International Water Pricing

Introduction

Water scarcity has no doubt become an issue, especially in developing countries where lack of access to clean water is the primary cause of illness and death. There are several values inherent in water including social, economic, ecological, and religious, moral and cultural. The question that this research attempts to answer is this: What is the private sectors role in water and water pricing?

Water has been globalized, commodified and privatized in recent decades. The uneven distribution of water around the world has led to trade on a global scale, water has been transformed from a non-market to a market good, and the private sectors involvement in the provision of water has increased (Anderson and Gaines). Water can be sold either as a bulk good or as a value-added product such as bottled water.

Water privatization occurred prior to the 1990’s, however, in 1992 the Dublin Statement and the United Nations Agenda 21 acted as a catalyst for new approaches to water resource management. The debate that these prompted revolves around whether or not water should be treated as an economic good (Anderson and Gaines). The Dublin Statement, issued from the International Conference of Water and the Environment (ICWE) includes in it the principle that “Water has an economic value in all its competing uses and should be recognized as an economic good” (ICWE, 1992, Guiding Principle No. 4) while the UN’s Agenda 21 resonates that “integrated water resources management is based on the perception of water as an integral part of the ecosystem, a natural resource and a social and economic good, whose quantity and quality determine the nature of its utilization” (United Nations, 1992). These illustrate the first instances when water was recognized as an economic good which has had much impact on water policy and water pricing.

Proponents for the privatization of water argue that pricing water will improve overall allocation of water and will encourage conservation. In the market-based approach, the notion that if something is nearly free, people will waste it and that if something has value, they will be better stewards of it (Grigg 137). In other words, pricing water provides an incentive for efficient use and the best allocation for maximum benefit.

Proponents of public provision of water argue for the treatment of water as a human right and fear that treating it as an economic good will leave certain people without vital fresh water resources. Notice, in both the Dublin Statement and the UN Agenda 21 cited above, neither clearly defines water as a human right. They both reference access to water as necessary but in
no way indicate that government has the responsibility of providing water to its people. The emphasis on the economic value of water and not on the universal right to water is highly contested by many, especially NGO’s and human rights activists. They argue that water needs to be explicitly recognized as a human right in order to protect people and obligate governments to ensure that all people have fresh water, to help set priorities for water policy and focus attention on resolving international conflicts over transboundary waters, and to help safeguard other human rights principles.

**World Bank-role in Promoting Water Price**

The World Bank initiated water sector reforms aim primarily at privatizing water utilities and commercializing water resources. The water privatization policy of the World Bank articulated in a 1992 paper entitled “Improving Water Resources Management” proceeds from the belief that water availability at low or no cost is uneconomical and inefficient. Even the poor should pay. As pointed out in the “World Development Report 1992”, the poor need a wider range of options so they can choose the level of water services for which they are willing to pay, thereby giving suppliers a financial stake in meeting their needs. (Sara Grusky, Bearing the Burden of IMF and World Bank Policies).

The World Bank argues that "Public sector providers waste water too much, typically losing 40 to 50 percent of their volumes through leaks and theft". Consequently, by the Bank’s logic, this accounts for governments’ inability to expand services to urban slums, small towns and villages. Moreover, governments commonly cite issues of corruption, inefficient water service, and inability to provide piped water access to the poor as reasons for inviting World Bank assistance.

As a solution to public delivery failure, the World Bank supports and vigorously pushes private participation. It asserts that increased cost recovery and privatization will actually expand access to clean water and sanitation, including for the poor. "Effective water resource management requires that water be treated as an economic good," says the Bank, adding that "private participation in water and wastewater utilities has generally resulted in sharp efficiency gains, improved service, and faster investment in expanding service."

Since the Bank views current water tariff rates in several developing countries as ‘below the market rate’, one advice appears to be charging higher rates which the Bank deems necessary to give private companies an incentive and sustainable profit, and allow them thereafter to extend piped water service to the poor. The privatization process would also benefit from commercializing operations at all levels, attracting private investments, substantially increasing water prices and agricultural power tariffs, and creating water markets.
Case Studies

Case 1. EU Water Framework Directive
In recognition of scarce water resources in European countries, the European Union put forth a Framework Directive in 2000 to outline provisions for water resource management in member countries. Article 9 of the Directive addresses recovery of costs for water and the member countries’ role in implementing the pricing policy. The full text of Article 9 can be referred to at https://www.cdt.org/privacy/eudirective/EU_Directive_.html.

While the EU Water Framework Directive does not specifically state full cost recovery as a requirement, it does state that cost recovery for “water services, including environmental and resource costs” be taken into account by member states. The European Environmental Bureau (EEB) wrote a report outlining how a pricing policy would need to be devised to meet the requirements of the Directive. In the report, costs that need to be recovered for full cost recovery to occur include the following:

- Operation and maintenance costs
- Capital costs
- Opportunity costs
- Resource costs
- Social costs
- Environmental damage costs
- Long run marginal costs

The study showed that the level of the water price in EU countries is generally lower than the cost recovery level. However, the pricing in most countries does play a role in achieving environmental goals.

EU water prices 2007
Case 2. Investing in Asia’s Water Sector

Unlike EU countries, Asian countries do not have a common organization for the management of water policies. In Asia, governments remain the dominant water utility players while wastewater treatment clients are both industry and municipalities. However, Asia has become increasingly affected by growing water scarcity and water pollution, and the pace of economic and population growth in parts of the region suggests that these problems will become far worse sooner rather than later. In light of the situation’s growing severity, there are increasing attempts to broaden private sector participation to address Asia’s water related problems. Those in favor of privatization commonly argue that private companies have greater ability to finance water projects, and ultimately optimize efficiency and expand services in pursuit of profit. It is obvious that a huge new infrastructure and services market is emerging in Asia, and the big focus is in China.

