

Editorial

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Introduction

Leonardo da Vinci, the eminent renaissance scholar and philosopher, said, “water is the driver of nature”. Many people in the past have considered it to be an over-statement, but at the beginning of the third millennium, it is difficult to disagree with Leonardo’s views. During the past five years, water has been increasingly considered to be one of the most critical natural resources issues for the early part of the 21st century. Analyses of all the current water-related trends indicate that the overall global water situation, at least for the next decade, if not for longer, is likely to deteriorate even further.

Strangely, however, neither the water and the development professionals, nor the international development-related institutions, realized or appreciated the seriousness of the global water situation as late as 1995, even though a few observers have been predicting this possibility for at least two decades. This can probably be best illustrated by the fact that the seriousness of the water crisis was not even a minor issue for discussion at either the International Conference on Water and the Environment that was organized by the United Nations System in Dublin, or at the United Nations Conference on Environment and Development at Rio de Janeiro. Held during the first half of 1992, both are considered to be landmark events of the 1990s.

It is now being increasingly realized that the Dublin Conference was poorly planned and organized, with very little appreciation or understanding of the potential water problems of the world, let alone finding and recommending solutions that could be implemented. Furthermore, as the Dublin Conference was expected to make the necessary inputs to the Rio discussions, not surprisingly, water did not receive adequate consideration at Rio.

For all practical purposes, at Rio, water was basically ignored by all the Heads of States, whose primary interests were focused on issues like climate change, biodiversity and deforestation. Water was at best a very minor issue during the plenary discussions. The chapter on water in Agenda 21, one of the main outputs at Rio, is not only the longest but is also the most poorly formulated. Thus, despite the rhetoric of the institutions and the individuals associated with the organization of the Dublin and the Rio Conferences, their impacts on global, regional or local water management have not been discernible. In all probability, development in the water sector would not have been materially different even if these two events had not occurred.

Water Crisis

In retrospect, it appears that the global water crisis was brought to prominence in the international agenda, not through the work of international organizations such as
0790-0627 Print/1360-0648 Online/05/0103–6 © 2005 Taylor & Francis Group Ltd
DOI: 10.1080/0790062042000316776

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the United Nations agencies, but primarily through the leadership and efforts of the Stockholm Water Symposium, an annual water event that is attended by leading water professionals from all over the world. By regularly focusing on the importance and relevance of water to the future socio-economic development of the world and its importance to environmental conservation, the Stockholm Water Symposium managed to convince the water profession that the global water situation, at least during the early part of the 21st century is likely to get worse, and thus must be considered seriously.

By the late 1990s, water became an important issue for discussion in the international political agenda. By the beginning of the 21st century, many international organizations suddenly decided that the world is heading for a water crisis that will be unprecedented in human history. Accordingly, water received much higher emphasis at the Johannesburg Summit of 2002, compared to at the Rio Conference. The Johannesburg Summit was organized by the United Nations to review the progress made since the Rio Conference a decade ago. The Committee on Sustainable Development of the United Nations decided to give high priority to water. The UN General Assembly declared the year 2003 as the 'Year of the Freshwater'. These decisions should have been taken at least a decade ago.

Regrettably, just as in the early 1990s water did not receive adequate attention, the issue of the water crisis is somewhat overblown at present.

While predicting the future is an extremely hazardous business, one item can be predicted with complete certainty: the world in 2025 will be vastly different compared to what it is today. Among the main driving forces that are likely to contribute to these changes are rapidly changing demographic conditions, concurrent urbanization and ruralization in the developing world, technological advances in water and non-water related areas, information and communication revolution, speed and extent of globalization, improvements in human capital and national and international policies. While some of the pathways through which the water sector will be affected by these driving forces are known, or can be predicted, many of the pathways are unknown at present.

While it is not realized at present, it is highly likely that water development and management practices will change more during the next 20 years, compared to the changes that have been witnessed during the past 2000 years (Biswas, 1999). So far, the water profession has generally ignored the global forces outside the water sector that are already shaping the future availability of resources and its use and management practices. These impacts are likely to increase very significantly during the next quarter of a century, and yet the water profession has not yet started to factor in these new developments, and their impacts on the global water scene, even in a cursory manner. Much of the impetus for these changes will come from outside the water sector, and the water profession will have to adjust rapidly to these changes. All these developments are likely to revolutionize future water planning and management policies and practices. Because of these changes, some of which now can be foreseen, it is possible to become cautiously optimistic of the global water future.

