

(draft not for quotation)

Fitting Water Reforms to National Context:
A brief report on African Law Workshop¹

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Introduction:

With growing concern about water issues in the developing world, many countries are in the process of introducing reforms in their water sectors. This process is strongly influenced by a growing global consensus about a clutch of principles—commonly understood as Integrated Water Resources Management (IWRM). These offer a set of best practices about how national and sub-national authorities can govern the process of transforming their traditional water sectors into modern ones prepared to deal with growing water scarcity. IWRM has often meant different things to different people; however, a commonly understood core includes the following: [a] formulation and enunciation of a coherent water policy framework; [b] river basin as a unit of water resources management; [c] enactment of water laws—usually separate for services and the resource-- to create a regulatory and property rights framework for water; [d] recognition of water as a social and economic good, and the use of pricing in improving the efficiency of allocation and use of water; and [e] greater user participation in the management of water resource as well as infrastructure. The empirical foundations of these principles are obscure. However, many of these best practices are seen to be operational in high-income countries which have progressively introduced them and found them effective in improving the governance of their water sectors. This has helped create a widely shared impression—especially amongst international aid agencies, research centers and consultants--that adopting these in emerging or poor countries would produce similar resource governance outcomes in the latter.

As they face growing problems of water scarcity and degradation of aquatic environment, many developing countries in Asia have been attempting to either adopt or adapt these IWRM best practices their settings. India has already enunciated two water policy statements, in 1987 and 2002. India also has a draft groundwater law tossing around for over 30 years. Thailand and Sri Lanka drafted national water laws but, after heated debates in the media about water pricing and water being declared state property, have taken it back to the drawing board. Pakistan adopted a water law styled after the water law of the state of Colorado in the US. Thailand, Indonesia, Bangladesh and Nepal too

¹ This draft report is based on contributions of a number of researchers in the workshop on ‘African Water Laws’ organized during January 26-28, 2005 in Johannesburg. The revised version will attribute ideas and information discussed in this draft report to the presentations made by different researchers at this workshop.

have either announced water policies or enacted laws or done both. While such institutional reforms produce impact only over a long time period, it is important to evolve a more textured understanding of the 'pathways' through which such reforms produce better resource governance. Africa presents opportunities to do this.

Africa's water scarcity is less severe than in many parts of Asia, except for the northern and most southern parts. Since the 1990s, Africa has an hyperactive track record of experimenting with a slew of IWRM interventions, especially of enacting water laws as a way of creating a regulatory and property rights framework for water governance. A recent workshop on 'African Water Laws' organized during January 26-28, 2005 in Johannesburg by International Water Management Institute (IWMI), Natural Resources Institute (NRI) and the University of Dar-es-Salam brought together researchers from several African countries who had documented their respective experiences with IWRM-type reforms, especially, of enacting and enforcing new water laws. Some fine and very interesting papers presented in this meeting can be found on www.nri.org/waterlaw/workshop. This IWMI-Tata Comment based mostly on the presentations and discussions of this workshop teases out key lessons of African water law experiments for other poor and emerging countries foraying into IWRM direction.

The Context of African Water Economies:

In several ways, rural Africa's institutional fabric is different from Asia's. In many parts of Asia, especially those with European colonial history, water rights are commonly an easement of land following the British-Dutch common law. In rural Africa, legal pluralism is in evidence to a greater extent than we find in many parts of Asia. Diverse legal traditions—international laws and treaties, state laws, religious and local norms, customs and customary law of the large range of ethnic groups, regulations imposed by development projects—determine 'water access options' available to rural communities. In rural Africa, we also witness marked discontinuity between local tradition and modern notions of rights. Legal plurality is the hallmark of Africa's traditional institutions. Communal areas in Zimbabwe, for instance, are governed by multiple sets of rules. Shona oral, customary law differs radically from Roman-Dutch written common law. The former is open to all and admits all kind of evidence. Shona makes little distinction between criminal and civil. Rights and duties by usage get the force of customary law because they are viewed as normal, just and consistent with its worldview. Shona chieftainship represents nested levels of jurisdiction. Customary law becomes operational at the first level of local community governance while formal law predominates at higher level. And the two seldom resonate with each other.

