooperation among the different parties involved in the Jordanian water scene today. Perhaps a good place to start would be to include more of the consumers' points of view in policies which affect their lives? At least this was Ala's suggestion:

Government, private or whatever - What is needed is proper distribution. Let the people help. Listen to us!

(Ala)

In Part III of this thesis I will discuss further some of the main issues which have been raised in the two previous chapters. I will then link the main topics for discussion with selected theoretical approaches presented in Part I of this thesis.

⁴⁸ When answering question 8 in "Appendix E: the Consumer Questionnaire".

PART III

CHAPTER 5: DISCUSSION: THEORY AND PRACTICE IN DEBATE

This chapter discusses further some of the topics raised in the four previous chapters, linking the selected theory which I have presented in part I to the empirical findings displayed in the previous two chapters (part II) of the thesis.

One aspect which I on the outset of this thesis thought would be a main point is the presence of the global corporation Suez Lyonnaise des Eaux's acting in Jordan. This was not mentioned anywhere during my interviews with professionals or users⁴⁹. LEMA, in situations in which it is described as "foreign", is presented as a "French company" (which, of course, is correct). Notably, the global aspects of the "French company" were not mentioned in any of the English speaking newspapers that I have come across either. The lack of mention of this aspect of the LEMA debate might therefore spring from lack of knowledge. If this is the case, it is worth asking why the information is not being publicised to the Jordanian people, be it in newspapers or on the television. Alternatively, it is possible that there in Amman is an opposition to privatisation where "foreigners" is a bad enough word in itself. Arguments might run along the tones of "Never mind where *else* this company operates, it should not be here in Jordan."

⁴⁹ I did not ask about LEMA's global connections in particular, as I thought this would mean leading the respondent. Rather, I talked in terms of "the foreign aspect".

There are two other issues which I also had expected to become main points in the thesis: religion and water sharing with Israel. Both of these matters were less prominent in my study than I had anticipated. Religious and political aspects of water were not as central as I had expected. As I discussed under the sub heading “Religion and Water” in the previous chapter, religion and politics were present, but not an issue which people discussed much with me. However this should not be interpreted to mean that profound ideas and political debates involving water is not a concern for people. Rather, in my interviews, water was talked about in the context of people’s everyday lives.

One notable example in my empirical research serves to examine the idea of waters’ usefulness as a political tool (Wittfogel). Evidence that control over water will imply control of people has been provided in several of my interviews. The setting of water prices, as we have seen, can have a direct consequence for poor people’s economic situation. The tariff structure, as it is designed (see page vii), may be partially responsible for providing large (poor) families with a higher water bill than had the structure of the tariff been “flat” (with the same price for each cubic metre). However, if the price had been “flat”, this might seriously affect poorer people who do not use water in excess of 20 cubic metres a quarter. Regardless of intent or policy, the current tariff structure would most likely have been in use even if the water company had still been public. The tariff (in Figure 1 on page vii) was put to use prior to LEMA’s “birth” in 1999, and can therefore not be said to be a result of privatisation. Also, arguments on basis of price would apply universally where people have to pay for water. Therefore it is possible to say that I have found arguments in favour of Wittfogels theory, but that his theory may be too general to shed light on the particular topic in this thesis.

It is not surprising but quite extraordinary that there can be such a big difference between the satisfaction levels in the “richer” as opposed to the “poorer” areas of Amman. This is yet another and grave indication of the huge separation between “rich” and “poor” in this relatively small area of Amman – Unfortunately, this presence of both “developing” and “developed” all in one town can be said to be a typical characteristics of a developing nation.

The *value* of water must be seen in a different context than the *price*. While the price of water is intended to cover the expenses linked to maintenance and management, the value of water is in direct proportion with the scarcity of the substance. It is possible to argue that although water should ideally be free of charge for all, pricing water could teach consumers about the value of water. As Ekky pointed out during our interview, “most people aren’t aware of water’s value and therefore waste it without thinking.” After all, we certainly will not see people washing their cars each week with expensive bottled water.

The Passing of Responsibility

One of my reasons for choosing the topic of Amman (as opposed to a case study of the Jordan Valley) was to avoid getting “locked” into a political debate over historic water disputed between Israel and her neighbours. However, also in this context I could not avoid the issue of “theft”, as it was described by Maram. Four respondents mentioned Israel as a troubling factor for Jordan’s water situation. I will not go into this topic in particular here, as an endless list of books on the subject has not seen any solution to the problem⁵⁰. Suffice to say that I found among the users in my study a tendency, although weak, to “pass responsibility” for the water situation which Jordan finds itself in onto regional water-sharing problems.

