

The New Economy of Water

The Risks and Benefits of Globalization and Privatization of Fresh Water

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Executive Summary

New voices are beginning to be heard in the debate over water, and new ideas – good and bad – considered. Among the most powerful and controversial of these new ideas is that water should be considered an “economic good” – subject to the rules and power of markets, multinational corporations, and international trading regimes.

In the last decade, this idea has been put into practice in dozens of ways, in hundreds of places, affecting millions of people.

Prices have been set for water previously provided for free. Private companies have been invited to take over the management, operation, and sometimes even the ownership of public water systems. Commercial trade in bottled water has boomed. International development agencies that used to work with governments to improve water services are now pushing privatization efforts. Proposals have been floated to transfer fresh water in bulk across international borders and even across oceans. This paper addresses these issues and concerns, and offers principles and standards to guide policymakers in the future.

We do not think the trend toward globalization and privatization of fresh water can be stopped, nor do we think it has to be. In some places and in some circumstances, letting private companies take responsibility for *some* aspects of water provision or management may help millions of poor people receive access to basic water services.

However, there is little doubt that the headlong rush toward private markets has failed to address some of the most important issues and concerns about water. In particular, water has vital social, cultural, and ecological roles to play that cannot be protected by purely market forces. In addition, certain management goals and social values require direct and strong government support and protection. Some of the consequences of privatization may be irreversible; hence they deserve special scrutiny and control.

As a result, we conclude that any efforts to privatize or commodify water must be evaluated far more carefully than they have been. Privatization efforts should be accompanied

by guarantees to respect certain principles and support specific social objectives. Among these are the need to provide for the basic water needs of people and ecosystems, permit equitable access to water for poor populations, include affected parties in decision making, and improve water-use efficiency and productivity.

Definitions

Globalization

“*Globalization*” is defined here as the process of integrating and opening markets across national borders. The entire process of globalization is highly controversial, raising great concern about national sovereignty, corporate responsibility, equity for the world’s poorest people, and the protection of the environment. The controversy extends to proposals to encourage large-scale trading of freshwater across borders. Indeed, among the most controversial water issues today are questions about how to implement – indeed, *whether* to implement – international water trading and sales.

Privatization

“*Privatization*” in the water sector involves transferring some or all of the assets or operations of public water systems into private hands. There are numerous ways to privatize water, such as the transfer of the responsibility to operate a water delivery or treatment system, a more complete transfer of system ownership and operation responsibilities, or even the sale of publicly owned water rights to private companies. Alternatively, various combinations are possible.

Commodification

“*Commodification*” is the process of converting a good or service formerly subject to many non-market social rules into one that is primarily subject to market rules.

Openness, transparency, and strong public regulatory oversight are fundamental requirements in any efforts to shift the public responsibility for providing clean water to private entities.

Water is Both a Social Good and an Economic Good

Water can be both a social and an economic good. Access to clean water is fundamental to survival and critical for reducing the prevalence of many water-related diseases. Other dimensions of water supply also have a social good character and therefore require governmental action, oversight, or regulation. Because water is important to the process of economic development, essential for life and health, and has cultural or religious significance, it has often been provided at subsidized prices or for free in many situations. In theory, though not always in practice, this makes water available to even the poorest segments of society.

Frustration over the failure to meet basic needs for water for all people in the last century has led to a rethinking of national and international water priorities and policies. Among these is the potential value of applying economic tools and principles. The International Conference on Water and Environment, held in Dublin, Ireland in January 1992, concluded, among other things, that:

“Water has an economic value in all its competing uses and should be recognized as an economic good.”

Following the Dublin meeting, the United Nations Conference on Environment and Development (held in Rio in 1992) clearly recognized that economics must play a part in efficient water management:

“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.”

What has been far less clear is how, practically, to achieve the right balance between managing water as an economic and a social good. This has become evident in the growing debate over globalization and privatization of water worldwide.

Globalization and International Trade in Water

The world’s water is unevenly distributed, with great natural variations in abundance. Indeed, the complex and expensive water systems that have been built over the past few centuries

have been designed to capture water in wet periods for use in droughts and to move water from water-rich regions to water-poor regions. As domestic, industrial, and agricultural demands for fresh water have grown, entrepreneurs have created a wide range of markets for water, leading to various forms of international water trading and exchanges.

