

Institutions for IWRM in Sri Lanka - A perspective

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History

The concept of IWRM was integral to practices in the use of water and natural resources in Sri Lanka as part of its hydraulic civilization dating back from 6th century BC. Water was treated with respect and strong social, cultural and religious links were intertwined in its use with strong relationships established between the temple, tank and community. The source areas and catchments were safeguarded carefully and the use of water for irrigation and livelihoods, the operation and maintenance of water courses and related infrastructure were regulated through edicts issued by the king. There was recognition of customary rights and obligations of the community and penalties were imposed for noncompliance. The complex system of weirs, reservoirs and cascades of reservoirs helped maximize water utilization including from return flows within a watershed or sub basin and were the mainstay of an agricultural society whose main occupation was rice cultivation. Cultivation of crops and related cultural practices followed strict land use norms. While hilly land and slopes were developed for irrigated rice production proper terracing and land use practices were followed to ensure that soil was not lost due to erosion. Sri Lanka then was indeed then the “Granary of the East”.

The Colonial era, especially under the British saw the state usurp much of the traditional community land under the Waste Land Ordinance of 1840 which appropriated to the state, all lands where title could not be proven. Many communities thus lost much of their community and even inherited lands. The opening of the hill country to development added another dimension to the issue of water resources conservation when much of the central highlands from which most of the water resources originated were opened up for plantation agriculture under state support and sponsorship.

This was further compounded by the revenue collection administrative, governance and management institutions that were established without much concern for natural resources management or hydrological parameters. Nevertheless, the British did resurrect the rapidly dilapidating irrigation systems and constructed new infrastructure albeit with the intent of lessening the import burden on rice. World War 2 highlighted the plight of vulnerability to imports and even after independence in 1947 national governments aggressively pursued development of irrigation infrastructure and irrigated rice production in the dry zone coupled with human settlement programmes to reduce population pressure in the wet zone .

Concept of IWRM

It is established that some aspects related to IWRM have been in the international pipeline since 1820. It was highlighted in the 1950's by UN and raised again at the UN Conference in Mar del Plata in 1977. The Dublin Expert Consultation in 1992 brought forth the now accepted 4 Dublin principles as the basis to move forward and the Agenda 21 UN Conference helped internalize and get commitment of states to many of these aspects in 1992 in Rio. WWF Forums especially in Marrakesh (1997), Hague(2000) and Kyoto (2003)together with WSSD in 2002 linked to the MDG's and Bonn and the following many forums including Rio +10 and Rio +20 have endorsed these aspects and principles. With water now as a likely goal in post 2015 SDG's consensual movement of states are most likely.

Meanwhile, no unambiguity in definition of IWRM exists even today, though the 4 Dublin principles continue to form the modern basis. By and large the GWP /TAC interpretation is subscribed to and this states *inter alia* that ***IWRM is a process which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.***

Three fundamental elements of IWRM to be addressed as identified relate to an enabling environment, institutional roles and management instruments.

The Legal Basis

A great number of legislations support water management and regulation. If three of the important Dublin principles are considered many related legal basis exist. Recognition of water as finite resource, multiple roles/ uses of water, optimum use, common interest, harmful impacts, quality controls and environmental concerns have existed prior to Rio/ Dublin.

Water Management and Legal Basis- Sri Lanka

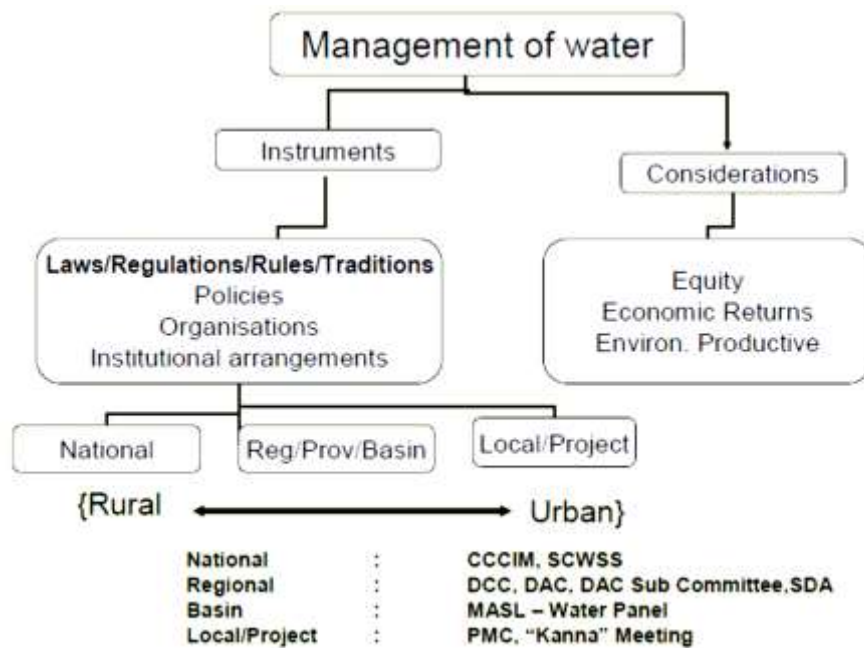
Historically as an outcome of the Waste Lands Ordinance the state inherited and thus controls an inordinately high percentage of natural resources including nearly 85 % of the land resources, the highest in the region. Water administration is yet based on the functional administrative systems inherited from the British period and defined by land/administrative determined boundaries..