I also found evidence of “passing responsibility” internally among the various institutions which together administer the water management of Amman (the Water Authority of Jordan, the Ministry of Water and Irrigation, the World Bank and LEMA). On LEMA’s side, the lack of flexibility in the contract was blamed for what LEMA sources saw as their incapability to influence the water situation in Amman, on topics such as where to invest, improve, restructure and with what means. This argument was not accepted by the Ministry of Water and Irrigation.

⁵⁰ See also my mention of biases in this literature in the “Introduction” of this thesis.

The ministry maintained that LEMA indeed had the freedom to invest their surplus and the means to do this through funding from the World Bank.

On the issue of supervision, I was confused not by the terms of the contract, but by the interpretations of the various parties bound by it. These are internal debates and my interpretation may result from some misunderstandings. However, the key point here is that I had access to personal interviews with some of the more prominent management figures and policy makers within the Amman water scene, as well as to internal documents. If *I* can get confused as to where the responsibility lies, then it may certainly confuse the customer too. Not surprisingly, I found among the user respondents⁵¹ a distribution of responsibility between all the parties mentioned above, as well as “the municipality”, “the government” and “the consumers” themselves. Not *one* of my respondents answered only “the Water Authority of Jordan”, the institution which according to my information holds the overall responsibility. This may have implications for transparency, as users may not know where to turn if complaints and suggestions are not followed up by LEMA. In this respect, the confusion may result in serious complications for a user in dispute with LEMA. Put simply, the fact that LEMA may cut off access to users not paying their bills can result in consequences for a user not knowing where to turn with complaints.

There are elements in which privatisation has brought more transparency into the water scene. All of the professional sources agreed that LEMA had improved transparency and targeted the acceptance of *wasta* and corruption. Such measures are surely a necessity on the way to improved water efficiency and a democratic approach to water sharing, especially in an area in which water is as scarce as it is in Amman. The measurements which LEMA has taken in this field, according to the information I have been able to gather for this thesis, should be seen as positive and much needed. However, for two reasons, there may be grounds for thinking that *wasta* may not be as easily eradicated as expatriates in LEMA may think. First, the strongly embedded ideas of tribal belonging and acceptance of *wasta* in the Jordanian society is evident by the recent anti-corruption campaign

⁵¹ When answering question 8 in the questionnaire in “Appendix E”.

initiated by the King Abdullah⁵². The second reason why *wasta* may not have been fully eradicated is that LEMA, according to their contractual obligations, cannot terminate employments by unwanted staff. Rather, such staff is relocated within the Ministry of Water and Irrigation (Source 4). Therefore the root of the problem may still exist within the corridors of LEMA's primary supervising institution.

There is general agreement that water is a scarce resource which is of fundamental importance to all living things on our planet. Furthermore, as I have demonstrated, there has been over the last few decades, a shift in focus from finding and developing new water sources, to a concentration on the proper, fair and sustainable management of the sources which exist. The World Bank, several United Nations agencies and Non-governmental Organisations as well as the private sector claim that such a proper management will result from privatising these resources, as competition and aspirations of economic surplus will make former state-run water sectors more efficient and economically liable. This in turn, it is argued, will improve the situation for the world's poor.

Opposing scholars (notably Shiva and Barlow) have put a strong case against privatisation of water. Privatisation based on ideas of the free market, such scholars will typically claim, will commodify water and thus generate a human right into "might is right", where economic gains for the private investor will have a higher priority than poor people's reliable access to safe drinking water at an affordable cost.

Using the example of LEMA we will find arguments both pro and con in the privatisation debate. After six years in office, the private water company LEMA is by many applauded as a success. There is full agreement among the professionals in my study that LEMA has made the water distribution more efficient and transparent, as well as reduced leakage. All these aspects of improvements will benefit the users of LEMA. However, there are also aspects of the contract between LEMA and the Ministry of Water and Irrigation which are not

⁵² See "On the Subject of *Wasta*" in "Appendix F"

necessarily beneficial for LEMA users. LEMA has the right to cut off access to people who do not pay their bills. When I discussed this earlier I pointed out that LEMA should be able to add force behind its determination to get paid for its services. Payment, after all, is LEMA's *raison d'être*. Although I have not focused on human rights in this thesis, we know that, as I have accounted for in the "Introduction", water is an issue discussed within the context of human rights discourse. *Access* to water is seen as a fundamental human right, and as such the right to remove access could have serious implications if used indiscriminately.

