THE HUMAN RIGHT TO SAFE DRINKING WATER AND SANITATION

Q:1 ***What conflicts exist in your country between different types of water uses (eg. agriculture, industry, tourism, among others). What are the main challenges in your country concerning water resources and wastewater management that impact on the realization of human rights?***

Although Sri Lanka does not face a water resources shortage in terms of quantity, there are growing trends of stress in terms of availability subjected to seasonal variation and competition among sub-sectoral water users. There are 103 river basins in Sri Lanka out of which around 20 basins, each consisting of basin area of over 1000 sq. Km. The per capita water supply per year stands at 2.4 thousand cubic metres which is fourth lowest among the Asian and Pacific countries. Sri Lanka has the second highest annual variability of rainfall of 22 Asian and Pacific countries. High locational and seasonal variability further complicates the situation. Sri Lanka has a high reservoir capacity particularly in the irrigation sub-sector as a percentage of annual water resource availability. The high water use coupled to series of different state institutions mandated to develop sub-sectoral uses has evolved a process of allocating water to respective uses / users without any concern to other sub-sectoral uses. Water resources available in the river systems are extracted independently for development of different sub-sectoral uses such as irrigation, water supply, hydro-power, industrial uses, other economic uses such as tourism, water sports etc. As a result, water for environmental needs such as wildlife, eco-system maintenance and water for marginalized poor have been neglected.

The current level of piped water supply for meeting domestic needs stands at 42% of the total population through 320 water supply schemes operated by the National Water Supply and Drainage Board and the Community Based Organizations. It has been noted that 97% of the households/ industrial and commercial connections and 92% of the institutional connections are metered and are subjected to recovery of costs associated with service provision. There are 234 major and medium irrigation schemes and over 1000 minor irrigation schemes operated by the Irrigation Department, Irrigation Management Division of the Ministry of Irrigation and Water Resources Management and Department of Agrarian Development. There are several reservoirs particularly in Mahaweli basin which is the largest basin of Sri Lanka that cater for multi-purpose uses such as hydro-power, irrigation and water supply sub-sectors. Over 45% of the electricity requirements are met through generation of hydro-power. Hydro-power generation involves decisions on the timing of water releases and the effect on downstream water users such as irrigation and domestic and drinking water supply purposes.

Participatory management approaches have been followed in developing and managing the irrigation and water supply schemes while ensuring recovery of cost of operation and maintenance while contributing towards meeting part of capital cost of water supply projects that are initiated by the Community Based Organizations developed on demand basis. Few water supply schemes have also been developed and managed through Public-Private –Community participation, that were promoted under a UN-ESCAP funded project. These schemes have been piloted in Colombo low income housing schemes successfully. Participatory approaches have been promoted in developing water supply schemes supported by Asian Development Bank, World Bank and Japanese funded projects.

Tertiary canals of the major and medium Irrigation schemes have been maintained through participatory approaches involving farmer organizations. There have on occasion been conflicts among the water use agencies in the irrigation and water supply sub-sectors when water allocation issues have been raised by the water supply agency when water is required to be shared from irrigation reservoirs.

Q2: How are different water uses prioritized in national legislation and policies? How are these priorities implemented in practice? Are there any implementation challenges? If yes, please elaborate on them and on measures taken to overcome them.

Considering the rising competition for water development for different sub-sectors by the respective state agencies such as Irrigation Department, National Water Supply and Drainage Board, Ceylon Electricity Board, Mahaweli Authority of Sri Lanka, Agrarian Development Department etc. there was an emerging need identified by the government to introduce water resources management measures in the early 1990s. There were no national policy for water allocation among competing demands, water conservation, data and information management and above all no institutional framework for management of water resources and river basin management. The water shed protection was weak with authority spread over several agencies. There was no legislation to manage surface water and ground water resources in the form of common water sources and thus quantity and quality of water resources were getting depleted. The water resources data is being collected by the Irrigation Department while rainfall data is gathered by the Meteorological Department for which there is no policy for sharing of data among all water agencies and other users such as researchers/ students and for development projects initiated by the private sector.