Though a Comprehensive Water Resources Policy was approved over a decade ago, the policy is in limbo, and no umbrella enabling law was adopted to backstop due to lack of political will. Ad hoc policies based on sectoral needs such as drinking water and non-controversial issues such as rain water harvesting have been set in place. Thus, the main operational framework for water sector operations still remains within the ambit of sub sector laws and regulations.

Historically and legally the institutions and laws relating to land administration have as a prerogative determined the use and control of water resources. A rights regime that is land based though accommodating appropriative rights and decision making rights to water has been the basis of water administration.

Nevertheless, a Programme/Project Management system introduced circa 1968 where sector based coordination is linked up through an integrated coordination mechanism at several levels has been able to overcome problems of harmonization to attain project/programme goals through sector/agency commitment to common or agreed goals. Any lack of an integrated framework purely for the water sector has been overcome to some extent as a consequence of these coordinating mechanisms. These coordination mechanisms based on agreed commitment to a set programme coordinated by focal agency or project management unit has worked satisfactorily notwithstanding the lack of a single comprehensive water policy and law and connected institutional arrangement. These Coordinating Committee's exist at the highest political and policy level but also at agency, province/district /division and local level. These interface and integrate decision making bodies at beneficiary level to allow for reasonable local level stakeholder consultation and involvement. Nevertheless an inherent weakness is where operations have been on project mode there is sometimes little transition to programme mode and continuity of ownership by the separate agencies.

As far as Sri Lanka is considered the management of water is presently structured as follows.



Water related legislation in Sri Lanka.

Sri Lanka has over 51 Acts and over 40 Agencies dealing with water, often resulting in duplication, confusion and inaction and seen as fertile grounds for corruption. Most laws are function or sub sector based. While there is wide acceptance of the need for a comprehensive water policy and legal basis, a series of misadventures due to poor planning assumptions both with respect to developing the policy and law has led to this impasse allowing the status quo to continue. Sri Lanka with its historical and long standing focus on irrigated agriculture (using over 80% of developed water resources) has resulted in very strong irrigation based institutions that command a prerogative in its use and management. These power domains were reinforced by political imperatives that for very logical reasons at the time provided for free infrastructure support and services in irrigation.

An obvious nexus developed between the politicians on one hand seeking to secure such investment and services to promote their own visibility and enabling the agencies to feel secure, notwithstanding management and operational inefficiencies and failures, due to this mutual dependency. Surveys had shown that farmers were willing to at least meet reasonable O&M costs as they could then demand efficient and reliable services; however these were aggressively countered as measures to drive the poor farmers to penury, while the real reason was that the immense power of free water and services held benefits for both the agency staff and politicians.

The policy process in earnest started circa 1990 from within the water sector under the USAID project- Irrigation Policy Support Activity (IMPSA) followed by in 1993 with the USAID/ADB study on Comprehensive Water Resources Management (Mosley) by the Ministry of Finance and Planning and then followed by the now infamous ADB/FAO initiatives in 1995 that in reality contributed significantly to this logjam. Predictably ADB supported concepts driven by the usual donor prescriptive perspective and from the Philippine experience; a Water Act, Council, Apex Body *etal*, set up to be executed by the Ministry of Finance as by now institutional changes worked through the water ministries were considered ineffective and the financial/economic aspects covering investments were of primary concern to donors such as ADB/WB etc.

It was the same in the Philippines, with initially the National Irrigation Administration (NIA) being the institutional home for the water sector within the Ministry of Public Works giving way to control by the National Economic Development Agency (NEDA) the economic agency of the Philippines.

Failure of this led to transfer of regulation and control to the Department of Environment and Natural Resources (DENR) ultimately moving a whole cycle of emphasis from development, to cost recovery and on to protection, exactly what seems to be the de facto situation in Sri Lanka.



Unfortunately it was assumed that rather than a policy that will evolve with need, it had to be comprehensive and overarching. Clear and unambiguous Principles of water resources use and management were not articulated, thus a framework for future change was lacking. It was all encompassing and thus without clear principles for future action, suspicious. A step by step approach on issues that need addressing was not considered.