The severity of China’s water problem is striking and presents a picture of severe supply constraints which are applicable in part to other Asian countries. China accounts for 22% of the world’s population, but it is endowed with only 7% of the world’s fresh water. Adding to the challenges of insufficient water supply are problems of pollution.

China first began pricing water in 1985. Previously, water was considered a public good. In the initial years, Beijing directed water-pricing policy, though since then this has come increasingly under the authority of provincial price bureaus which approve and implement all tariff changes. However, by comparison to countries with four times the available resource, China’s price for water is between 70-80% lower. Water prices have however, come to increasingly take into account levels of scarcity and willingness to pay. Industry and residential users have tended to
pay more than agricultural users, and rapid consumption growth in major cities has been a catalyst for price hikes.

The Chinese people are willing to pay more for water, the World Bank reports, “as long as the quality of the service is good and the tariff level acceptable.” And yet prices in China are still much too low to ensure that the water is used efficiently enough to sustain the supply. Higher prices would persuade people to both reduce waste and improve the allocation of water across all its possible uses (including in the energy sector). It would also encourage more investment in desalination and other measures to increase supply.

**Case 3. Middle East: Turkey and Cyprus**

Turkey is the only country in the Middle East that has a bountiful supply of freshwater resources, from snowy mountains and heavy precipitation, and it has been actively pursuing becoming a leader in exporting water in the last decade (Anderson and Gaines). The Southeast Anatolia Development Project (GAP) is being developed on the Tigris and Euphrates River and the branches that originate in Turkey in an attempt to “eliminate interregional economic and social imbalances within its borders” (Brooks). The project includes 22 dams and 19 hydropower plants and irrigation networks on the Euphrates and Tigris river basins. The project is expected to irrigate 1.8 million ha of agricultural land, generate 27 billion kwh of annual energy, increase income by 209% and create 3.8 million new jobs (1). Turkey is hoping to harness much of the nearly 5 billion cubic meters per year of water that the Manavgat River provides. Turkey has reportedly discussed water exports with many countries including Cyprus, Israel, Libya, Malta, Greece, and Jordan (Anderson and Gaines). Below are more in depth looks at the negotiations between Turkey and Cyprus.

The Agreement of Water Transportation to the Turkish Republic of Northern Cyprus from Turkey between Turkey, Northern Cyprus, and the Inbar Water Distribution Company was signed in 2003, though water has been being transferred since 1998. Due to decreased precipitation and salt water intrusion that is in the aquifer from over-drawing of groundwater and is so severe that water is no longer potable in some areas, North Cyprus needs water from elsewhere.

Based on a 1999 Harvard Institute for International Development paper by Bicak and Jenkins, North Cyprus annual demand for water is 106.6 million cubic meters, 82% of which is for agriculture. Safe yield from aquifers is estimated to be 74 million cubic meters and rivers and dams can provide about 13 and 7 million cubic meters respectively. The water deficit is therefore approximately 12.5 million cubic meters. The estimated cost from this study to transport, via tanker, 40,000 cubic meters per year from the Manavgat River was US$1.13 per cubic meter with consideration of cost of transport, infrastructure investment, and leakage of 30% in the distribution system. This did include the cost of raw water but it was estimated that Turkey would charge US$0.15 per cubic meter. (Anderson and Gaines).
The current agreement for water transportation is with an Israeli company to transport water via a “new technology” to Cyprus for $0.60 per cubic meter. Currently, a project to construct an 80km undersea pipeline to provide 75 million cubic meters of freshwater per year from a new dam on the Euphrates River in Turkey to Cyprus is underway and expected to be completed in March of 2014 (Hürriyet Daily News).

Case 4. Canada and the US
Canada is the world’s largest single owner of freshwater resources (Johansen). In the Water Protection Act of 1999, Canada bans bulk water export following an outcry from the public. Prior to this ban, in 1986, the government of British Columbia issued licenses to allow the export of freshwater, mostly for small volumes of water, from coastal streams by marine tanker, but not by diversion from its interior rivers (Johansen). Snowcap, one of the first of these, joined forces with Sun Belt Corporation, to supply the small town of Goleta, CA. In 1991 B.C. placed a moratorium on all new or expanded licenses, resulting in Snowcap/Sun Belt being unable to sign a contract with Goleta. The B.C. Water Protection Act of 1996 made the ban permanent. In 1999 Sun Belt sued the government of British Columbia under the North American Free Trade Agreement (NAFTA) which generally prohibits the restriction of the exportation of goods. This raises the question: How does such prohibition fit into international trade agreements like NAFTA and the General Agreement on Tariffs and Trade (GATT)?

Conclusions
Water scarcity is an issue that affects everyone. In recent years water has been sold between countries in order for them to better provide for their constituents. The question has arisen whether water should be treated as an economic good or if should be protected and guaranteed to all as a human right. The discussions from the case studies above present the different views of different regions of the world and different methods of dealing with water scarcity. Water pricing has been suggested to improve water quality, help in allocation, and encourage conservation. Others argue that pricing water is morally objectionable in that it prevents certain populations who cannot afford water from accessing water.

Questions
1. Do you agree that it is appropriate to treat our waters as a commercial good?
2. Do you think that to put a price on water is the best way to improve the scarcity and quality issues that developing countries are facing with their waters?
3. How will public concerns about water pollution affect the current water policy, water pricing, and the potential future investment?
Works Cited


The World Bank Website: <http://water.worldbank.org/water/about-us>