Literature considers open access bad, leading to the tragedy of commons; African tradition celebrates open access as an ideal arrangement. Often in Africa, *de facto* rights are determined by one's control of the more scarce resource. In wetlands, if one has land, one gets entitlements to water; but in dry-lands, control over water enables one to cultivate surrounding land. Modern land and water laws interact in complex ways with customary rights to produce social outcomes which are often not easy to fathom. In

Kenya, for instance, a new land law has reduced access to land along rivers/streams and thereby neutralized prior water rights as a default..

Unlike elsewhere in the developing world, many countries in Africa have a strong imprint of customs and customary law and institutions relating to the use of water resources. Customary laws and practices emerge from consistent repetition of a given conduct, and the conviction of the community that such conduct is acceptable. The Akan customary law prevailing in many of Ghana's 128 districts is illustrative of the wide scope of customary law and practices in rural Africa. Community ownership of water and other natural resources has remained largely unquestioned. Here, chieftains, priests and priestesses play different roles in traditional water governance. The chief is deified; people interact with the chief through the linguist who in turn will pass on the communication to the chief. A widely observed custom is of weekly water holidays: on Tuesday of each week, no body can take water from a river/stream, nor does anyone go to the sea. Akan customary is self-enforcing. Government laws, rules, regulations are difficult to enforce and police in rural communities; customary laws are self-enforced.

A presentation by Desalegn Chemedda offered, as an example, a detailed and excellent description of traditional institutions for water management in Awash and Borana basins in Oromia state of Ethiopia. *Gadaa* -a male-oriented socio-political and cultural system-is an important institution of Oromia; it is a system of age-grade classes that succeed each other every eight years in assuming social, economic and political leadership. Young members are introduced to community management chores with simple tasks; young children below 8 are free of all responsibility; 8-16 year- olds look after small stock; 16-24 year olds draw water from wells; 24-32 form the nucleus of future *Gadaa* leaders; and so on. Only male members in 40-48 age-group constitute *Gadaa* leadership from whom a presidium (Council of Elders) of 9 members is constituted; those older than 48 are retired from leadership roles. The Council of Elders form rules and regulations; they also function as arbiters of last resort. Since wells are often major source of water, an elaborate set of practices have evolved around them. In wet season, typically, open sources of water are used and wells are closed. During the dry season, wells reopened, and yet, herds are often moved to distant areas. Managing wells is among the key responsibilities of the *gadaa*. Variants of this system prevalent in Borana are widespread and powerful throughout pastoral Africa. Ethiopia's constitution protects and promotes the self-governing traditional institutions.

Colonial history too has left a strong imprint on Africa's water scene. The tradition of vesting ownership of water to the state is a colonial tradition that many newly independent states copied. Colonial decisions of decades ago also continue to affect rights over river basins. For instance, the British gave absolute rights over Nile waters to Egypt during the colonial period. Now, even if they want, countries around Lake Victoria--Kenya, Uganda, Tanzania can not divert any water from the lake without explicit permission from Egypt which has stationed engineers around the lake to monitor its rights.

Scope of African Water Laws:

The water laws of many African countries enacted seem quite strong by the standards of South Asia where even water policy statements, such as India's, have been quite lukewarm and unambitious. Declaring water to be state property, requirement of permits for water diversion, introduction of water pricing are all quite common features in African water laws. Tanzania plans enacting two separate legislations at one breath: Water resources act, and a Water supply and sewerage act. Under Tanzania's new water law, as it was in the past, all property over water resources is vested in the Republic of Tanzania. All users—except domestic—are supposed to acquire water rights through water use permits. The law reaffirmed water as an economic good; domestic water use was exempt from water price; but all other water use was subject to pricing. The law also recognized the principle of basin level water resources management; and to that end, prescribed organization of water users into WUAs as well as sub-catchment/ sub-basin Water Boards.

