Reclaiming Water Pricing
for Participatory Public Services

by Patrick Bond

No one would doubt ‘the principle that water is a scarce good with dimensions of economic efficiency, social equity, and environmental sustainability’. Yet as articulated in the World Bank’s (1996:ix) *African Water Resources* document, the principle disguises two polar-opposite positions about how to price water. We need to reclaim the pricing of water as a central element in the establishment of a genuinely participatory water service, since ‘getting the prices right’ is one of the dogmas of the commercialization process. It is a recourse to technical jargon, which leaves many public services advocates infuriated but also helpless against rapid price increases for poor people.

What are the two positions? On the one hand, *The Economist* magazine’s (2003:1-5) survey on water declared the central dilemma: ‘Throughout history, and especially over the past century, it has been ill-governed and, above all, colossally underpriced.’ Identifying this problem, naturally begets this solution: ‘The best way to deal with water is to price it more sensibly,’ for ‘although water is special, both its provision and its use will respond to market signals.’ In rural areas where there is competition among farmers for irrigation water, ‘The best solution is water trading.’ As for the problem of allocating and delivering water to the poor, ‘The best way of solving it is to treat water pretty much as a business like any other.’ We can term this the ‘neoliberal’ position.

Six months later, on the other hand, a international movement with ‘progressive’ politics, the People’s World Water Forum (PWWF), emerged in Delhi, India to promote the ‘decommodification’ of water, based upon feeder social movements from around the world, in both cities and rural sites of struggle over water access. The PWWF (2004:1) founding statement declared that ‘Water is a human right; that corporations have no business profiting from peoples’ need for water; and that governments are failing in their responsibilities to their citizens and nature.’

Because there are many different ways that the pricing of water can be considered in bulk and retail settings, it makes sense to first outline the philosophical positions using a simple graph that distinguishes between neoliberal and progressive values. At the extreme where maximizing the production of economic goods is the prime objective, a leaked 1991 World Bank memo by then chief economist Lawrence Summers proposed an environmentally- and socially-insensitive allocation of resources: ‘I think the economic logic behind dumping a load of toxic waste in the lowest-wage country is impeccable and we should face up to that’ (http://www.whirledbank.org). Rather than ‘internalize the externalities’ associated with social impact or ecological damage, Summers’ solution was simply to displace these to somewhere political power was negligible and the immediate environmental implications were less visible, in the name of overall economic growth.

And yet there are well-established critiques of Gross Domestic Product (GDP), the most common measure of the aggregation of economic goods. Contrary to a more nuanced ‘economic logic,’ GDP treats the depletion of natural capital (including water resources) as
income instead of depreciation of an asset; ignores the non-market economy of household and community, in turn devaluing childcare, elder care, other home-based tasks and volunteer work (all of which rely upon access to clean water); considers natural disasters and pollution as economic gain because of associated service sector employment and repair/clean-up/replacement opportunities, not as a debit from social welfare or, with respect to drought and flooding, from ecosystem integrity.

Even as a caricature of neoclassical economics in the memo cited above, the promotion of commodified nature and society struck a chord during the neoliberal epoch of the late 20th century. Throughout, those lobbying to treat water ‘much as any other business’ grew in strength, and privatization and commercialization of water supplies expanded in many parts of the world. The intense conflict over the economics of water resources allocation was prefigured by the 1992 International Conference on Water and the Environment in Dublin, where water was formally declared an ‘economic good.’ Four years later, the formation of the Global Water Partnership and World Water Council advanced the position that commodification of water would lead to both private sector investments and more efficient utilization. In the same spirit, 1997 witnessed the first World Water Forum in Marrakesh, the founding of the World Commission for Water in the 21st Century, and an emblematic statement by the Swedish International Development Agency (1997:11-13): ‘As the realisation increases that fresh water of satisfactory quality is a scarce and limited resource, matters related to management of the water resources have become more into focus ... At least four conditions need to be fulfilled to carry through efficient water allocation: (1) well defined user rights, (2) pricing at its marginal cost, (3) information related to availability, value, quality, delivery times, and (4) flexibility in allocation responding to technologic, economic and institutional changes.’ The United Nations Panel on Water declared in 1998 that ‘water should be paid for as a commodity rather than be treated as an essential staple to be provided free of cost’ (New York Times, 22 March 1998).