In the past, most large-scale transfers of water occurred within national and political borders. Agreements were also common among nations that share a watershed, such as the U.S. and Mexico over the Colorado, the Sudan and Egypt over the Nile, and many others. Now, however, proposals for bulk water transfers are being made at international, and even global, levels between parties that do not share a watershed. In recent years Alaskan, Canadian, Icelandic, Malaysian, Turkish, and other waters have been proposed as sources for international trade in bulk water. Besides the historically important environmental and socioeconomic implications of water transfers, the possibility of large-scale bulk trading of fresh water has now become an issue in international trade negotiations and disputes.

The possibility of bulk water transfers has caused concern in water-abundant regions that a global water-trading regime might lead to the requirement that abundant resources be tapped to provide fresh water for the rest of the world, at the expense of local environment and people.

The Rules: International Trading Regimes

Rules governing international trade, such as those set out by GATT, WTO, and NAFTA, are complex and often contradictory. In recent years, efforts to implement standard rules have been developed in various international forums, and these rules have become increasingly sophisticated and important to the global economy. At the same time, they have become increasingly controversial, as their implications for the environment, civil society, and local economies become clearer.

There is little legal precedent pertaining directly to international trade in water, making it difficult to predict the outcomes of current and future trade disputes in this area with certainty. However, commercial pressures to export water are increasing, making resolution of these ambiguities an important goal. In addition, adverse, even virulent public sentiment over several proposed exports highlights the need to resolve and clarify issues.

There is considerable debate among legal experts as to whether WTO member governments can control, limit, or regulate bulk water exports, and there are few legal

precedents. We believe a strong argument can be made to support banning bulk exports of water under GATT Article XX(g) where freshwater water resources are “non-renewable” or exhaustible through overuse or abuse, assuming domestic production or consumption is also limited to prevent non-renewable uses. In some circumstances, we also believe that GATT would support a ban on bulk exports of water when such exports threaten ecosystem or human health.

Our analysis also suggests, however, that profitable large-scale, long-term bulk exports of water across international borders are unlikely for many reasons, especially the high economic cost of moving water. Nevertheless, great uncertainty continues to revolve around the legal interpretation of international trade agreements in the context of globalizing water resources and we urge clarification of rules governing bulk exports of water. In particular, we recommend national water policies that explicitly protect water necessary to support human and ecosystem health and prohibit the mining and export of non-renewable water resources.

The New Economy of Water: Privatization

One of the most important – and controversial – trends in the global water arena is the accelerating transfer of the production, distribution, or management of water or water services from public entities into private hands – a process loosely called “privatization.” Treating water as an economic good, and privatizing water systems, are not new ideas. Private entrepreneurs, investor-owned utilities, or other market tools have long provided water or water services in different parts of the world. What *is* new is the extent of privatization efforts underway today, and the growing public awareness of, and attention to, problems associated with these efforts.

The issue has resurfaced for several reasons: first, public water agencies have been unable to satisfy the most basic needs for water for all humans; second, major multinational corporations have greatly expanded their efforts to take over responsibility for a larger portion of the water service market than ever before; and third, several recent highly publicized privatization efforts have failed or generated great controversy.

The privatization of water encompasses an enormous variety of possible water-management arrangements. Privatization can be partial, leading to so-called public/private partnerships, or complete, leading to the total elimination of government responsibility for water systems. At the largest scale, private water companies build, own, and operate water systems

around the world with annual revenues of approximately \$300 billion, excluding revenues for sales of bottled water. At the smallest scale, private water vendors and sales of water at small kiosks and shops provide many more individuals and families with basic water supplies than they did 30 years ago. Taken all together, the growing roles and responsibilities of the private sector have important and poorly understood implications for water and human well-being.

As a measure of the new importance of privatization, the World Bank, other international aid agencies, and some water organizations like the World Water Council are increasingly pushing privatization in their efforts, but without a common set of guidelines and principles. As a result, there is rapidly growing opposition to privatization proposals from local community groups, unions, human rights organizations, and even public water providers.

Protests – sometimes violent – have occurred in many places, including Bolivia, Paraguay, South Africa, the Philippines, and various globalization conferences around the world. Opposition arises from concerns over the economic implications of privatizing water resources, the risks to ecosystems, the power of corporate players, foreign control over a fundamental natural resource, inequities of access to water, and the exclusion of communities from decisions about their own resources. Some fundamental principles are necessary to prevent inequitable, uneconomic, and environmentally damaging privatization agreements.

The Risks of Privatization: Can and Will They Be Managed?

The move toward privatization of water services raises many concerns, and in some places, even violent opposition. In large part, opposition arises because of doubts about whether purely private markets can address the many different social good aspects of water, or whether some non-market mechanisms are necessary to serve social objectives.

