Privatisation of Water Resource Management: Looking Beyond Profiteering

Mr. Jagadisha Bala*
Dr. Y. Muniraju**

Introduction

Water, the need of life, is likely to pose the greatest challenge on account of an increased demand with population rise, urbanisation and economic development, and shrinking supplies due to over-exploitation and pollution. Although water is an abundant and renewable natural resource covering two thirds of the planet, a very small proportion of this is effectively available for human use. In India, as a result of development, the demand for water is increasing both in urban and rural areas. This may increase tensions and disputes over sharing and command of water resources. The emerging scarcity of water has also raised a host of issues related to sustainability of the present form of economic development, sustained water supply, equity and social justice, water financing, pricing, governance and management.

India has more than 18% of the world's population, but has only 4% of world's renewable water resources and 2.4% of world's land area (National Water Policy 2012). One of the major constraints often cited for India in achieving developmental goals is the pressure of an ever-increasing population. According to the census data of 2011, the population of India is 1.21 billion. The per capita water availability of water has decreased from 2,309 cubic metres (m^3) in 1991 (Sharma and Bharat, 2009) to around 1,170 m^3 (NIH, 2010). India does not fall under the category of a water scarce country per se, rather it can be termed as a country under 'water stress'[1]. Considering the projected population growth in 2025, the per capita water availability in India can further decrease to 1,000 m^3, which would then be termed a 'water scarcity' situation (UNICEF, 2013).

United Nations - Water as a Human Right

When the 1948 Universal Declaration on Human Rights was written, no one expected to see a day when the need to ensure access to water would be so important. The United Nations (UN) in their Millennium Declaration draws attention to the importance of water and related activities in supporting development and eradicating poverty. In December 2003, the UN General Assembly, declared the period 2005-2015 International Decade for Action 'Water for Life'.

The Government of India also declared the year 2007, 'Water Year'. Access to fresh water is a pre-requisite for achieving the goal of sustainable development and better health care. On July 28, 2010, in a historic moment for humanity, the UN affirmed the right to water and sanitation as a fundamental human right (A/RES/64/292) - an important step in transforming society's relationship with water and holding governments accountable.

Later in the year, the Human Rights Council of the United Nations went even further. In September 2010, the Human Rights Council clarified that the right to water and sanitation is part of existing international human rights law and as such, States can no longer deny their responsibilities to provide safe water and sanitation. Since India voted in favor of the General Assembly resolution and is a signatory of the International Covenant on Economic, Social and Cultural Rights and the Convention on the Rights of the Child, its responsibilities are clear under international law.

The Right to Water in the Indian Context

National Water Policy (NWP) -2012, calls for the Centre, the States and the local bodies to ensure access to a minimum quantity of potable water for essential health and hygiene to all its citizens. But water is not referred to 'as a human right' anywhere in NWP.

Although the Right to Water is not enshrined in India's Constitution as Fundamental Right, various judgments of the High Courts and Supreme Court have equated the right to water as part of the 'Right to Life' (Article

*Associate Professor, Government First Grade College, Haleangadi **Faculty Member, P.G. Department of Commerce, Mangalore University. This article is based on a joint paper presented by the sam authors in the National Conference held at Nitte on Dec. 29-30, 2013.

[1]UNDP (2006): Annual water availability under 1700 m3 per capita constitutes conditions of 'water stress', less than 1,000 m3 per capita represents 'water scarcity' and below 500 m3 'absolute scarcity'.

21), which is a fundamental right. Court judgements do not constitute law or policy. At best, they provide directions for the formulation of laws and policies. To date there have been no laws or policies enacted in India asserting that water is a fundamental and inviolable right enjoyed by every citizen of the country. The 'right to water' can therefore only be obtained in India on a case-by-case basis by going to court.

