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Water Resource Management: A Comparative Perspective. Edited by Dhirendra I. Vajpeyi. Westport, CT: Praeger Press, 1998. xii, 177 pp.

Reviewed by David Guillet, Department of Anthropology, Catholic University of America, Washington, DC.

Irrigation is at a "watershed divide" in the US and elsewhere in the world. Looking back lies a recent past of growing populations and increasing water pollution, decreasing water availability, costly dams and waterworks, expanding tourism and industrialization, and changing values of domestic consumption (e.g., turfgrass, standards of hygiene, and bottled drinking water). Ahead lies a new policy "consensus" resting on neoliberal principles applied to water management. At the heart of the consensus is demand management, the recognition of the value of water in relation to its provision cost and the introduction of policies to require consumers to adjust their usage more closely to those costs. These policies include water markets, measurement of consumption and the levying of tariffs on the basis of the amount consumed, and punitive costs for wastage. Water-use planners and policy makers in countries of the South (and not-so-far-South) await the next planeload of lending agency officials and consultants carrying briefcases with their patent medicines. Aside from their economic assumptions, the political dimensions of these policies warrant close attention by political ecologists.

The book under review, a collection of cases of national-level water management authored by political scientists and a few practitioners, is another in a series of recent treatments of the topic. Chapters are included on World Bank policy, Chinese water management policy, the Three Gorges Project, Brazil, India's Narmada River Basin Project, Nigeria, the Rhine and the Danube, and the Federal Republic of Germany. Some

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of the topics will be recognized as highly controversial (Three Gorges, Narmada); others though less well-known are equally deserving of scrutiny.

A good place to start a book of this sort is with the World Bank, a major disseminator of the new policy "consensus." In their introductory chapter, Caroline Thomas and Peter Clegg offer one of the relatively few critiques of World Bank orthodoxy. Theirs focuses on the distributional effects of these reforms. Although granting the efficiencies of the market orthodoxy, they see unintended effects of widening gaps between the rich and the poor. Without special consideration for the poor, neoliberal reforms may well end up benefiting only the already well-off or well-placed. Common property arrangements, they suggest, offset these distributional inequities and should receive equal consideration with the market and the state in determining entitlements.

This critique is refreshing and will resonate with readers of this journal, particularly those who have witnessed over the years other "unintended" consequences of poorly thought reforms. If meant to set up a review in succeeding chapters of how countries around the world are implementing the new orthodoxy, it doesn't quite hit the mark, as many countries seem not to have gotten the message. Judging from the next two chapters on Chinese water management policy and the Three Gorges Project, China for one, remains fully committed to meeting demand by "above all investing more money and efforts in exploring new water resources." China is attempting to fund the Three Gorges Project out of domestic sources, given the refusals to extend loans by the World Bank and the American Export and Import Bank. Expanding supply by financially and environmentally costly dams and by interbasin transfers withholds even minimal lip service of alternative or complementary solutions.

Brazil, the subject of the next chapter, also doesn't seem to have read the script. This enormous country, Peter Calvert and Melvyn Reader tell us, is hell-bent on pursuing 31 hydroelectric dams in the environmentally sensitive Amazon. Once again, one finds an explicit policy of supply augmentation carried out by a centrally directed development bureaucracy that is supported quite generously by the World Bank and the Inter-American Development Bank.

Completing this triumvirate is India, the subject of a chapter on the Narmada Project. One would have thought we had heard the last of this controversial dam--but no, it "will be completed, despite all the opposition and controversy." Although India withdrew its loan request from the World Bank in 1993 after the Bank imposed new conditions, it has since decided to finance the project with domestic funds.

Despite the "orthodoxy" of demand management, decentralization, and stakeholder participation, clearly many major players in the South continue to follow centralized, often self-financed, capital-intensive, and large-scale projects to increase supply. Are they the last hurrahs of an older era? Probably not. As long as someone is willing to put up the money, or domestic financing can cope with the costs, we probably haven't seen the last of enormous projects such as these. Only a world economic crisis, certainly a possibility as of this writing, could choke off the internal and external capital flow necessary to keep them alive. On the other hand, smaller-scale projects with strong stakeholder participation and provisions for watershed and demand management are beginning to crop up more and more often, coexisting in many cases with large-scale project planning. Even within the World Bank there are advocates of common property resource management who continually challenge neoliberal assumptions and the new "orthodoxy".

The Chinas, Brazils and Indias are exceptions, one may say, in their size, capacity for internal financing, and lure for private investors. The smaller, poorer, countries, on the other hand, have more at stake. They lack alternatives to multinational lending agencies for development capital and are much more susceptible to accepting their patent medicines as the price to pay for obtaining loans. The next chapter deals with one such country-Nigeria. The author examines the possibility of introducing the new water-management policies there but finds a host of rather nebulous "cultural obstacles" in the way.