At the same time, the International Monetary Fund (IMF) and World Bank became much more explicit in promoting water commodification through what were once mainly macro-oriented structural adjustment programs, whether the Enhanced Structural Adjustment Facility, Poverty Reduction and Growth Facility, or Poverty Reduction Strategy Programme. According to one NGO critique by the Globalization Challenge Initiative (http://www.challengeglobalization.org), ‘A review of IMF loan policies in 40 random countries reveals that, during 2000, IMF loan agreements in 12 countries included conditions imposing water privatization or full cost recovery. In general, it is African countries, and the smallest, poorest and most debt-ridden countries that are being subjected to IMF conditions on water privatization and full cost recovery’. When the World Bank (2000, Annex 2) instructed its field staff on how to handle water pricing in even impoverished rural Africa, the mandate was explicit: ‘Work is still needed with political leaders in some national governments to move away from the concept of free water for all... Promote increased capital cost recovery from users. An upfront cash contribution based on their willingness-to-pay is required from users to demonstrate demand and develop community capacity to administer funds and tariffs. Ensure 100% recovery of operation and maintenance costs.’ It was not long before a bureaucratic class emerged within Africa to work on cost recovery, for according to the 2001 Kampala Statement coauthored by the World Bank and the African Utility Partnership (2001:4), ‘The poor performance of a number of public utilities is rooted in a policy of repressed tariffs.’
But a debate quickly followed over the merits of full cost recovery of operating and maintenance costs. In most urban systems, the cost of supplying an additional drop of water—the ‘short-run marginal cost curve’ (Line A in Figure 1)—tends to fall as users increase their consumption, because it is cheaper to provide the next unit to a large consumer than a small consumer. Reasons for this include the large-volume consumers’ economies of scale (i.e., bulk sales), their smaller per unit costs of maintenance, the lower administrative costs of billing one large-volume consumer instead of many small ones, and the ability of the larger consumers to buy water at a time when it is not in demand—e.g., during the middle of the night—and store it for use during peak demand periods. The premise here is that the pricing of water should correspond directly to the cost of the service all the way along the supply curve. Such a system might then include a profit mark-up across the board (Line B), which assures the proper functioning of the market and an incentive for contracting-out or even full privatization by private suppliers.

Figure 1: Three ways to price water: marginal cost (A), for-profit (B), and cross-subsidized lifeline plus rising block tariff (C)

The progressive principle of cross-subsidization, in contrast, violates the logic of the market. By imposing a block tariff that rises for larger consumers (Line C), the state would consciously distort the relationship of cost to price and hence send economically ‘inefficient’ pricing signals to consumers. In turn, argue neoliberal critics of progressive block tariffs, such distortions of the market logic introduce a disincentive to supply low-volume users. For example, in advocating against South Africa’s subsequent move towards a free lifeline and rising block tariff, the World Bank advised that water privatization contracts ‘would be much harder to establish’ if poor consumers had the expectation of getting something for nothing. If consumers didn’t pay, the Bank suggested, South African authorities required a ‘credible threat of cutting service’ (Roome, 1995:49-53).

The progressive rebuttal is that the difference between Lines A and C allows not only for free universal lifeline services and a cross-subsidy from hedonistic users to low-volume users. There are also two additional benefits of providing free water services to some and extremely expensive services to those with hedonistic consumption habits:

- higher prices for high-volume consumption should encourage conservation which would keep the longer-run costs of supply down (i.e., by delaying the construction of new dams or supply-side enhancements); and
**benefits accrue to society from the ‘merit goods’ and ‘public goods’ associated with free provision of services, such as improved public health, gender equity, environmental protection, economic spin-offs and the possibility of desegregating residential areas by class.**

By way of definition, public goods can be observed and measured, for underlying their existence are two characteristics: ‘nonrival consumption’ and ‘nonexclusion’ from consumption. Nonrival consumption means that the consumption of a public good/service by one person need not diminish the quantity consumed by anyone else. A classical example is a national defence system, which is ‘consumed’ by all citizens in a quantity which is not affected by the consumption of defence benefits by fellow citizens. Likewise, the benefits of a clean environment and hygienic public water system—reflecting a strong municipal water system and lifeline access to all—are enjoyed by all municipal consumers, regardless of how much water is consumed by a particular individual, although a minimum consumption level is required for all citizens so as to prevent the spread of infectious diseases. The principle of nonexclusion simply means that it is impossible to prevent other citizens from enjoying the benefits of public goods, regardless of whether they are paid for. This is important, as a state determines the detailed character of water pricing policy, and distinguishes between necessities guaranteed by the state, versus luxuries that people must pay for. A simpler way of putting it is that where the net benefits to society outweigh the costs associated with consumption of a good/service, the result is a ‘merit good’. When the merit good benefits apply universally, so that no one can be excluded from their positive effects, the result is a ‘public good’. Markets usually underprovide for public goods, so the ‘Post-Washington Consensus’ style of economics attempts to correct this market imperfection, even if it might mean introducing other market distortions, such as a free lifeline supply of water.