In such a context, Report of the Committee for Drafting of National Water Framework Law felt necessary to ensure that every individual is given the right to have access to a minimum quantity of portable water within easy reach of the household and recommends a minimum quantity of potable water shall not be less than 25 litres per capita per day (MoWR, 2013). The proposed framework law is not intended to either centralise water management or to change centre-state relations or to alter the constitutional position on water in any way. But the law is intended to be justiciable, in the sense that deviations can be challenged in a court of law.

Recent Developments

Since the last few years there have been constant discussions in the country about how infrastructure impasses are likely to be the major hindrances in achieving 8 per cent plus Gross Domestic Product (GDP) growth rates and how to increase investment to overcome these.

Planning Commission emphasises - "Infrastructure investment will need to increase from about 8 per cent of GDP in the base year (2011- 12) of the Plan to about 10 per cent of GDP in 2016-17. The total investment in infrastructure would have to be over Rs. 45 lakh crore or $ 1 trillion during the 12th Plan period. Financing this level of investment will require larger outlays from the public sector, but this has to be coupled with a more than proportional rise in private investment. Private and Public Private Partnership (PPP) investments are estimated to have accounted for a little over 30 per cent of total investment in infrastructure in the Eleventh Plan. Their share may have to rise to 50 per cent in the Twelfth Plan. PPP-based development needs to be encouraged wherever feasible. It is necessary to review the factors which may be constraining private investment, and take steps to rectify them" (Planning Commission, 2011).

Water Supply and Sanitation is one of the crucial sectors which needs infrastructure. Even the Draft National Water Framework Bill - 2013, provides for association of private sector in PPP mode for improvement in public service delivery and capacity building in water sector.

Privatisation of Water in India

In 1991, the Government of India announced its policy of opening the power sector to private players. As a part of this, hydropower was also opened to private sector participation. Now we can see the beginnings of privatisation in other parts of the water sector. Privatisation of irrigation is in initial stages. On the other hand, privatisation of water supply, especially industrial and urban water supply is very much a reality and several cases are at various stages of development and implementation. With several Public Private Partnerships (PPPs) in pipeline in water sector, it is crucial to understand the efficacy and utility of the PPPs in achieving the objective of supplying water to meet domestic needs of the poor and economically weaker sections.

Fundamental Shift

Privatisation is not new to the water sector in India. The supply of water by tankers and other smaller practices of water supply in villages and cities have existed for a long time. These practices, however, were mostly community managed, or restricted to personal use. What has changed in the past 10 years is the entry of private corporations. Big corporations such as Suez-Degremont, Veolia, Coca-Cola, Pepsi, Tata, Reliance and many others are in the business of water, sanitation, solid waste management, sewerage, bottled water, beverages and more in different forms of PPP. The players are mostly corporations - and that too mainly foreign based multi-national corporations (MNCs) who are in a position to establish control over whole sections of the sector.

These MNCs are hugely powerful entities, with enormous financial and political muscle. Moreover, they are being backed by international financial agencies like the World Bank (WB), and global powers like the

United States Government who in turn wield enormous influence over Governments and policy, and are using this to promote the interests of the new private players in the water sector (Dwivedi et.al., 2007). For instance, after several State Governments imposed a ban on Coke and Pepsi following the disclosure of high pesticide residues, the US Government wrote officially to the Indian Government, demanding a 'level-playing field' for these companies. "Packing in a terse warning on investments, the letter states that fair treatment for US companies investing in India is essential, especially in the light of prospective investments from US into India" (The Economic Times, 2006).

Private-sector involvement in infrastructure was vigorously promoted by development agencies and international institutions in the 1990s and early 2000s. "The top three 'donors' in the Asia Pacific region - Asian Development Bank (ADB), World Bank (WB) and Japan Bank for International Cooperation (JBIC) - attach conditionalities to their loans that prescribe private sector participation (PSP) or public private partnerships (PPP) in the water sector" (Violeta P. Corral, 2007).