Zimbabwe's Water Act of 1998 separates commercial and primary water; the latter refers to domestic, livestock, household needs. Water for commercial use requires permits and is subject to user pays principle. A controversial aspect of Zimbabwe's Water Act of 1976 was that it assigned water rights to land titles in perpetuity; and since the bulk of the land was owned by commercial farmers, local black communities were dispossessed of their traditional water rights. Zimbabwe's New Water Act of 1998 tried to correct this. It replaced water rights by temporary water permits. All water, including groundwater is vested in the state. 7 water councils are created; and Zimbabwe Water Authority was created to partially replace its Department of Water Development.

Kenya's State-centred water law vests the control of water and right to use water in the minister. A permit is required for water use barring some exceptions. Each permit defines the scope and extent of water right of each holder. Except those using buckets to draw water from streams, all require permits.

Ghana has made some effort to integrate modern with traditional. To implement the legal-institutional reform, Basin Boards were created; these provide representation to traditional authorities. Chiefs are invited to explain the customary law in their territories. If the courts accept these, these become formal law for that territory. Each district assembly has elected representatives, two members of the parliament, but 30% of the seats are reserved for traditional authority representatives appointed by the President in consultation with the chiefs. The customary principle of reasonable use, not harming other riparians are key new ideas introduced in the new water law. Institution of chief and priests, customary law, sacred grove, water holiday—are traditional notions integrated into the water law and governance.

In Ghana, new water law had profound impact on traditional water governance. The new 1996 law separated land and water; All use requires registration although only some need permits/licenses. Land owners were required to seek permit for water use; many, especially, large land holders acquired permits. But numerous small users have not; and

registration of these has not progressed at all. The law vests water in the president; but a transitional period of 1 year was provided for people to get their use regularized. All manner of problems have arisen in enforcing the law. Far-flung rural communities have not accorded any urgency to get their water use registered and regularized. When some communities tried, it led to unusual differences. One chief claimed jurisdictional right over all water passing through his territory. He was given a user right but not the jurisdictional right.

There were several common features across Africa of the wave of IWRM enthusiasm. First, commonly, as their colonial predecessors, water was declared state property, thus demolishing at a stroke traditional rights based on communal management. However, under IWRM, this dormant system only applied to few large water users was revived and extended to the entire nation. This resulted in tension and anxiety; even though water became state property only in name. Second, in many countries, use rights to water had to be acquired afresh by applying for a permit; in all countries, small users such as households drawing water for domestic needs were explicitly excluded from the permit requirement, but registration and payment requirements for any further small-scale productive uses are either explicitly stipulated or remain defined vaguely. Third, commonly, separate laws were passed that distinguished between water services management and water resources management, the former viewed as a commercial function, and the latter as a public service function. Fourth, the law in many countries provided for a price levied on water diversion or provision. Fifth, almost everywhere, new legal framework necessitated—and was followed—by a revamp of existing structure of public institutions or their replacement by a new class of institutions. Sixth, river basin was commonly adopted as a unit of water resources management; and new institutions were created at basin, sub-basin level rather than to fit administrative territories. Together, these interventions are much of what we understand by IWRM in today's language. Did these interventions produce better management of Africa's water economies?

Social Impacts of African Water Reforms

The overall sense emerging from the workshop seemed to suggest that nowhere—except in South Africa—did the new clutch of interventions produce significant improvements in the management of water resources or services. Ghana's reforms—which were taken as a model by several countries--seemed by far the most thoughtful and sensitive, focused as they were on blending modern water institutions with traditional systems of rural resources management; yet, one senior commentator dubbed Ghana's water law a 'heroic failure'; and somebody from Ghana confirmed that his country is already taking its water reforms back to the drawing board. In Zimbabwe, the question was how many rural people know about the new water law which has focused on big water and ignored small water. It ignored how most people actually irrigate, which is by hand. Another researcher from Zimbabwe, commenting on reform of water rights, asked: 'Does the right refer to 'raw' water or treated water? If the former, it is non-operational since anyone can take a bucket and lift water from any water body.' Many commentators also felt that new laws in most African countries were drafted for closed or nearly-closed basins where the key

threat was of over-development of water resources. But in Ethiopia, of the total resource of over 120 km³, just around 2 km³ is presently diverted. This is the situation in most African countries where key challenge is developing water resources to improve livelihoods. It will take a lot of agricultural intensification and economic growth before physical scarcity of water or pollution of water bodies become critical issues in many parts of Africa. One researcher likened water reforms in Africa to selling maternity apron to a woman who had not even become pregnant!