While the concept of a Council or decision making body and a Tribunal for arbitration and conflict resolution appeared logical, that of an Apex body for management (yet to be proven elsewhere) was less so. The management model sought an Authority mandate that would have merely led to another “Command and Control” rather than an “Ecosystem” approach. The former difficult to transform into the latter and adding a further layer to the administrative hierarchy and transaction costs. That competition for the same limited skilled technical resources would lead to further erosion of implementation services to support regulation was inherent. Intrinsic advantages of delegated services and horizontally integrated matrix project management/ coordinating mechanisms that had worked well in this country was to give way to creation of another unitary authority.

River Basin Organizations (RBO)/ River Basin Management (RBM) and River Management(RM) for Sri Lanka.

RBO/RBM has been the prescriptive institutional model constantly being promoted in IWRM related discussion fora including by many donors. Nevertheless, this needs critical appraisal as under careful scrutiny some issues arise that counter this seemingly logical institutional arrangement as practical and ideal.

A river as the most visible water entity in an entire basin, immediately gives a clearly identifiable physical dimension that lends itself to management interventions, which also help to backstop the concepts of RBM/RBO as a logical road to IWRM. However, the hydrological parameters/ characteristics in a drainage basin do not in themselves provide an isolated management and independent, self-sufficient entity as sectoral, national and even international imperatives (international basins) often determine the legal/regulatory basis and management. This is compounded when central issues such as of governance and cross cutting issues such as corruption are to be addressed in this context. While planning of use and allocation of water resources on the hydrological basis of a basin is logical and rational, a fully-fledged management model of River Basin Management (RBM) and River Basin Organization (RBO) though attractive as a concept do not exist as rivers bisect basins and usual political, social and cultural issues and local power domains that exist will not allow for it.

What exist are generally Command and Control models mostly focused on infrastructure management and related services such as the Tennessee Valley Authority or TVA (now dysfunctional) which have and MASL exist (NARBO presently lists 28 such RBO). As mentioned earlier it has been accepted that command and control models set up for infrastructure based management of basins or part of a basin can seldom transform to an ecosystem model.

The first such Command and Control RBO in Sri Lanka was established circa 1949 when the Gal Oya Multi-Purpose Project was commissioned in the east of the country. A Board named the Gal Oya Development Board (GODB) was set up on the lines of the (TVA) to handle this large multi- purpose project that had components of human settlement, irrigated agriculture and livestock, sugar cane farming, hydro power agro and other industries together with supporting services. GODB in the 1960's was transformed into the River Valley Development Board (RVDB) which undertook similar development in the Walawe Basin in the South of the country, while the services that were provided including the custodianship of infrastructure was handed over to the respective line agencies. The RVDB after fulfilling a similar mandate was wound up in the early 1980's after transfer of its functions to the Mahaveli Authority of Sri Lanka (MASL). The late 1960's saw the establishment of the Mahaveli Development Board (MDB) set up to develop a master plan for using water resources under the Mahaveli River. An accelerated programme which telescoped a 30 year development plan to 5 years saw the establishment of the MASL in 1979 which to date provides the required services to the declared Mahaweli areas downstream. With other basins being declared under the Mahaveli Act, large multi-purpose projects of similar nature in other basins now come under the custodianship of the MASL.

In such a context it would appear that resource planning and allocation is a practical option rather than full basin management for large basins. The role of RBO/RBM seems valid as seen where behavioral norms for collective water resources, shared resources and can be agreed on (recent EU directive, now to be ratified by UN for all) but not all encompassing. South Asia has a more complex geo political environment and it would be highly challenging to say the least to implement a similar agreement for shared waters.

However, the intermediate model of River Management was never considered for Sri Lanka. Israel with 3 rivers has a River Authority though Sri Lanka is an insular nation at least the national rivers can be so managed at least with respect to river resources. There is no agency currently taking actual responsibility for rivers in Sri Lanka, while the Irrigation Department provides limited allied services such as stream gauging, flood forecasting and engineering services when required.

Trans-basin Diversions.

With the advent of Mahaveli over 2500 MCM of water is transferred to the water short Dry Zone of Sri Lanka and it is planned to divert more than another 1000MCM by 2025. While the state has control of interprovincial rivers the setting up the Provincial Council System has brought a degree of alertness to impact on current users and unlike earlier⁵ a more consensus derived transparent and acceptable allocation and sharing mechanism seems indicated.

Going Forward

The Country Consultation on UN post Development Agenda for Water- Sri Lanka ,helped revisit the issues related to water and natural resources both in terms of the MDG'S and Post 2015 SDG's. The need for integration of the water sector and other natural resources' sector especially in the context of Climate Change impacts, strengthening coordinating mechanisms and capacity building were high priorities. A water goal now seems possible through the OWG agreement though UN acceptance is required.