PPP Model

The guidelines notified by the Ministry of Finance defines a Public Private Partnership (PPP) Project as "a project based on a contract or concession agreement, between a Government or statutory entity on the one side and a private sector company on the other side, for delivering an infrastructure service on payment of user charges" (MoF, 2006).

By this definition and even functionally, "PPPs do not follow the basic concepts of partnership which largely means similarity of goals, sharing of profits, losses and risks and a shared commitment for each other. PPPs therefore can be questioned on the concept of partnership itself " (Dwivedi, 2008).

In the above context it is noted that, "As privatisation became politically controversial, even in the UK, new terms were introduced. 'Public-private partnership', abbreviated as PPP, was created to present the same forms of involvement of the private sector as more a collaborative, technical exercise rather than an aggressive transformation of relations. A similar term, 'private sector participation' (PSP) has also been widely used, especially by the World Bank and others in the context of developing countries. In both cases, the term is not a legal or technically exact phrase, but rather a replacement for the old general Thatcherite use of the word 'privatisation'. The vast majority of PPPs, for example, are not partnerships in any legal sense, but simply contractual relationships" (David Hall et.al., 2003).

Documents of several implementing agencies confirm this lack of differentiation between PSP and PPP in practice. The Asian Development Bank (ADB) acknowledges in one of its reports that there is, in fact, no difference between the two. It states, "This approach of developing and operating public utilities and infrastructure by the private sector under terms and conditions agreeable to both the government and the private sector is called PPP or P3 or Private Sector participation (PSP)" (ADB, 2006). These terms have also been used interchangeably. Some of the older projects that had earlier been categorized under PSP are now appearing under PPP initiative (Dwivedi, 2008).

Table-1: Private Sector Participation (PSP) in Water Supply, Sanitation and related projects

State/ Union Territory	PSP Projects				Total
	Water Supply	Sanitation	Solid Waste Management	Sewerage	
Andhra Pradesh	8	0	4	3	15
Delhi	8	0	1	11	20
Gujarat	8	0	3	3	14
Karnataka	12	1	8	5	26
Madhya Pradesh	10	0	0	1	11
Maharashtra	27	3	5	13	48
Rajasthan	8	0	5	4	17
Tamil Nadu	9	0	7	9	25
Total	90	4	33	49	176
Other States/ Union Territories	21	2	25	12	60
Grand Total	111	6	58	61	236

Source: PSP Database–Manthan Adhyayan Kendra, 2013.

Table-1 reveal the total number of ongoing water sector related PSP projects in India, of which water supply projects are large in number. According to the Private Participation in Infrastructure database of the World Bank, India is second only to China in terms of

number of PPP projects and in terms of investments, it is second to Brazil (Planning Commission, 2011).

Modes of Privatisation

The PPP could take many contractual forms, which progressively vary with increasing risk, responsibility, and financing for the private sector. However, the most common partnership options are (i) Service Contract; (ii) Management Contract/Lease; (iii) Build Operate Transfer (BOT); (iv) Concession; (v) Joint Venture; and (vi) Community-based Provision. Most contracts take the form of 'Concession' and 'Design, Build, Finance, and Operate' contracts, to cover the finance, design, management, and maintenance obligations. These contracts are usually financed by user fees or tariffs or by government subsidies (ADB, 2006).

In India, privatisation in water sector is taking place through two modes. The first mode is Outright Privatisation of Water Services through - Build Own Operate Transfer (BOOT) projects. Here the private company builds some part of the infrastructure - say the treatment plant or filtration plant - and runs it for a regular charge on the system. Normally, these would be long-term contracts, with a purchase agreement that would guarantee a minimum demand. This mode is being used for industrial and urban water supply projects and is likely to be used for irrigation projects.