Another progressive critique of private suppliers who require tariffs reflective of marginal cost plus profit, is that water infrastructure is a classical natural monopoly. The large investments in pipes, treatment centers and sewage plants are ‘lumpy’ insofar as they often require extensive financing and a long-term commitment, for which the state is more capable. To the argument that a progressive tariff could still coincide with a private sector supplier through a strong state regulator, progressives mistrust ‘captive regulatory’ relations given the long history of corruption in the water sector. Rebutting those who argue that Third World states are intrinsically incapable of providing water services, progressives cite more proximate reasons for the recent degeneration of state water sectors: 1980s-90s structural adjustment programs which decapacitated most states; corrupt state bureaucrats; weak trade unions; and disempowered consumers/communities.

Finally, the progressive argument for making a water subsidy universal—not means-tested for only ‘indigent’ people—is both practical and deeply political. If the service is means-tested, it invariably leads to state coercion and stigmatization of low-income people by bureaucrats. Further, it is an administrative nightmare to sort out who qualifies since so many people depend upon informal and erratic sources of income. More philosophically though, it is a premise of most human rights discourse that socio-economic rights such as water access are universally granted, not judged on the basis of a subjective income cutoff line, especially given the differences in household size for which different low-income people are responsible. This is partly because international experience shows that defense of a social welfare policy requires universality, so that the alliance of poor, working-class and middle-class people that usually win such concessions from the state can be kept intact (Esping-Andersen, 1990).
As The Economist observed in mid-2003, one of the most important sites to consider the economics of water resources allocation is South Africa. One reason is that because of the international drive to commercialize water, even post-apartheid South African citizens were subject to neoliberal cost recovery and disconnection regimes. This affected many who simply could not pay their bills. From the late 1990s through 2002, as a result, approximately 10 million people suffered water disconnections. Africa's worst-ever recorded cholera outbreak—affecting more than 150,000 people—can be traced to an August 2000 decision to cut water to people who were not paying a South African regional water board.

After the ruling African National Congress promised free basic water supplies in December 2000 during a municipal election campaign, the same bureaucrats responsible for water disconnections began redesigning the water tariffs. In July 2001, revised price schedules provided a very small free lifeline 6,000 liters per household per month, followed by a very steep, convex curve (see Figure 2). But the next consumption block was unaffordable, leading to even higher rates of water disconnections in poor areas. The 6,000 liters represent just two toilet flushes a day per person for a household of eight, for those lucky enough to have flush toilets. It left no additional water to drink, wash with, clean clothes or for any other household purposes. In contrast, from the progressive point of view, an optimal strategy would provide a larger free lifeline tariff, ideally on a per-person, not per-household basis, and then rise in a concave manner to penalize luxury consumption.

Johannesburg's tariff was set by the council with help from Suez Lyonnaise des Eaux, a Paris-based conglomerate, and began in July 2001 with a high price increase for the second block of consumption. Two years later, the price of that second block was raised 32%, with a 10% overall increase, putting an enormous burden on poor households which used more than 6,000 liters each month. The rich got off with relatively small increases and a flat tariff after 40 kiloliters/household/month, which did nothing to encourage water conservation and hence did not mitigate the need for further construction of large dams, which in turn would drive up the long-run marginal cost curve and further penalize low-income Johannesburg townships residents.

Figure 2: Divergent water pricing strategies --
Johannesburg (2001) v. ideal tariff for large household
Source: Johannesburg Water (thin) and own projection (thick)

What this discussion of the economics of water resources allocation goes to show, simply, is that pricing is political, and indeed the pursuit of ‘impeccable economic logic’ in the water sector has generated some of the most intense struggles in the world today, calling into question the very tenets of the neoliberalism. The economics of privatized or commercialized urban water services have been challenged from Cochabamba, Bolivia - where the US firm Bechtel tried to take ownership of rainwater collected by poor residents in the context of huge price increases - to Accra, Ghana, to most Argentine cities, to Manila and Jakarta, to Atlanta and Johannesburg, and to many other sites in between.

Working out the contrasting discourses in political-economic analysis, as above, is crucial to any resolution of the problem in public policy. To establish a thorough-going public commitment to water includes not only factoring in health, environment, gender equity, economic multipliers and other merit goods. What should be clear is that ‘getting the prices right’ is a recipe for commercialization and privatization - and a host of related social ills. The goal, instead, should be to get the prices ‘wrong’, but the society and eco-system right.

References