Water Pricing

One of the issues that is likely to have major impacts on water use and management practices in the future is water pricing, a topic that is considered to be somewhat

controversial at present. The World Commission on Water for the 21st Century in its report (2000) said categorically:

Commission members agreed that the single most immediate and important measure that we can recommend is the systematic adoption of full-cost pricing for water services.

The reasons for this recommendation were outlined by the Commission as follows:

- Far too few public resources are devoted to public goods, especially environmental enhancement;
- Free water leads to wasted water;
- Considerable resources invested in the water and sanitation sectors, estimated at \$30 billion a year, are used inefficiently;
- Governments in developing countries cannot meet the investment demands for water services now, let alone for the future, yet they are under-investing in public goods.

The Commission then went on to say:

The situation is clear, without full-cost pricing the present vicious cycle of waste, inefficiency, and lack of services for the poor will continue. There will be little investment from the private sector, services will be of poor quality and rationed, and there will be little left for investing in water quality and other environmental improvements. The corollary is that there could be a 'virtuous cycle', too. This could be one in which users pay for the services that want, in which the urban utilities and irrigation agencies provide these services efficiently and accountably, in which users pay the costs of these services, in which investors place their money, and in which public funds are used primarily for public purposes.

Some four years after this report was issued, an objective assessment indicates that the Commission (the author was a member of this Commission) basically got the thrust of its arguments right, even though water pricing was one of the two issues that attracted maximum debate during the Second and Third World Water Forums at The Hague, in March 2000, and Kyoto, in March 2003. The second most controversial issue of this report was the recommendation of private sector involvement in the water sector, which is also a focus of this issue of the journal. Of course, this is not surprising since in many ways these two issues are interlinked. The private sector would have no interest in managing a water concession unless they could recover their investment costs, and also make a reasonable return on the capital invested. Without water pricing, there will be no private sector interest in managing large urban water concessions.

It is now being widely accepted that water services can no longer be free to all the consumers, or could be provided to them ad infinitum and universally on a highly subsidized basis. The era when water could be provided free is now mostly over. Efficient water management is simply not possible unless demands are managed properly, consistently and equitably. One of the tools for efficient demand management is unquestionably water pricing.

This, of course, does not mean that we have all the answers on how water should be priced for different consumers and for different uses. How can we ensure that the poor have adequate access to reliable water and sanitation services and affordable prices, but concurrently the rich are not subsidized? How, by whom, and through what processes should these services be managed so as to ensure the objectives of provision of reliable services, economic efficiency and maximizing social welfare are met concurrently? These and many other associated questions need to be answered satisfactorily, based on observed facts and scientific analyses, and not on dogmatic views. What is becoming increasingly clear is that there are no universal solutions. Each case needs to be analysed and judged on its merits and constraints. What may be working well for England and Wales, where the entire water services were sold to the private sector, may not be an appropriate solution for Argentina or Mexico. Equally, within a country there are likely to be several alternatives, especially if the countries are large and diverse in terms of climatic, economic and social conditions, like USA, Brazil, China or India. Furthermore, solutions may also vary with time in the same location, depending upon the prevailing socio-political conditions and economic considerations.

Public–Private Partnership

The World Commission on Water also made several comments on the possible roles of the private sector in managing water resources in the future. The report pointed out that:

- Adequate incentives should be provided to the private sector to contribute where it is well equipped to do so;
- The private sector will bring neither its money nor its management skills and know-how, unless it can operate in a predictable, transparent regulatory environment, and unless it can get a reasonable return on its investments, without undue political interference;
- The private sector can bring in additional financing to the water sector, which the public sector alone cannot provide;
- The Private sector can considerably improve the current poor technical and financial performances of most water utilities in the developing world.

Both at the Second World Water Forum in the Hague in 2000, and the Third World Water Forum in Japan in 2003, a main contention of the activists, who strongly opposed both water pricing and private sector participation, was that these two issues are interrelated. The point was made repeatedly that water pricing is a ‘code word’ for handing over an essential public service to the private sector, which will then make unseemly profits at the cost of the poor.

During the Hague Forum, it was widely assumed that a few multinational corporations (4–6) would ‘control’ the water services sectors of urban areas of the world. They would become so big and powerful that the public regulators would not be able to control them. By the Third World Water Forum, a scant three years after the Hague event, the goal-pasts had shifted. Whereas in 2000 a few multinational companies were increasing their outreach at a very rapid pace, by 2003, the same companies were beating a retreat from the developing world. Saddled by huge debts and significant losses in many concessions, and

facing a steeply declining share process, most multinational water companies had decided to significantly curtail their ambitious plans of the recent past. The post-2000 period also witnessed very significant changes in these companies, through mergers, demergers and bankruptcies.