The second mode, which is more insidious, is through the water sector reforms. "The Water Sector Reforms (WSRs) are following the same line as the power sector reforms in the country, and indeed, are similar to the WSRs all over the world. These policies, pushed by the WB and ADB, have the underlying thrust of converting the whole sector into a market. Processes like unbundling, independent regulatory authority to free the sector from 'political interference', increasing tariffs, retrenchment, full cost recovery, elimination of subsidies, cutting off supplies for non-payment, removal of public standposts, PPP, allocation of water to highest value use through market mechanism - are the major elements" (Dwivedi et.al., 2007).

Privatisation - Major Issues and Experiences

It was expected to inject both investment and efficiency into these sectors in developing countries, replacing traditional public-sector systems suffering from under-investment and inefficiency due to excessive political interference and corruption by vested interests including bureaucracies and labour. It was assumed that this extension of private-sector involvement would be economically successful and generally applauded.

"In the water and energy sectors, these expectations have not been fulfilled. Private-sector investment in developing countries has been falling since its peak in the 1990s, MNCs have failed to make sustainable returns on their investments, and the process of privatisation in these sectors has proved widely unpopular and encountered strong political opposition" (David Hall et.al., 2005).

The Aim Is Profits only:

The basic aim of a private company is profits. That is its primary and normally sole motive. A private company will want to recover its investment, the interest and principal of debts incurred, 'reasonable' profits, and also other things like the fluctuations in the dollar exchange rate. Hence, while the company may bring in new investments, it is sure to take away the same and more. That is the basic, irrefutable logic of private sector involvement. This needs to be clearly understood, along with the implications that flow from this essential character of privatisation.

- Opposition to privatisation is based on central economic issues-prices, profits, jobs, and development. Privatisation of water and energy is seen as making prices higher than they would otherwise be, and profits-and senior management pay-higher than is justified, while at the same time cutting jobs and making the remaining workers less secure. In developing countries in particular, opposition is also based on a strong sense that these sectors should be subject to local decision making, taking account of all public interests, and not left to global, commercial operators and market forces (David Hall et.al., 2005).
- "Once the water giants enter the picture, water prices go up. In Subic Bay, the Philippines, Biwater increased water rates by 400 percent. In France, customer fees increased 150 percent but water quality deteriorated; a French government report revealed that more than 5.2 million people received

'bacterially unacceptable water'. In England, water rates increased by 450 percent and company profits soared by 692 percent - CEO salaries increased by an astonishing 708 percent. Service disconnection increased by 50 percent. Meanwhile, dysentery increased six-fold and the British Medical Association condemned water privatization for its health effects" (Vandana Shiva, 2002).

- Privatised projects are structured on the basis of high and at times, assured returns. Tiruppur project in Tamil Nadu has a rate of return on equity of 21%. The privatised water supply project in Buenos Aires - the biggest in the world - earned an average of 19% of net worth as post-tax profits in the first 7 years. El Alto in Bolivia had a guaranteed rate of return of 13%. Xian in China was giving Veolia a fixed 15% return before a 2002 Chinese law outlawed fixed returns (Dwivedi et.al., 2007, p.20).

- Often, high private profits actually come from public money. In Guinea, on privatisation, water rates shot up 6-7 times, and people were paying rates higher than European cities like Paris, Milan and London. The Government was forced to take a WB loan to subsidise tariffs - which meant actually that it was getting into debt to fund the profits of the private company (Ibid, p.21).

- The cost-cutting measures employed by private companies lead to large-scale retrenchments. Indeed, one of the measures of the efficiency of companies under privatised regimes is the ratio of employee per water distributed. Even if one allows for the rectification of certain amount of over-staffing, companies are likely to go much beyond this. In Buenos Aires, Argentina almost half of the 7200 workers of the public utility OSN lost their jobs on privatisation (Ibid, p.21).