Other concerns relate to a fundamental distrust of corporate players and worries about the transfer of profits and assets outside of a community or even a country. The greatest need for water services often exists in those countries with the weakest public sectors; yet the greatest risks of failed privatization also exist where governments are weak.

The rapid pace of privatization in recent years and the inappropriate ways several projects have been implemented have compounded the worries of local communities, non-governmental organizations, and policymakers.

As a result, private water companies are increasingly seeing serious and sustained public opposition to privatization proposals.

Water Provision is a Basic Responsibility of Governments

Governments have a fundamental duty to see that basic services, such as water, sewerage, and energy, are provided to their people. The failure to satisfy such basic needs, or at least provide the means to do so, must be viewed as irresponsible. Efforts of international lending agencies and development organizations have, in the past, focused on helping governments to provide these services. More recently, these organizations have begun to shift their efforts, pushing privatization as a new solution. We have serious concerns about this transfer of responsibility and the loss of control it implies.

Privatization May Bypass Under-Represented and Under-Served Communities

One of the basic goals of any proposal to provide water services (publicly or privately) should be to meet explicitly the needs of under-served communities through an expansion of access to water or wastewater services. Poor peri-urban populations have traditionally been under-served because they lack political power or representation, they come from unofficial “communities,” or they may be unable to pay as much for water as residents in wealthier areas. Privatization can potentially worsen this neglect.

Privatization Can Worsen Economic Inequities and the Affordability of Water

One of the leading arguments offered by proponents of privatization is that private management or ownership of water systems can reduce the water prices paid by consumers. Ironically, one of the greatest concerns of local communities is that privatization will lead to *higher* costs for water and water services. The actual record is mixed – both results have occurred.

One of the potential benefits of privatization is elimination of inappropriate subsidies. We note, however, that *lack* of water subsidies in some cases can have disastrous results, especially when combined with pressures to recover costs. There has been inadequate attention given in privatization negotiations and debates to identifying the difference between appropriate and inappropriate subsidies. When water systems or operations are privatized, it may be desirable to protect some groups of citizens or businesses from paying the full cost of service.

Privatization Agreements May Fail to Protect Public Ownership of Water and Water Rights

Privatization of water management can, under some circumstances, lead to the loss of local ownership of water systems, which in turn can lead to neglect of the public interest. Many of the concerns expressed about privatization relate to the control of water rights and changes in water allocations, rather than explicit financial or economic problems. In part, this is the result of the deep feelings people have for water. It is also the result, however, of serious neglect of these issues by some who promote privatization.

Privatization Agreements Often Fail to Include Public Participation and Contract Monitoring

Oversight and monitoring of public-private agreements are key public responsibilities. Far more effort has been spent trying to ease financial constraints and government oversight, and to promote private-sector involvement, than to define broad guidelines for public access and oversight, monitor the public interest, and ensure public participation and transparency. Weaknesses in monitoring progress can lead to ineffective service provision, discriminatory behavior, or violations of water-quality protections.

Inappropriate Privatization Efforts Ignore Impacts on Ecosystems or Downstream Water Users

Many privatization contracts include provisions to encourage the development of new water supplies, often over a long period of time. If privatization contracts do not also guarantee ecosystem water requirements, development of new supply options will undermine ecosystem health and well-being (for both public and private developments). Balancing ecological needs with water supply, hydroelectric power, and downstream uses of water is a complex task involving many stakeholders.

Privatization Efforts May Neglect the Potential for Water-Use Efficiency and Conservation Improvements

One of the greatest concerns of privatization watchdogs is that efficiency programs are typically ignored or even cancelled after authority for managing public systems is turned over to private entities. Improvements in efficiency reduce water sales, and hence may lower revenues. As a result, utilities or companies that provide utility services may have little or no financial incentive to encourage

conservation. In addition, conservation is often less capital intensive and therefore creates fewer opportunities for investors. Consequently, it may be neglected in comparison with traditional, centralized water-supply projects.

Privatization Agreements May Lessen Protection of Water Quality

Private suppliers of water have few economic incentives to address long-term health problems associated with low levels of some pollutants. In addition, private water suppliers have an incentive to understate or misrepresent to customers the size and potential impacts of problems that do occur. As a result, there is widespread agreement that maintaining strong regulatory oversight is a necessary component of protecting water quality. When strong regulatory oversight exists, privatization can lead to improvements in water quality.