As a result the National Planning Department initiated action to implement an Asian Development Bank funded Technical Assistance project 'Institutional Assessment for Comprehensive Water Resources Management' that could introduce following five point Action Plan for comprehensive management of the Water resources of Sri Lanka:

- Formulation of a National Water Policy
- National Water Legislation
- Institutional Development
- River Basin Planning
- Information Management and Public Consultations

Based on the above outcome of the Institutional Assessment TA for Comprehensive Management of Water Resources, ADB supported Sri Lanka to implement the Project 'Institutional Strengthening for Comprehensive Water Resources Management' in 1996 over a period of three years. Under this project, the national water resources policy was formulated with a focus on the following topics:

- Water Rights and Allocation
- Water Resources Demand Management
- Water Resources Data and Information
- Groundwater Resources Management
- Institutional Framework for Comprehensive Water Resources Management

Q3: What strategies, approaches and mechanisms guide water resources and wastewater management? How do these ensure that the basic needs of the entire population are met?

Methodology adopted for Policy Development

The following methodology was followed for policy development:

The Water Resources Council, Inter-Agency Co-ordinating Committee and the Water Resources Secretariat were established to support implementation of project components. The Water Resources Council consisted of Secretaries of Ministries responsible for water sub-sectoral uses, including Environment, Ministry of Finance and Planning, two representatives of water user organizations and two representatives of the NGOs operating with the objectives relating to water sector, representatives of academic institutions/ Universities and the private sector. The Inter-Agency Co-ordinating Committee consisted of heads of agencies representing the use and management of water sub-sectors. The Water Resources Secretariat served as the project implementing agency with a set of professionals representing the water sub-sectors and appointed by the respective water agencies on secondment basis. The main approach adopted for policy development related to the following topics:

- Literature review

The water resources management approaches including integrated water resources management measures adopted in other Asian, European and Western countries were studied through reference to relevant literature and through the analysis of web pages. The services of an International Technical

Advisor were obtained for the literature review and transfer of relevant literature to match with the local conditions on the basis of the situational analysis.

- Issue Identification

The major issues in the water resources sector were identified relating to competing demands among water sub-sectors, riverine management issues, water sources / watershed management, groundwater issues, demand management / water conservation, institutional weaknesses and absence of institutions for water resources management etc. through consultation workshops organized at national, district and divisional secretariat levels involving policy makers, water professionals, researchers, water sub-sectoral managers, water user organizations, Community Leaders / NGOs and Community Based Organizations (CBOs).

- Formulation of draft policy statements

The draft policy was formulated to resolve the water resources related issues identified through stakeholder consultations. It was focused on cross cutting issues rather than on sub-sectoral issues.

- Consultations, Awareness creation for consensus building

The draft policy statements along with issue papers were subjected for discussion at the Inter-Agency Co-ordinating Committee and the Water Resources Council followed by consultations through awareness creation among stakeholders who are the community leaders of sub-sectoral water users, NGOs and the women representatives. The organization of the workshops for dissemination of information on draft water policy statements and stakeholder consultations were carried out by the Sri Lanka Environmental Journalists Forum.

- Cabinet approval for National Water Policy

The draft policy statement for Water Resources Management was presented to the Cabinet of Ministers chaired by Her Excellency the President of the Socialist Republic of Sri Lanka in the year 2000. The Cabinet approval was obtained for the National Water Resources Policy.

- Objections by NGOs

There were series of objections raised by the NGOs and some of the water user organizations such as Farmer Organizations indicating the danger of implementation of the National Water Resources Policy highlighting the provisions made relating to transferable water rights, economic value of water and ownership of water, licensing requirements for bulk water allocation permits applicable to surface and groundwater use etc. On the basis of careful consideration of certain objections raised by community organizations, the government has decided to withdraw the water resources policy statements relating to transferable water rights.

National Water Resources Policy – 2000

Some of the salient features of the water resources and the policy statements are indicated below:

- Water Resource is a moving object with unpredictable nature of availability in quantity and quality
- Need for reliable data and information on a real time basis
- Diverse uses and users
- Importance in making economic, social and environment related decisions
- Linkage to upstream and downstream water users in a river basin context
- Treating it as an economic good and as a common resource
- Need to integrate inter-sectoral and Intra-sectoral management approaches
- Need to identify hydrological units such as river basins for effective management of water resources

Other water policy topics that should be dealt with are as follows:.