While reforms failed to usher in IWRM, they threatened to unsettle Africa's rich customary laws and traditions and created new anxieties. In Tanzania, a major worry expressed was about the observed impacts of individualization of water rights that was replacing the age old CPR regime on water and other natural resources. It was observed that the 'permit system' to create new water rights had triggered a permit seeking spree to shut out the others with the argument 'I paid for the water, so I can use as I need'. A related apprehension was also that the bulk of the country's population residing in far flung rural settlements is unlikely to pursue the transaction costly process of permit acquisition; and this may result in the criminalization in law of all traditional uses of water.

The clash with customary laws in many places created serious threat of disenfranchising the poor. In Kenya, where the new State-centred water law vests the control of water and right to use water in the minister, almost everyone needs to acquire a permit which, like Mexico's water concessions, defines the scope and extent of water right of each holder. Securing a permit for agricultural water use requires title over a piece of land because it must specify where water would be used. Many of Kenya's poor may have held land in native reserves for generations under customary law but this may be of no avail unless they have formal titles. Three types of land titles exist: government, Trust land (native reserves under colonial rule not vested to trusts) and private land mostly owned by commercial farmers. Areas dominated by Trust lands are deprived of water permits because these farmers do not have land titles. And even farmers who own private lands do not get land titles inherited under customary practices. The regime of documented land titles has not been possible to set up in Kenya; and this may create serious distortions in the way the new water law actually plays out.

2.3 million rural Kenyans are supplied water by voluntary, community based informal self-help groups (SHGs). Under the new law, the Minister created a Water Services Regulation Board (statutory) which in turn created 6 Water Services Boards. These in turn appointed professional water service providers, mostly private businessmen, to provide water services on a cost recovery basis. Most SHGs failed to qualify and are to be replaced by professional service providers. In order to qualify, the SHGs will have to formalize, professionalize and operate on a cost recovery basis and invest in O & M besides absorbing the transaction costs of registration as a co-op or an NGO, and of acquiring land titles. Some of the strong SHGs will take this route; but the poorest SHGs will be least able to make this transition. And all that succeed will lose their voluntary, communitarian character.

All in all, Africa's water reforms seem to have done little to usher in effective IWRM in most countries that tried them. In particular, four problems were identified in a recurrent fashion: [a] the aims that the water reforms seemed designed to achieve did not reflect the water sector priorities of the countries and a majority of their citizens; [b] the reforms touched only a small segment of the water economy and a tiny proportion of water use and users; as a result, their impacts on the water sector were neither deep nor broad; [c] they posed serious threats to customary laws and institutions evolved and used by communities; these are never ideal, but they are time-tested, robust and perform their basic functions well; and [d] they also created serious distortions, threatened disenfranchisement of larger numbers of poor, and created new vested interests; these potentially deleterious impacts were limited only by the fact that almost everywhere reforms failed to stick, laws remained largely unenforced, water prices remained uncollected.

Drivers of reform

What, then, went wrong with Africa's water reforms? Several things, it seems. Many countries just copied laws made elsewhere, just as several states in India have blindly copied Andhra Pradesh's law on participatory irrigation management, and Pakistan Punjab has copied the water law of the state of Colorado. In Africa too, parts of the South African Water Act have been copied elsewhere. Without consultation, public participation, and a serious attempt to fit reforms to the context, the impact of these reforms was bound to be negative if at all. And now, Ghana is having second thoughts on its reform strategy and wants to go back to the drawing board.