Privatization Agreements Often Lack Dispute-Resolution Procedures

Public water companies are usually subject to political dispute-resolution processes involving local stakeholders. Privatized water systems are subject to legal processes that involve non-local stakeholders and perhaps non-local levels of the legal system. This change in *who* resolves disputes, and the rules for dispute resolution, is accompanied by increased potential for political conflicts over privatization agreements. While we strongly support the concept of standards, benchmarks, and clear contract agreements, such standards must be negotiated in an open, transparent process, with input from all parties, not just water companies.

Privatization of Water Systems May be Irreversible

When governments transfer control over their water system to private companies, the loss of internal skills and expertise may be irreversible, or nearly so. Many contracts are long term – for as much as 10 to 20 years. Management expertise, engineering knowledge, and other assets in the public domain may be lost for good. Indeed, while there is growing experience with the transfer of such assets to private hands, there is little or no recent experience with the public sector re-acquiring such assets from the private sector.

Principles and Standards for Privatization

We believe that the responsibility for providing water and water services should still rest with local communities and governments, and that efforts should be made to strengthen the ability of governments to meet water needs. As described

in this study, the potential advantages of privatization are often greatest where governments have been weakest and failed to meet basic water needs. Where strong governments are able to provide water services effectively and equitably, the attractions of privatization decrease substantially. Unfortunately, the worst risks of privatization are also where governments are weakest, where they are unable to provide the oversight and management functions necessary to protect public interests. This contradiction poses the greatest challenge for those who hope to make privatization work successfully.

Despite the vociferous, and often justified, opposition to water privatization, proposals for public-private partnerships in water supply and management are likely to become more numerous in the future. We do not argue here that privatization efforts must stop. We do, however, argue that all privatization agreements should meet certain standards and incorporate specific principles. Consequently, we offer the following Principles and Standards for privatization of water-supply systems and infrastructure.

1. Continue to Manage Water as a Social Good

1.1 Meet basic human needs for water. All residents in a service area should be guaranteed a basic water quantity under any privatization agreement.

Contract agreements to provide water services in any region must ensure that unmet basic human water needs are met first, before more water is provided to existing customers. Basic water requirements should be clearly defined (Gleick 1996, 1999).

1.2 Meet basic ecosystem needs for water. Natural ecosystems should be guaranteed a basic water requirement under any privatization agreement.

Basic water-supply protections for natural ecosystems must be put in place in every region of the world. Such protections should be written into every privatization agreement, enforced by government oversight.

1.3 The basic water requirement for users should be provided at subsidized rates when necessary for reasons of poverty.

Subsidies should not be encouraged blindly, but some subsidies for specific groups of people or industries are occasionally justified. One example is subsidies for meeting basic water requirements when that minimum amount of water cannot be paid for due to poverty.

2 Use Sound Economics in Water Management

2.1 Water and water services should be provided at fair and reasonable rates.

Provision of water and water services should not be free. Appropriate subsidies should be evaluated and discussed in public. Rates should be designed to encourage efficient and effective use of water.

2.2 Whenever possible, link proposed rate increases with agreed-upon improvements in service.

Experience has shown that water users are often willing to pay for improvements in service when such improvements are designed with their participation and when improvements are actually delivered. Even when rate increases are primarily motivated by cost increases, linking the rate increase to improvements in service creates a performance incentive for the water supplier and increases the value of water and water services to users.

2.3 Subsidies, if necessary, should be economically and socially sound.

Subsidies are not all equal from an economic point of view. For example, subsidies to low-income users that do not reduce the price of water are more appropriate than those that do because lower water prices encourage inefficient water use. Similarly, mechanisms should be instituted to regularly review and eliminate subsidies that no longer serve an appropriate social purpose.

2.4 Private companies should be required to demonstrate that new water-supply projects are less expensive than projects to improve water conservation and water-use efficiency before they are permitted to invest and raise water rates to repay the investment.

Privatization agreements should not permit new supply projects unless such projects can be proven to be less costly than improving the efficiency of existing water distribution and use. When considered seriously, water-efficiency investments can earn an equal or higher rate of return to that earned by new

water-supply investments. Rate structures should permit companies to earn a return on efficiency and conservation investments.

3. Maintain Strong Government Regulation and Oversight

3.1 Governments should retain or establish public ownership or control of water sources.

The “social good” dimensions of water cannot be fully protected if ownership of water sources is entirely private. Permanent and unequivocal public ownership of water sources gives the public the strongest single point of leverage in ensuring that an acceptable balance between social and economic concerns is achieved.

3.2 Public agencies and water-service providers should monitor water quality. Governments should define and enforce water-quality laws.