- In spite of all this, private companies rarely bring in much new investment, even though this is a major justification for privatisation. Equally important, most privatised water systems receive large part of their finances from public sources. In Tiruppur, the biggest privatised water project in India, public sources are bringing in about 40% of the project funding, and private sources only 13%. The source of the rest of the 47% of project funding is not clear - a problem of transparency that exists with most private projects. In Nelspruit, South Africa, Biwater obtained nearly two third of the total finance in the form of a loan from the state-owned Development Bank of South Africa (DBSA) (Ibid, p.22). The return on investment is seldom invested back into the system by the private companies to improve or expand water and sanitation services to the deprived areas as profits and dividends are the primary concern. Even contractual obligations in this respect are many times flouted.

- It is often argued that private companies deserve the high profits as they take risks. After all, that is what an entrepreneur is supposed to do. Yet, the reality is that most privatisation programs are structured with the risks passed on to the public. It is unlikely that the private sector will undertake commercial risks without guarantees that are ultimately backed by public money. Nor will it undertake major investments without a 'take or pay' clause. In Chengdu, China, the city was forced to buy a minimum of 400,000 cubic meters per day of water from the ADB financed, privatised Build Own Transfer (BOT) project under a 'take or pay' basis. This created huge problems because the demand had been overestimated and so the city was obliged to pay for water it did not need. Many of the public agencies - especially international agencies are providing guarantees to private sector projects. United States Agency for International Development (USAID) is providing guarantees in Tiruppur and Bangalore (Ibid, p.24).

- Then there are cases of over-extraction of groundwater by MNCs like Coca Cola for producing soft drinks and bottled water - a clear case of use and control of a public resource for private profits. Local communities in places like Plachimada (Kerala), Mehdiganj (U.P.), have been fighting companies as their groundwater sources have drastically depleted and soils contaminated with toxic wastes from the factories producing soft drinks and bottled water.

Efficiency of Operation

Apart from investment, the other very important advantage claimed for privatisation is that it can run the water systems efficiently than the public sector. Experience all over the world shows that efficiency of operation is not the monopoly of private sector - there are many examples of efficient public sector water utilities, amidst inefficient ones, while performance of private sector is not always better. One measure of operational efficiency is the Non-Revenue Water (NRW). As the name suggests, it is water that does not bring revenue - and so includes water being given free (possibly a policy choice), but also system losses, leakages, thefts etc. Hence, a lower NRW is considered an indicator of higher efficiency. In an article in Inter Press Service on private sector role in water services, it was reported that "Osaka has a NRW level of 7%, Phnom Penh records an NRW of 26% and Penang 19%. (These are publicly operated.) In comparison, privately operated Jakarta and Manila have NRW of 51% and 62% respectively." The same study also states that "Chengdu, Jakarta, Kuala Lumpur, and Manila have PSP in water supply, but the main reasons for PSP (efficiency, investments, and autonomy) have not been manifested to date. Phnom Penh is an example of a city where there is a very good public utility" (Dwivedi et.al., 2007, p.25).

Research for the World Bank Economic Review says that studies on water utilities in Asia (from a sample of 50 water companies in 29 Asian and Pacific region countries) - "show that efficiency is not significantly different in private companies than in public ones" (Estache and Rossi, 2002). Clearly, private sector does not have any inherent advantage as far as efficiency is concerned over the public sector.

In short, phasing out cross-subsidies, increase in tariffs, disconnection on non-payment are all necessary - indeed inevitable - elements of the privatisation process. Thus, water sector ceases to be a social responsibility, and water changes from being a 'social good' to a mere commodity. In this way, the process of 'corporatisation' of water is invariably and necessarily accompanied by its 'commercialisation' or 'commodification'. Now, the series of Water Sector Reforms (WSRs) in various states are forcing a legal basis to all of this by creating new laws that enshrine these principles. The most serious implication of privatisation however is in terms of the sovereignty of citizens, of communities and of the country, with the control over such a vital resource passing on in the hands of private, and that too foreign, companies (Dwivedi et.al., 2007).