Integrated Water Resource Management is a theoretical idea of "perfect" water management, inclusive of the opinions of all parties who have interest in water, be it policy makers, politicians, Non-governmental Organisations, the public, animals or nature herself. In a situation of water stress, implications of such ideas may be harder in practice than theory might suggest. Nevertheless, the Ministry of Water and Irrigation, on its homepage www.mwi.gov.jo, as well as in its *Water Sector Investment Programme* from 2002-2011 (2002: 19) call for Integrated Water Resource Management in its water policies. Integrated Water Resource Management came up during one of my interviews with LEMA users. Siham pointed out that water management was supposed to be "a process where everybody is related to each other. Our water needs our cooperation", she said. This made me think that *cooperation* and *relatedness* were good ways of reflecting on Integrated Water Resource Management. It is in itself an academic and policy-sounding concept, and one which, for this reason, does not necessarily invite people's participation on their own terms. Integrated Water Resource Management becomes a discourse (Foucault) which by using specific definitions of "public knowledge", act to exclude outsiders from participation. If we were to ask the average citizen of Amman what they thought of Integrated Water Resource Management, we might not get a quick response. However, had we asked him or her about cooperation and relation within the water sector, more fruitful and insightful answers might be produced.

The discussion above brings us on to ideas of democracy and participation and the role which private participation takes in such a debate. Jordan can not claim to be

among the strongest democracies of the world (AHDR 2004), rather, as one diplomat has phrased it, Jordan is “on the way to democracy” (Source 6).

According to the *Arab Human Development Report 2004*, one major problem found on the basis of a survey conducted in five countries in the Middle East (among them Jordan) was that people did not trust that they had reliable, accountable and transparent governments.

A press release on the occasion of the publishing of the *Arab Human Development Report 2004* (5 April, 2005) notes that:

A public opinion survey conducted in five Arab countries for the third and latest Arab Human Development Report reveals that people do not enjoy governance that is democratic, open, transparent and protective of basic freedoms and human rights (...) Less in evidence, according to those participating in the survey, was the existence of an effective opposition, an independent media and judiciary, transparency and accountability of governance, and efforts to combat corruption.
(AHDR 2004 Press Release 2005a)

In other words, the report claims that people interviewed in Algeria, Jordan, Lebanon, Morocco and Palestine in late 2003, did not feel they live in a transparent and open society where freedom of accountability and democracy could be enjoyed. Whether the findings of this report are one of the reasons why King Abdullah two months later launched his anti-corruption campaign in Jordan is not known. What can be read from the report is an indirect accusation of the King (among others) when the report goes on to claim that “power resides with heads of state who derive legitimacy through religious or tribal traditions, or revolutionary, nationalist, or populist movements.” (AHDR 2004 Press Release 2005b).

My findings in this thesis have elements which would support a need for more interaction and feedback between people, legislators and policy makers. This would be advisable also from an Integrated Water Resource Management approach which is ascribed for by the Ministry of Water and Irrigation in its *Water Sector Planning and Associated Investment Programme* (2002).

Naguib (2003) describes in *Knowing Water* how important project documents created by the World Bank and other parties in water development policies which concern peoples lives. Even if such documents were available, they would not be accessible (nor in Arabic) to most of Naguib's informers. This is the case also with some of my informers, and such issues need to be addressed when ascribing for a more transparent society.

CONCLUDING REMARKS

Has privatisation improved the water situation on Amman? This is the question I started out with at the offset of this thesis. My material shows that there are no clear cut answers to this question. Water in Jordan, as my research has shown, is an emotional issue about which most Jordanians have an opinion, many of which are deeply contradictory. This makes for no easy climate in which for LEMA, the private water company, to make changes and impose new methods of supplying water and charging for it.