- Drought management and flood control
- Water resources economics
- Basin Planning and Management
- Water quality and watershed management
- Stakeholder participation in water resources management
- Water Resources Development and Financing

The integration of water resources need to take place in the following subjects:

- Surface and groundwater resources management and sustainable development
- Upstream and downstream users
- Watershed and riverine management
- Water and other natural resources management
- Water allocation should consider protection of environmental flows

Water Resources Act was drafted through a Netherlands funded UN-FAO Regional Water Legislation Project that was implemented in parallel with the ADB Project through the Water Resources Secretariat. The Water Resources Secretariat continued to function beyond the life of the ADB project on 'Institutional Strengthening for Comprehensive Water Resources Management' attending to modifications required for the original national policy document.

Formulation of river basin plans was initiated under the World bank funded Mahaweli Restructuring and Rehabilitation Project (MRRP)' that was implemented by the Mahaweli Authority of Sri Lanka (MASL) over a period of five years from 2000 to 2005. Under the project, the MASL was to be transformed into a River Basin Management Agency after conducting an in-depth institutional analysis and after transferring the legitimate functions carried out in the Mahaweli areas to the respective line agencies such as Agriculture Department, Irrigation Department, etc. The MASL was to convert itself to an 'agency responsible for water resources management in Mahweli and adjacent river basins such as Kala-Oya, Maduru-Oya, Yan Oya etc. The river basin plan for Kala-Oya basin was prepared with the assistance of local and foreign consultants. Preparation of the basin plan followed needs assessment, issue identification, consultation of stakeholders located in the upstream and downstream of the basin and the topics addressed are as follows:

- Socio-economic Characteristics and population forecasts
- Agricultural situation and status of natural resources
- Water resources assessment in terms of quantity and quality of surface and groundwater resources
- Present and future balance of water supply and demands
- Development issues, options and alternatives (improvement of system storage, watershed degradation, improving access to safe drinking water, factors affecting watershed and riverine degradation, solutions for issues etc.
- Conservation of environmental degradation
- Comprehensive Kala Oya river basin management plan (integrated water resources management through an interface with other natural resources, building standard guidelines for regulations and enforcement of bulk water allocation and building stakeholder knowledge on the resolution of issues through participatory management)
- Institutional arrangements for Plan implementation (proposed legislation, Kala-Oya Basin Committee, Co-ordination with other line agencies, linkage to Mahaweli Basin Management Agency etc.)

National Water Resources Policy Components

The objective of water resources management is to ensure the use of water resources in an effective and equitable manner, consistent with the social, economic and environmental needs of present and future generations.

Further objectives focus on facilitation of national development, conserve and recognize the value of scarce water resources for meeting current and future demands of the population, recognition of the national importance of water allocation to the irrigation sector in terms of quantity, number of dependence and potential for improved water conservation, ensuring water allocation that promotes social harmony and individual decision making, ensuring healthy environment and sustainable use of both surface and groundwater resources using a comprehensive river basin approach.

Wastewater Management:

Wastewater Re-Use projects are under implementation in water stressed dry zone areas of the country. Wastewater re-use for irrigation purpose is under implementation at Jaffna/Kilinochchi Water Supply & Sanitation Project and proposed Hambantota Wastewater Disposal Project and at Mirijjawila Export Processing Zone. For effect, Central Environmental Authority (CEA) has a separate standard for treated wastewater re-use for irrigation purpose.

At the moment, 95% of the population still rely on onsite sanitation system such as septic tanks and soakage pit/ soakage trenches. To this effect, SLS 745 Part II: 2009 was published to give guidelines on how wastewater disposal system could be designed and operate which include septic tanks, soakage pit/ trenches, up flow Anaerobic filters and constructed wetlands.

Since 2.5 of the population is covered by sewerage reticulation systems, sea outfalls and treatment plant at CMC area, Hkkaduwa, Kataragama, Jaela Ekala & Moratuwa, Ratmalana, Kandy City Waste Disposal Project and few major towns are now being planned to meet targets for MDGs.

In addition, all major export processing zones, housing schemes have their own wastewater collection, treatment, disposal systems.

Q4: How does your government ensure transparency, access to information and participation in decision-making regarding water resources and wastewater management?

Policy Principles

All water resources including surface and groundwater are owned by the state and will be managed by the government in partnership with water users on behalf of all Sri Lankans. Water resources will be managed in a sustainable manner considering economic, financial, environmental, social and other considerations. The security of supply for water users will be increased through a system of water entitlements which are effectively monitored and enforced. The entitlements will be transferable subject to safeguarding rights of third parties, vulnerable groups, environmental values and other important benefits. The cost of water resources management will be shared in an equitable manner

with beneficiaries while maintaining a subsidy for those who are currently unable to pay a share of these costs. Water will be managed which recognizes distinctive roles of women and men and priority will be given to activities that facilitate traditional gender roles and strengths, with particular focus on interests of marginalized groups of the population. Information on water resources will be strengthened and co-ordinated through data sharing between agencies.