Another major influence seems to have been of international agencies and global thinking. Tanzania is a case in point; its national strategy has oscillated between improvising and building upon its traditional institutions to total transformation. Based on a study by McKinsey, Tanzania spent 1961-1970 trying to improve its rural economy by building upon its customary institutions. In 1970/2, with the launch of *Ujamaa* program, total transformation of the rural sector became the rage; traditional institutions were at a discount. The state recognized rural people's fundamental right to safe water without charge. Donor funding was mobilized to do that. In 1986, *Ujamaa* failed, and incremental building upon the bedrock of the traditional institutions came back to fashion. More recently in 1990s, there was a swing again; liberalization and globalization induced new thinking: 'Customary water law is no good in a globalizing world; and what seemed needed was codified law to do business with multinationals.' Tanzania's new National Water Policy financed by the World Bank once again seeded the idea of new water law.

Tanzania's 1991 water policy identified water development and provision as a key goal and argued for more water storage creation. However, creating new storage and infrastructure was anathema to international donors; so Tanzania ended up doing what donors would support: IWRM, which included legal institutional reform, river basin organizations, WUAs, but no attempt to get what its people need most, better and more

infrastructure. One researcher commented that Tanzanians all along had plans to build dams but were secretive about it for the fear of donor reprimand.

Water reforms in South Africa:

South Africa has emerged, during the past decade, as a model, exemplifying best practices for IWRM type water sector reforms in an emerging economy context. South Africa is interesting because of its first-world-third-world duality. In terms of income inequality, South Africa is next only to Brazil. 54 percent of South Africa's water use is in agriculture; and 95 percent of its agricultural water is used by a small minority of white commercial farmers. In general, 90% of its water use is in the formal sector; but 90 percent of its water users are in the informal sector.

South Africa's path-breaking water law (chapter 4 of the Act: section 21) specifies following uses and brings them within its IWRM mandate, among others:

- [a] taking water from a water resource;
 - [b] storing water
 - [d] engaging in a stream-flow reduction activity, such as forestry
 - [e] control activities. E.g., irrigating with wastewater
 - [f] discharging of wastewater into a water source through a pipe, canal,
 - [i] altering the bed, banks, course or characteristics of a water course;
 - [k] using water for recreational purposes
- etc.

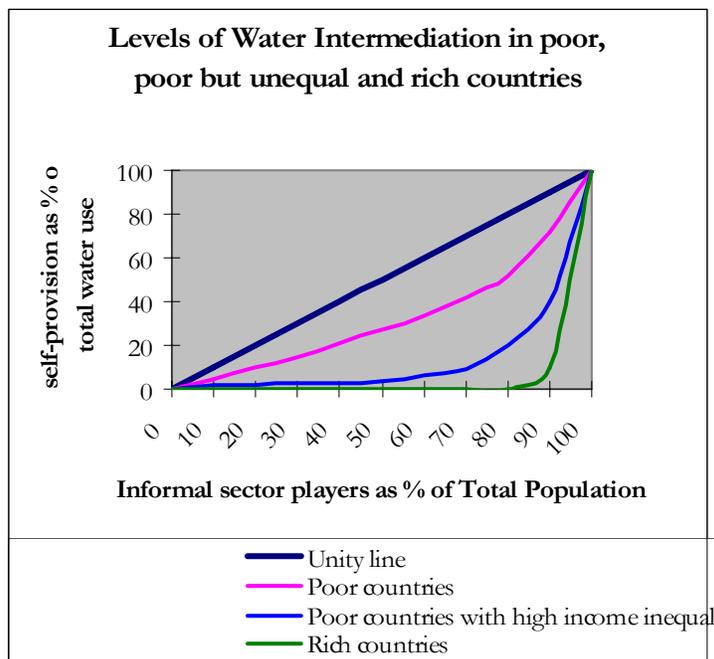
Ultimately, all those using water for the above purposes have to obtain a permit, pay water tariff as well as water resource fee. South Africa has all of 62,000 authorized, billable water users (or registered primary diverters) that account for 11 billion m³ of water allocation for (mostly commercial) agriculture, 5 billion m³ for industry and municipal; 9 billion m³ for forestry. Government of South Africa generates around 2 billion rand/year as income from water tariffs. Managing these users has presented unique challenges: it is difficult to ascertain actual volumes used; some users did not register and some registered use could be unlawful under existing water law. This has impact on tariff determination and collection. There are serious problems of tackling unlawful water users. Many commercial farmers have extended their irrigated areas unlawfully. When confronted, they argue they are using their water allocation more efficiently. A critical issue for officials is whether to rely on voluntary compliance or evolve a system of policing.