One third of the world's population live in countries which suffer from *water stress* (Falkenmark), and Jordan is defined as suffering from "high" water stress. On a per capita basis, Jordan's freshwater reserve ranks among the lowest in the world, and the nation's rapidly increasing population presents a challenge for present as well as future water preserves and supply. Jordan has reached its Millennium Development Goal defined as 97% coverage of drinking water in the Country. For this reason, Jordan is experiencing a shift from a main concern with *access* to water to a focus on infrastructural, distributional and maintenance issues. This is where privatisation comes in: it is presented as one solution to the need for an efficient, economically viable and transparent system of providing water to people in a way which satisfies the needs of the population whilst costing the Jordanian economy as little as possible. However, such a move is not unproblematic in a nation where, as in most of the world, the idea that the state can best govern ownership of one of the most precious substances is deeply held.

I would like to take this opportunity to remind the reader once again that Jordan is a nation with many cultures and peoples with contradictory points of view on privatisation of water in Jordan. For this reason it can hardly be said to be an easy job which LEMA has embarked upon – to embody aspirations, politics and emotions of so many layers of society into a unified and effective water privatisation strategy.

In 1999, the French based global water company, Suez Lyonnaise des Eaux, together with the Jordanian company Montgomery Watson-Arabtech Jardaneh won a World Bank-initiated bid for private management of the water distribution and wastewater in the Greater Amman Area. The management contract, due to be renegotiated every four years, stipulates that the Water Authority of Jordan remains in charge of the water reserves in Jordan and the piping system 500 meters away from buildings, as well as the price of water which customers pay. In 2005, six years after LEMA acquired the contract, it is still to be renegotiated.

The terms of the contract enable the Water Authority of Jordan to remain in charge of water decisions in Amman, and therefore does not “hand over” power to an outside interest which might prioritise profit interests over human rights to access to water. In this way, the term “privatisation” used in this thesis must be seen as a mild form of privatisation, and not “complete privatisation”. The professionals in my study are not in doubt as to the benefits to the Amman water distribution which LEMA’s contribution has had. According to the Ministry of Water and Irrigation, the water distribution now shows profit, which it did not prior to LEMA’s takeover. Moreover, there is little reason to doubt that the access to water has improved and the water leakage has decreased significantly since LEMA’s entrance into the Amman water scene (although LEMA cannot be said to be solely responsible for this). In other words, the contract with LEMA has contributed to a situation in which *more* people have access to *more* water at a government controlled price, whilst enabling LEMA and Ministry of Water and Irrigation to profit from the water distribution in Amman. Privatisation, in this respect, has improved the water situation. However, the question is more complex than this.

LEMA has also improved customer services and enabled easier and more efficient billing systems. LEMA's own customer survey indicates that more people were satisfied with customer services in October 2004 than earlier, an indication perhaps, that customers are increasingly more trusting and satisfied with the company. Based on the research presented in this thesis, however, the trend is not as clear: Several pointed out that the water company has become more user friendly, but almost half of the users I spoke to indicated dissatisfaction with LEMA, and claimed that the prices were "not acceptable". The prices were by these people specifically pinned as LEMA's responsibility. This, as I have shown, is probably not the case, but is important because it hints at a deep distrust of LEMA.

LEMA, which benefits from experience from outside Jordan, has made a point of eradicating corruption and *wasta* (see "appendix F") during its time in office. One of my sources within the Ministry of Water and Irrigation informs that since LEMA's takeover, high officials and important people for the first time are forced to pay their water bills. A transparent, incorrupt and accountable water distribution service is of fundamental importance, and a step towards a fully democratic and developed society. Still, my research indicates that the anti-corruption battle may not necessarily yet be won.

As a private company, LEMA has less "public service" responsibilities, and are allowed to cut off access to water as way of enforcing payments. In this study I have illustrated that it is probably necessary for business to be able to put force behind the demand for payment in exchange for services provided. Furthermore, it could also be said that since this is an issue concerning a small percentage of the total amount of users, then this is good for the remaining majority. This means that no one can "cheat" and the majority will not have to pay for the dishonest users. However there is a human rights issue involved here. Cutting off access is highly problematic if it will mean that poor people cannot access water to satisfy basic human needs of thirst, cooking and hygienic purposes. Lack of access, as we have seen, can result in situations in which, as Um Hammad' explains: "It's keeping me from thinking of my family, kids, from reading books".