Water suppliers cannot effectively regulate water quality. Although this point has been recognized in many privatization decisions, government water-quality regulators are often under-informed and under-funded, leaving public decisions about water quality in private hands. Governments should define and enforce laws and regulations. Government agencies or independent watchdogs should monitor, and publish information on, water quality. Where governments are weak, formal and explicit mechanisms to protect water quality must be even stronger.

3.3 Contracts that lay out the responsibilities of each partner are a prerequisite for the success of any privatization.

Contracts must protect the public interest; this requires provisions ensuring the quality of service and a regulatory regime that is transparent, accessible, and accountable to the public. Good contracts will include explicit performance criteria and standards, with oversight by government regulatory agencies and non-governmental organizations.

3.4 Clear dispute-resolution procedures should be developed prior to privatization.

Dispute resolution procedures should be specified clearly in contracts. It is necessary to develop practical procedures that build upon local institutions and practices, are free of corruption, and difficult to circumvent.

3.5 Independent technical assistance and contract review should be standard.

Weaker governments are most vulnerable to the risk of being forced into accepting weak contracts. Many of the problems associated with privatization have resulted from inadequate contract review or ambiguous contract language. In principle, many of these problems can be avoided by requiring advance independent technical and contract review.

3.6 Negotiations over privatization contracts should be open, transparent, and include all affected stakeholders.

Numerous political and financial problems for water customers and private companies have resulted from arrangements that were perceived as corrupt or not in the best interests of the public. Stakeholder participation is widely recognized as the best way of avoiding these problems.

Broad participation by affected parties ensures that diverse values and varying viewpoints are articulated and incorporated into the process. It also provides a sense of ownership and stewardship over the process and resulting decisions.

We recommend the creation of public advisory committees with broad community representation to advise governments proposing privatization; formal public review of contracts in advance of signing agreements; and public education efforts in advance of any transfer of public responsibilities to private companies. International agency or charitable foundation funding of technical support to these committees should be provided.

Conclusions

As the 21st century unfolds, complex and new ideas will be tested, modified, and put in place to oversee the world's growing economic, cultural, and political connections. One of the most powerful and controversial will be new ways of managing the global economy. Even in the first years of the new century, political conflict over the new economy has been front and center in the world's attention.

This controversy extends to how fresh water is to be obtained, managed, and provided to the world's people. In the water community, the concept of water as an "economic good" has become the focal point of contention. In the last decade, the idea that fresh water should be increasingly subject to the rules and power of markets, prices, and international trading regimes has been put into practice in dozens of ways, in hundreds of places, affecting millions of people. Prices have been set for water previously provided for free. Private corporations are taking control of the management, operation, and sometimes even the ownership of previously public water systems. Sales of bottled water are booming. Proposals have been floated to transfer large quantities of fresh water across international borders, and even across oceans.

These ideas and trends have generated enormous controversy. In some places and in some circumstances, treating water as an economic good can offer major advantages in the battle to provide every human with their basic water requirements, while protecting natural ecosystems.

Letting private companies take responsibility for managing some aspects of water services has the potential to help millions of poor receive access to basic water services. But in the past decade, the trend toward privatization of water has greatly accelerated, with both successes and spectacular failures. Insufficient effort has been made to understand the risks and limitations of water privatization, and to put in place guiding principles and standards to govern privatization efforts.

There is little doubt that the headlong rush toward private markets has failed to address some of the most important issues and concerns about water.

In particular, water has vital social, cultural, and ecological roles to play that cannot be protected by purely market forces. In addition, certain management goals and social values require direct and strong government support and protection, yet privatization efforts are increasing rapidly in regions where strong governments do not exist.

We strongly recommend that any efforts to privatize or commodify water be accompanied by formal guarantees to respect certain principles and support specific social objectives. Among these are the need to provide for the basic water needs of humans and ecosystems as a top priority. Also important is ensuring independent monitoring and enforcement of water quality standards, equitable access to water for poor populations, inclusion of all affected parties in decision making, and increased reliance on water-use efficiency and productivity improvements.

Openness, transparency, and strong public regulatory oversight are fundamental requirements in any efforts to share the public responsibility for providing clean water to private entities.

Water is both an economic and social good. As a result, unregulated market forces can never completely and equitably satisfy social objectives. Given the legitimate concerns about the risks of this “new economy of water,” efforts to capture the benefits of the private sector must be balanced with efforts to address its flaws. Water is far too important to the well being of humans and our environment to be placed entirely in the private sector.