"It is also worth emphasising that the opposition to privatisation should not be cast as resistance to economic progress. Scepticism concerning the supposed benefits of privatisation is increasingly confirmed by reviews of empirical evidence suggesting that public or private ownership makes little difference to efficiency" (Willner, 2001, cited in David Hall et.al., 2005, p.292).

Table-2 shows a range of countries and cities that have rejected privatisation proposals or terminated private concessions and reverted to public-sector services. A significant feature of the campaigns is that they have taken place in countries at varying levels of national income, so the opposition is clearly not limited to factors that are peculiar to developing countries. As shown in the Table-2, countries with recent campaigns include high-income countries like France, Germany, and the USA. Where campaigns have been successful, it has almost always been through existing democratic institutions. This has sometimes involved pursuing cases through the courts to rule privatisation policies illegal on constitutional or other grounds. Privatisation policies were significant electoral issues too in many countries.

Table-2: List of Failed Privatisation Projects in Water Supply and Sanitation

No.	Country (Place) & Year	Company Involved	Reasons for Rejection	Result
1	**Argentina** (BA Province) 2002	Azurix, Enron subsidiary	Frequent price increases, poor service quality, failure to honor contractual commitments, financial problems.	Termination of privatisation, Government decision.
2	**Argentina** (Tucuman) 1998	Vivendi Environnement	Severe tariff hikes, intense public protests.	Privatisation was terminated after it became an issue in the state elections. Co. filed for compensation.

3	**Bolivia** (Cochabamba) 2000	International Water Ltd., Bechtel	Drastic increase in water tariffs, intense public protests.	Termination of privatisation, Govt. decision.
4	**Bolivia** (EL Alto and La Paz) 2005	Suez Water	Private operator refused to extend potable water supply to the poor areas of the city, peaceful but huge uprising & demonstrations by the people.	Supreme Decree by the Govt. cancelling the contract with the company.
5	**Canada** (Halifax) 2003	Suez	Private corporation refused to take responsibility for failing to meet environmental stands of the contract, also effective grassroots campaign by citizens & environmentalist groups.	Cancellation of sewage treatment contract.
6	**Canada** (Hamilton) 2004	AWS/RWE Thames	Municipal council voted to take back operation of city water & wastewater plants after the contract term ended.	Operations to be handled by the municipal body.
7	**China** (Da Chang, Shanghai) 2004	Thames Water	Ended concession when government cancelled guaranteed rate of return.	Private company withdrew.
8	**China** (Shenyang) 1999	Sino-French Water Company	High price of bulk water, huge losses to state owned company due to high guaranteed returns, failure of concession contract.	Contract terminated, re-sold to the State owned company.
9	**China** (Xian Water) 2001	Veolia's subsidiary, Berlinwasser	Ended concession when government cancelled guaranteed rate of return.	Terminated, sold to Municipality.
10	**Columbia** (Bogota) 1994	--	City refused World Bank money due to privatisation conditionality.	Water Utility remains in Public Sector.
11	**France** (Grenoble) 2001	Suez	Bribery scandal, public protests.	Termination of privatisation, Municipal decision during election.
12	**Germany** (Potsdam) 2000	Eurawasser - Suez-Lyonnaise des Eaux & Thyssen	Unjustified price increases by private operator.	Termination of privatisation, Municipal body's decision.
13	**India** (Bangalore) 2001	Biwater	Very high cost of water, assured off-take from the company.	Bulk water supply contract from Cauvery river cancelled.
14	**India** (Delhi) 2006	--	Intense public protests, & expose of contractual terms favouring private companies.	Privatisation stalled.
15	**Kenya** (Nairobi) 2001	Vivendi / Tandiran Information Systems Sereuca Space	Severe price hikes, huge job cuts, guaranteed profits, no competitive bidding process.	Privatisation cancelled.
16	**Malaysia** (Kelantan Waters) 1999	Thames Water	Poor services provided by private company, huge debts, low number of connections, high amount of non-revenue water.	Contract terminated, State government bought back the stake from private company.
17	**Malaysia** (Indah Water) 1997	United Utilities	Private operator exited, eventually contract failed.	Terminated, nationalised.
18	**Philippines** (Manila-West) 2003	Maynilad Water Services Inc. - consortium of Suez & Benpres Holdings	Failure to extend water connections to poor areas, no investments, increase in tariffs, non-fulfillment of other contractual obligations.	Public utility MWSS has had to take back the water services, including liabilities created by the private companies.
19	**Puerto Rico** (Puerto Rico) 2003	A Vivendi subsidiary - Autoridad de Acueductos y Alcantarillados de Puerto Rico	Problems in service delivery, non-fulfillment of contractual obligations, violations of environmental laws.	Termination of privatisation, Government decision.
20	**Poland** (Lodz) 1995	Vivendi's engineering subsidiary OTV	Problems in terms of costs and failures, work was done late and uneconomically, deadlines not kept, construction work was not finished on time.	City Council terminated construction contract for sewerage treatment plant.
21	**South Africa** (Nkonkobe) 2002	Suez	Popular protests due to disconnection, price hikes.	Termination of privatisation, Court ruling.
22	**Tanzania** (Dar es Salaam) 2006	City Water, subsidiary of Biwater	Erratic water supplies, acute water shortages, failure to provide clean water to poor communities.	Contract terminated - Government decision.
23	**Thailand** (Bangkok) 1997	United Utilities	Government claimed that company is not fulfilling contractual obligations.	Co. abandoned contract, it continues to pursue for claims for compensation.
24	**USA** (Atlanta) 2003	United Water - Suez Subsidiary	Higher water rates, deteriorating quality, failure to make investments.	Termination of privatisation, Municipal decision.