The structure of who-does-what and who-is-accountable-for-what within the water management sector of Amman can seem confusing for the outsider. My interviews disclosed confusion as to who was responsible towards the consumer. There are several, and separate, participating institutions in the water sector. Among these, the responsibilities are laid out clearly – in theory. But in practice, there were examples where there was passing of responsibility amongst the various institutions in matters ultimately concerning accountability and responsibility towards the consumer. I may have misunderstood something, but if I, with access to the top people in their fields cannot work out the chain of reaction involved, then will a consumer with a complaint about LEMA know where to turn?

This study is not about accountability, yet it is issue which has turned up during my research for this paper. In the empirical part of this thesis we have on the one hand seen professionals working in and around LEMA discussing how to improve the water situation through increased access and more transparency. On the other hand some users believe that water is being “stolen”. We saw Ala lament the way, in her opinion, people were not being listened to⁵³. Such conflicting views on LEMAs presence and work in Jordan can be seen as signs of the lack of confidence which LEMA has from some of the public in Amman.

As an “outsider looking in” I do not claim to have provided the “whole truth” about the LEMA story. What I have presented has been merely one version of a complex situation, but one which I hope might contribute to shed a different light on privatisation in Jordan.

I set out the journey of this thesis with the goal of telling the story of privatisation from a LEMA user’s perspective. However, I found that in order to give voice to this group in a meaningful context, I would have to first consider the questions raised from the theoretical, practical and professional points of views. The end result became a broader view than I had envisaged, but perhaps a more inclusive one.

⁵³ See page 81.

During the research for this thesis it has been easy to contact people, and I am grateful for the excitement and interest which people have shown for the topic I raised to them. Um Hammad, who stated the importance of my topic (in the introduction), was just one of many who made me feel welcome and opened up to me about their water concerns. I am also happy to have talked mostly to women, as they are the main users of household water, and have shed a light on important aspects of water use in Amman.

Has privatisation improved the water situation in Amman? In this thesis I have shown that privatisation has improved the water situation by enhancing the water coverage and available flow of water, as well as initiating the crucial fight to combat corruption and *wasta* in the water sector of the desert nation. I have shown that introducing a private sector working culture has increasing transparency within LEMA, a step, no doubt, towards improving the water situation in Jordan. However, as we have seen in the empirical part of this thesis, there are also indicators that the situation has not improved. LEMA has been provided with the possibility to cut off access to water, which could mean cutting off access to a human right for some people. Furthermore, I have shown in this thesis that unclear distribution of accountability and responsibility towards the consumer may confuse LEMA users. Therefore, the consequences of privatisation uncovered in my study are not exclusively positive, and the question of whether privatisation has improved the situation must be seen in a grey scale rather than in a black and white manner.

After all, the water problems in Jordan are not black and white in any way, and hopefully the restructuring of the infrastructure as well as a truly integrated approach will help make the situation better for all involved parties. Let me end with a hopeful note from a LEMA user who is optimistic about the future of the water situation (and price), Ranna:

The old pipes are not working. LEMA, the water company, is now digging all over the city to improve them. This is very important, and they need to cover their costs. I hope this means we will get more for our money later.

(Ranna)

EPILOGUE

The government of Jordan has set water prices to rise in the fourth quarter of 2005, raising the minimum rates for consumption of 20 cubic metres or less of each household from JD 3, 50 (\$ 5) to JD 5 (\$ 7) a quarter. This rise will affect all of Jordan and is not a measure enforced by LEMA. According to a spokesperson for the Ministry of Water and Irrigation, Mr Adnan Zu'bi this will "encourage people to rationalize water usage and help make up for the loss the kingdom [of Jordan] incurs by selling water for less than the actual price." (*The Jordan Times* June 24, 2005).

It is very possible that some of the problems with access and tariff structure I have pointed to in this thesis will be "evened out" or minimised following the completion of the Capital Investment Project, which aims to renovate the entire infrastructure of pipes in Amman by 2006. After all, water management in Jordan is a political project far from being "finished" in 2004/2005 when I did research for this thesis.

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“Gov’t hopes to tap into private investment to improve water management”. June 19, 2000.

“High tech may water Jordan Valley, but dry up family farming”. August 31, 2000.

“Flushing of dam may be only short term solution”. September 17, 2000.

“Water conservation programme relies on message of religious texts”, January 17, 2001.

“LEMA cites lists of improvements, challenges after two years of managing Amman’s water”. July 16, 2001.

“Tap water turned off for some in Whidat”. October 25, 2001.

“LEMA inspector hospitalised after being physically assaulted”. November 20, 2001.