Key statements of Water Resources Policies

Water Rights and Allocation Policy

Water use rights will be granted through water entitlements. Water entitlements will be granted to group schemes viz. urban water systems, irrigation schemes, etc. and larger water users.

Water entitlements will be used to convey water use rights for both surface and groundwater.

Water entitlements will contain terms and conditions regarding water abstractions, purpose of water use, volumes and rates source and point of abstraction etc.

The source of water for an entitlement will be the river, stream or other natural water body or the groundwater aquifer, from which the water originates.

Entitlements will be granted for a fixed period of time based on the type of water use to allow entitlement holders to recover their investment.

New entitlements will be issued through an application and approval system.

The water allocation and entitlement process will be co-ordinated with the environmental licensing system.

Environmental, social and cultural water uses will be protected, including provision of water for the poor and marginalized. Minimum stream/ river flows will be maintained to meet the above requirements.

River basin plans will be formulated to specify the long term allocation of water and other water management functions including operational planning and management.

River basin management committees will be appointed consisting of representatives of government and all water users.

Voluntary transfer of water entitlements will be allowed between entitlement holders or from entitlement holders to those seeking to acquire water use rights.

Water Resources Demand Management Policy

The objective of demand management policy is to promote the efficient use of water resources and to maximize the value of the resource to society.

Key policy provisions are transferable water entitlements that will promote water conservation and improved water allocation, water management cost sharing and promoting water conservation in the irrigation sector, introducing regulatory controls, introduction of water conservation agreements among bulk water entitlement holders and awareness and educational programmes.

Ground water Management Policy

The objective is to promote the sustainable development and management of groundwater resources in Sri Lanka.

Groundwater will be managed with the recognition of distinctive characteristics of specific aquifers, such as rates of replenishment and the sensitivity of aquifers to depletion and contamination that will be taken into account in groundwater planning and allocation.

All national water resources policies will apply equally to ground water resource management.

Surface and groundwater resources will be planned and allocated in a co-ordinated manner and in accordance with the policy on 'Water Rights and Allocation'.

All demand management policies will be applicable equally to groundwater resources.

Integrated management of surface and groundwater will be promoted.

The institutional structure proposed for water resources management involving Water Resources Council, National Water Resources Authority and water Resources Tribunal will be held responsible for sustainable management of groundwater resources.

Q5: In your Government's view, should water resources and wastewater management be reflected in the Sustainable Development Goals/ post-2015 development framework?

Constraints for Policy Development and Implementation

The proposed changes to be made for water allocation through bulk water entitlements proposed to different sub-sectoral users were not acceptable to majority stakeholders due to the following factors:

- Community participation in issue identification and awareness creation on draft policy and for consultations were limited due to restrictions in the availability of financial resources that led to poor information sharing strategies
- Majority bulk allocation of water has already been provided to irrigation sub-sector that could not be transferred to any other use due to existing riparian rights that are already in operation under the Irrigation Ordinance

- Transferable water rights to meet higher valued uses could not be implemented due to cultural and socio-economic conditions of the irrigation water users engaged in paddy cultivation which is a national priority in meeting food security needs
- Reliability and accuracy of water resources related data and information was hardly to be achieved that is required for real time water resources planning and management
- The proposed institutional arrangement to appoint the National Water Resources Authority (NWRA), Water Resources Tribunal for resolving water allocation issues and the Water Resources Council holding responsibility for policy decisions were subjected for criticism as creation of new government entities for water resources management would not be able to perform without the support of the other water related agencies that were in existence for long periods
- Dependence of the NWRA on other agencies for data collection for water resources assessments at river basin level and formulation of river basin plans would have to base on creating additional responsibilities on the existing agencies such as Irrigation Department, Water Resources Board, National Water Supply and Drainage Board and the Mahaweli Authority of Sri Lanka etc.
- Type of working arrangements with the above water agencies with additional responsibilities through Memorandum of Understanding or contract agreements were new approaches that could be subjected to risk in delivering the outputs in time and efficiency
- Type of work associated with the bulk water allocation and enforcement of water rights and water entitlements are to be delegated to District Secretariats / Divisional Secretariats were raising doubts in the absence of a field network for the NWRA