24	**USA** (Atlanta) 2003	United Water - Suez Subsidiary	Higher water rates, deteriorating quality, failure to make investments.	Termination of privatisation, Municipal decision.
25	**USA** (New Orleans) 2002	A subsidiary of Veolia Environnement	Campaign by a coalition of labour, environmental groups, churches and citizen activists.	Rejection of private bids by city's Sewerage & Water Board.
26	**Vietnam** (Thu Duc, Ho Chi Minh City) 2003	Suez-Degremont	Company exited in dispute over contract terms.	Contract terminated.

Source: Public Services International Research Unit (PSIRU) database, University of Greenwich, London; and Public Citizen reports and others cited in Dwivedi et.al., 2007, Annexure-II, pp.A.2-9.

Nowhere PPPs have been able to fulfill the exaggerated promises made by their advocates. "The recent study by Marin (2009) analyses the performance of more than 65 major PPP contracts in the developing world on the basis of four indicators (coverage expansion, quality of service, operational efficiency, and tariff changes). It shows that very few of these contracts are satisfactory in more than one or two of these criteria" (cited in MH, Zérah and Sylvy, 2011, p.261). Therefore, it can be observed that "PPPs are not suited to all situations, nor can they be envisaged in all situations. Consequently, a call to innovate and invent varied new 'arrangements' is necessary" (Ibid. p.263).

Conclusion

The hasty rush toward privatisation has failed to recognize that water has vital social, cultural, and ecological roles to play that cannot be protected by purely market forces. There is a need to provide for the basic water requirements of people and ecosystems, permit access to water for poor populations, and improve water use efficiency and productivity. Transparency, Accountability with a strong public regulatory oversight, and meaningful Participation of the public (TAP) are fundamental requirements in any efforts to shift the public responsibility for providing clean water to private entities. Efforts should be made to strengthen the ability of governments to meet water needs. The bottom line is that water resources - by their very public nature - require public oversight to ensure that people, not profits, come first.

"Water is not a commercial product like any other

But, rather, a heritage which must be protected, defended and treated as such."

- European Water Framework Directive

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JKSHIM Contribution