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APPENDICES

APPENDIX A: LIST OF “PROFESSIONALS”

Source 1

Higher manager of the Ministry of Water and Irrigation (MWI)

Source 2

Higher Manager of the Programme Management Unit (PMU) with the MWI

Source 3

Higher official with the Programme Management Unit (PMU) with the MWI

Source 4

Senior Manager of LEMA

Source 5

Higher official with LEMA

Source 6

Water official with an Embassy in Amman

The Municipality of Greater Amman

Eng. Abdel Rahim F. Boucai. Deputy Mayor of Amman

Email: boucai@nets.com.jo

Interviewed 7th February 2005

World Bank

Suhail Jme'an. Senior Financial Analyst. Finance. Private sector and Infrastructure.

Middle East and North Africa Region

Email: sjmean@worldbank.org

Telephone interview on 8th of February 2005

Academy of Educational Development (AED)

Lama Sidawi. Knowledge management and Training Officer. Water Efficiency and Public information for Action (WEPIA)

Email: isdawi@go.com.jo

Interviewed on 23 September 2004

Royal Scientific Society

Dr. Mohammad Saidam, Director, Environment Monitoring and Research Unit (EMARCU)

Email: m.saidam@emarcu.gov.jo

Interviewed 24th November 2004

APPENDIX B: QUESTIONS FOR PROFESSIONALS

About the Questions:

The topics presented here are not to be confused in any way with a questionnaire. The questions (or rather talking points, so as not to give standardised questions, to provide a feeling of “real conversation”) were not shown to the interviewees, nor did I necessarily bring up each topic with each person interviewed. They are not presented here for anything else than to give a sense of my thinking and preparations before the interviews. The main points discussed in all interviews were:

- Is water now being distributed more efficiently?
- Is water used more efficiently (because it is now more expensive)?
- Has access to water improved / changed?
- What has privatisation meant for the users of water?
- Who is in the final instance responsible for the fair and equal water distribution in Amman?

Discussion Topics:

- Privatisation – what does it mean? Pros and cons
- Water privatisation – is it development?
- Financing water development?
- Is it at all possible to “own” water? And if it is possible, who can own it?
- Water in the Qur’an: water to be shared equally between all (including plants and animals?)
- What are the implications for water users?
- Water quality – has it improved? – Taste, Colour, amount of dirt per cubic centimetre?

- LEMA: About the contract: when does it expire: will it be renewed - Any competitors?
How is the LEMA-contract structured - how is it controlled, what kind of institution is set up for overseeing private companies?

- The foreign aspect of a French / Jordanian / global company?

- Is privatisation carried out in a specifically Jordanian way (as opposed to for example the “British privatisation”?)

APPENDIX C: QUESTIONS FOR THE WORLD BANK

Main Questions in my Thesis:

- Is water now being distributed more efficiently?
- Is water used more efficiently?
- Who is, in the final instance, responsible towards the consumers and the water reserves of Jordan?
- Has access to water improved/ changed?

Specifically for the World Bank:

The Contract:

- How is the LEMA-contract structured in terms of responsibility towards the consumer in terms of:
 1. Water quality?
 2. Water accessibility?
 3. Reasonable/affordable pricing?
 4. Providing information about sustainable use of water?
- How is the contract controlled?
- What kind of institution(s) is set up for overseeing private companies in Jordan?

WB investment / aid:

- How much the WB contributed to the following in relation to the LEMA contract:
 1. The Ministry of Water and Irrigation?
 2. LEMA?
 3. An independent monitoring body?

(I've been informed that the WB has funded "an independent monitoring body" to review budgets et cetera.)

- For how long does the WB plan to keep (yearly?) investments?

General:

- What are the greatest benefits with this project as you see it?
- What are the greatest challenges/problems?
- What is still needed for the contract to work to its fullest capability?
- Has the contract brought greater transparency?
-

And finally:

- Could you rate how successful you think the contract has been until now?

Thank You!