Here the volume would have profited from empirical analyses of the new orthodoxy at work. Most of the hoopla has been about Chile's enactment in 1981 of a National Water Code establishing a system of transferable water-use rights. Of the several policy directions it could take, Chile chose a strong form of separating water rights from land and allowing them to be transferred. Water remains a public good, yet concessions allowed under the law convey permanent and transferable rights to water. In effect, private property has been created out of heretofore inalienable use rights. Bauer's recent evaluation of the impact of the Water Code finds claims of its success exaggerated or incomplete, and often politically or theoretically motivated (Bauer 1997). The recognition of existing rights to water restricted the expansion of new concessions, as by 1981 the water of most of the rivers in the north and central valleys had already been allocated. Exchanges of water-use rights are also most frequent in these water-scarce valleys; elsewhere, transactions are limited. Since Chile's water law imposes no financial obligations such as taxes or fees, nor legal duties requiring water rights to be put to "beneficial use," owners of surplus water rights are able to keep them off the market until an external event drives up water prices.

The notion that demand management policies would encourage water-rights holders to think about and manage water as an economic good, rather than a free attribute of land ownership, thereby increasing efficiency, seems to have failed in Chile. Bauer explains that in Chile, like other Andean countries, most land is incapable of agricultural crop production without irrigation water. Consequently, the only time that farmers are willing to sell their water rights separately from land is when they are getting out of agriculture for good. Bauer's questioning of the utility of freely tradable water rights and water markets in Chile as a model is highly relevant to the issues in the volume under review.

Lastly, the editors state that about 47 percent of the land area of the world, not including Antarctica, falls within international water basins shared by two or more countries. Rivers that originate in one and flow through several countries require different solutions to their problems. This isn't anything new. As Irene Lyons Murphy argues in her chapter, countries in the basins of the Rhine and the Danube rivers have jointly solved their problems for centuries. But post-1950 pollution of the Rhine was of several orders of magnitude greater than in previous decades, leading to a crisis and an international commission. Such international agreements offer very real solutions to the unique water-management problems of shared basins. Perhaps their experience in negotiation as a solution to water-management problems could be brought to bear in the new policy consensus.

In sum, the volume will be useful for students needing a set of case studies of older forms of water-management policy against which to compare the "new orthodoxy." It is also pertinent to understanding the importance of international agreements as a solution to rivers crossing national boundaries. Other, more empirical, cases, however, of the application of demand management would provide better examples of the "new orthodoxy" at work.

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Earth's Insights: A Multicultural Survey of Ecological Ethics from the Mediterranean Basin to the Australian Outback by J. Baird Callicott, with a Foreword by Tom Hayden (1997) Berkeley : University of California Press, 285 pp.

Reviewed by Dipak R. Pant, Professor of Economic Anthropology and Applied Anthropology, University of Castellanza (VA), Italy

Earth's Insights covers some challenging terrain in the field of comparative environmental ethics, a field too little explored by scholars. Callicott, professor of philosophy and religious studies at the University of North Texas, constructs for us a framework for the comparative study of ethics and environmental values, and for examining the susceptibility of both to historical change. Implicit in this tour is a notion that we might turn to non-Western sources of inspiration to chart a course for a more sustainable future.

The first question Callicott poses is: What is the equivalent of "ethics" in traditional non-Western societies? As he acknowledges, ethics do not exist in a vacuum, hermetically sealed off from larger systems of ideas (or, for that matter, from the rough-and-tumble of the real world). Ethics must be viewed, instead, like any other sphere of human thought and action (science, technology, or law) in a broad frame of differences--of problems perceived and solutions attempted--by peoples of different places and times, in different terms, and under different conceptual banners. Callicott's jump-start with a philosophical discourse on ethics is quite problematic, however, as he does not first ground us well enough with a panorama of ethics-like thought in non-Western traditions. From the outset, one is left wondering about how well his conceptualization of ethics travels across time and place.

The going does not grow easier. Dealing with the historical roots of Western environmental attitudes and values (Chapter 2), Callicott repeats an oversimplification promoted by many other Western scholars. Only Judeo-Christian and Greco-Roman heritages are taken into consideration, while overlooking the more richly textured mosaic of local "little" traditions of Celts, Iberians, Italics, Teutonics, Nordics, Slavs, and so forth. The preindustrial Western rural traditions were expressions of some powerful and persistent undercurrents that have survived even to contemporary times in different folk forms. Yet Callicott disregards the surviving rural folklore in Europe. The Christian traditions, particularly Roman Catholicism, have absorbed and preserved many polytheistic, polycentric, and nature-worshipping elements that are yet to be seriously