Since the World Commission on Water issued its report some three years ago, the knowledge-base in this area has improved significantly. Based on the latest analyses, the following can be observed:

- The private sector currently serves about 4–7% (estimates vary) of urban water consumers in the developing world. This percentage is likely to increase in the coming years, but most likely at a much slower rate than what was anticipated even only two years ago.
- Under all foreseeable conditions, the vast majority of domestic urban consumers will continue to receive their water and wastewater services from the publicly-run water companies, at least for the next 15 years.

Because of controversies that are common in this area, the Third World Centre for Water Management decided to carry out a series of in-depth analyses on the performances of the private sector in various developing countries. Based on these analyses, following conclusions can be drawn.

First, there are many forms of private sector involvement. These could range from outright sales of assets to the private sector, as was the case for England and Wales, to provision of management concessions to run water supply and wastewater collection and treatment facilities over a fixed number of years (current concessions range from 3 to 60 years), to outsourcing of specific activities. Since England and Wales sold outright all its assets to the private sector in 1989, no other country has followed this model. Some 15 years after this privatization in England and Wales, there is currently no agreement amongst water professionals as to its actual impacts on the consumers and quality of services provided. The assessments available at present range from highly favourable to equally highly deplorable.

In contrast to outright sale of assets, the use of management contracts to the private sector for specific period of years has proliferated during the past 5–7 years. Here again no universal judgement can be made. Some concessions have been very successful, but equally others have been dismal failures. Results have sometimes varied even within a single country (for example, in Morocco, Casablanca could be considered to be a success but not Rabat), and in one instance at least in the same metropolitan area (half of Manila works, but the other half does not).

There could also be a time dimension to the effectiveness of the private sector involvement. Thus, Buenos Aires was a good example of private sector involvement, until the economic meltdown in Argentina changed all the boundary conditions. Recently, the concessionaire had to write off nearly \$500 million of its investments in this city.

Thus, there is no single model of private sector participation which could be appropriate to all cases in one country, let alone for the entire world.

Second, after rapid expansion in the award of concessions to manage water supply and wastewater systems to the private sector in recent years, the rate of award of new similar arrangements has slowed down very perceptibly since the year 2002. Near terms prospects for new concessions do not look encouraging. On 9 January 2003, one of the major multinational groups announced a 5-point action

plan for 2003–2004, which included:

- reduction of debt mainly by selling assets;
- cost reduction;
- new investments to be financed by cash flow, which means that its new annual investments will fall from €8 billion to €4 billion;
- reorganization; and
- reducing its exposure in developing countries by one-third.

Third, competitive pressure from the multinational water companies has improved the performances of the public sector companies in many developed as well as developing countries. This is an advantage that the water professionals have mostly missed. It is expected that the performances of many public sector water companies would improve quite considerably in the future, certainly at a much higher rate than has been the norm for the past 20 years. Without the threat of the private sector competition, it is highly unlikely that the performances of the public sector companies would have improved in such a remarkable fashion in recent years, and over such a short period of time.

Finally, performances of public and private sector companies should not be generalized. By most criteria, the best water utility in the world continues to be Singapore, a public sector endeavour. Even within the private sector companies, their performances have varied very significantly, ranging from excellent to very dismal. Equally, the performances of individual multinational water companies have varied from one city to another, and also could vary over time even in the same city. Thus, any objective analysis of the current state of affairs will have to conclude that the performances of the public sector are not necessarily uniformly bad, and equally the achievements of all the private sector companies are not necessarily uniformly good. Each case should be judged on its merits and demerits, and over a specific period of time. Thus, both the high priests of the private sector who claim that the private sector will solve all the problems, and the die-hard social activists who claim that private sector has no role to play in water supply and wastewater management are wrong. Each project must be judged by its performances, which must be based on objective analyses of facts, and must not make generalized statements based on dogmas and/or hidden agendas.

Concluding Remarks

The papers for this issue were specially commissioned by the Third World Centre for Water Management to review the status of the use of water pricing in different parts of the world, and also what have been the global experiences in public–private partnership in the water sector. Supported by the Inter-American Development Bank and Agencia Nacional de Aguas of the Government of Brazil, the only objective of the analyses in this special issue is not to promote water pricing and public–private partnerships as panaceas, but to discuss what are their comparative advantages and disadvantages compared to the traditional practices of the recent years. Based on such information and experiences, individuals in specific locations can then make informed decisions as to what could be the most optimal decisions for the case in question.

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