APPENDIX D: LIST OF “USERS” INTERVIEWED

Name	Gender	Location in Amman	Number of Individuals in Household
Raeida	F	West Amman	4
Maram	F	West Amman	5
Ekky	F	West Amman	2
Hind	F	West Amman	8
Yara	F	West Amman	4
Kay	M	Central Amman	3
Zeina	F	East Amman	3
Noura	F	East Amman	16
Um Hammad	F	East Amman	5
Ala	M	East Amman	7
Rabihah	F	East Amman	9
Alla	F	East Amman	13
Siham	F	East Amman	9
Ranna	F	East Amman	3
Nart	M	South Amman	5
Massimo	M	West Amman	1
Esma	F	Central Amman	1
Dina	F	Central Amman	2
Nadia	F	West Amman	1
Ahmad	M	East Amman	5
Abu Karim	M	North/West Amman	6
Monzer	M	East Amman	4

APPENDIX E: THE USER QUESTIONNAIRE

Name _____

A / E

Sex: Female _____ Male _____

In which area of Amman do you live?

North Amman _____

West Amman _____

East Amman _____

South Amman _____

Central Amman _____

Approximate monthly salary for your household _____

Number of individuals in the household _____

1. How much did you pay for your last water bill? _____

How much do you pay for water per billing period on average? _____

2. Did the prices of water rise during the last 6 years?

Yes _____

No _____

Don't know _____

If yes, do you think the price is reasonable compared to the services you get? _____

3. Did the service improve during the last 6 years?

Yes _____

No _____

Don't know _____

If yes, what are the factors you appreciate most? (You may tick several answers)

Efficiency _____

Transparency _____

Easier to pay bills _____

Complaint response _____

Connection service _____

Less leaking _____

Water quality _____

Other _____

4. Are you satisfied with the water services?

Yes _____

No _____

If no, why? _____

5. Do you think the water distribution in Amman is run by the:

Public sector _____

Private Company _____

Don't know _____

If you answered "private" in the last question, do you think private distribution has:

Improved the water situation for your family _____

Worsened the situation for your family _____

Made no difference _____
Don't know _____

6. Have you or your family made any attempt to save/reuse/economise water during the last 6 years?

Yes _____
No _____
Don't know _____

If yes. what actions have you taken? _____

7. Do you think there is a water problem in Jordan?

Yes _____
No _____
Don't Know _____

If yes. what do you think is the primary reason(s) for the water problem in Jordan? (You may tick several answers)

Bad Government _____

Bad Water policies _____

Bad pipes _____

Overpopulation _____

Lack of education on proper water usage _____

Other. please specify _____

8. Who do you think has the responsibility for the proper and fair management of the water reserves in Amman? (You may tick more than one answer):

LEMA, the water company _____

The Government _____

Ministry of Water and Irrigation _____

Water Authority of Jordan _____

The consumers _____

The Municipality _____

Other (s) _____

9. Do you drink bottled water?

Yes _____

No _____

10. Do you drink filtered water?

Yes _____

No _____

11. Any comments _____

Shukran!

APPENDIX F: A NOTE ON THE CONCEPT OF WASTA

“*Wasta*” [vas’da]: The closest concept in English is perhaps “favouritism” as defined by *The Jordan Times* (June 27, 2005). Other definitions might be “preferential treatment of friends, tribes and family”; “camaraderie, or “connections” (as it is used in the *Jordan Human Development Report 2004*: 60). The concept is linked to, but should not be confused with “corruption”, as connections, not money, is involved in *wasta*. Having a *wasta* might mean knowing an “insider”, either with a governmental office, or any other institution providing services. This person will help you get ahead in the queue, or perhaps get you out of paying the bill. A real life example: When I failed my first attempt to get my Jordanian driver’s licence (I did pass the second test), a colleague told me that if I failed my second attempt, I would not have to worry: we would just find ourselves a *wasta*. *The Arab Human Development Report (2004)* defines *wasta* as “personal contacts” in its definition of what it terms “petty corruption”:

Petty corruption refers to situations where Arab citizens have to rely on personal contacts (*wasta*) or pay a bribe to obtain services that are legitimate and to which they are entitled, or to avert a punishment by the authorities. If ending corruption entails, among other measures, deep economic reform, active laws and mechanisms of accountability, and transparent governance, “structural corruption” can be overcome only by radical reform of the political architecture.

(AHDR 2004: 17)

King Abdullah of Jordan is currently stepping up the fight against *wasta* and corruption, and said in a speech on 26th June that “*wasta*, (favouritism) and nepotism have infringed on people’s rights and allowed for the abuse of public funds and deprived some people of deserved opportunities” (as quoted in *The Jordan Times* June 27, 2005). Jordan ranks as number 37 out of 146 nations in Transparency International’s 2005 Annual Corruption Conceptions Index (ibid).