Interestingly, however, the South African IWRM leaves 95% of its people out of its ambit. All of 2.3 billion m³ –about 10 percent—of total water use is allocated to the so called schedule-1 users, mostly rural black South Africans, who include some 18 million primary diverters of water for domestic use, gardening, and irrigation. Schedule-1 water use is neither subject to permits nor billable. But any water use 'for commercial purposes', which is not defined, is. If anything, everyone agrees, the crying need is to

increase the access to and productive use of water by these users; yet the entire rubric of IWRM interventions is finding it hard to meet this need.

Not that South Africans are not trying. An excellent case study on rural South Africa—18 million people ruled by 800 chiefs and 13000 village headmen, complete with their customary law and traditional institutions—found their water economies predominantly informal; water law does not reach here; self or community provision galore. Under the National Water Policy of 1997 and Water Act of 1998, entire South Africa was to be covered by 19 Catchment Management Agencies (CMAs); but this has proved difficult. Only 1 has been formed so far. It is easy to create paper organizations but far more difficult to build representative institutions, especially of large numbers of rural poor. Formation of Catchment Management Agencies, revitalizing and turning over of small-holder irrigation systems to Water User Associations,—all central to improving the lives of the vast majority of South Africans—remain major challenges that the country’s water reforms are yet to begin to meet. IWRM is working in European South Africa, but the African South Africa has to begin at the beginning. This should not surprise anybody because bringing South Africa’s informal water economy within the ambit of the reform was always going to be difficult and time-consuming. These are also the challenges facing India, Bangladesh, Nepal and numerous poor countries.

Lessons:



The African Law Workshop was centrally about the gap between the precept and practice of IWRM. There was little questioning of the basic premises such as that water should be priced to reflect its scarcity value, that it is best managed at basin level, that reform of property rights will promote its efficient and sustainable use. Everyone agreed. The question was how to make these stick in Africa. All the evidence presented suggested that these work easily and produce desired impact in highly formalized segments of water economies

where: [a] primary water diverters are large, body corporates and few in number; [b] most water users are supplied by organised service providers; and [c] capital accumulation in terms of infrastructure creation is already high. On the other hand, no matter how carefully designed and implemented in a participatory manner, IWRM

reforms prove difficult to implement and produce uncertain outcomes in highly informal segments of national water economies where: [a] most of the country's households are primary water diverters; [b] most self-supply their water requirements directly from source; and [c] capital accumulation in water infrastructure is very low. There was little discussion also of the distinct possibility that whether water economies are formal or informal has little to do with their water endowments or their water management institutions but it has, in general, a great deal to do with their level of economic development.

The IWRM paradigm neither responds to the priorities of the poor in poor countries, nor does it resonate with their ground conditions which make implementing water pricing, reform of property rights, allocating water at basin level work. The key factor often ignored is the numbers of primary diverters of water from nature. As figure 1 shows, in rich countries, these are often just a very small number of body corporates—water companies, utilities, municipalities, co-operatives--who serve the water needs of all users that are no longer primary diverters. In low-income countries with high level of income inequality such as Brazil and South Africa, IWRM works well in the rich, modern, formal segment of the water economy but can actually leave the poor worse off by destroying their traditional institutional arrangements while replacing them by poorly functioning modern ones. In any case, IWRM deflects attention of policy makers in these countries from what ought to be their their key priority—which is to deliver improved and better managed water infrastructure and services.