



National Water Resources Policy and Institutional Arrangements

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Water Resources Council & Secretariat
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National Water Resources Policy and Institutional Arrangements **Executive Summary**

The following information is a summary of the National Water Resources Policy and should be viewed along with the full Policy.

A. Water Resources Policy Foundation

A number of warning signs point to increasing water resource problems in Sri Lanka. Competition and water shortages will increase as a result of highly variable rainfall and growing demand for water. Watersheds are being degraded, resulting in sedimentation of reservoirs and more serious floods and droughts. Water pollution from domestic, agricultural and industrial sources is contaminating surface and groundwater and affecting public health. Groundwater is being over-extracted in some areas, affecting the availability of water for others and for environmental values.

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

Further objectives for water resources management are to:

- Facilitate national development
 - Conserve, and recognise the value of, scarce water resources
 - Ensure equitable sharing of water resources for meeting current and future demands of the population through an efficient allocation system
 - Recognise the national importance of water allocation to the irrigation sector in terms of such things as the amount of water allocated, number of users and potential for improved water conservation
 - Ensure flexibility of water allocation in a way which promotes social harmony and individual decision making
 - Safeguard investments in water resources development and other sectors of the economy by providing water rights and entitlements
 - Improve standards in the maintenance of safe quality of water sources required for various water uses
 - Ensure a healthy environment and sustainable use of both surface and groundwater resources using a comprehensive, river basin-oriented approach
- 2. Scope** The National Water Resources Policy applies to all fresh and brackish water in Sri Lanka. It does not apply to marine water.
 - 3. Policy Principles** All surface and groundwater are owned by the state and managed by the government in partnership with water users on behalf of all Sri Lankans. Water will be managed in a sustainable manner, recognising efficiency, equity and environmental objectives. Sri Lanka will take an open and participatory approach to water resources management and will base decisions on strong and co-ordinated resource information.
 - 4. Sectoral Emphasis** The special role of the irrigation sector in Sri Lanka is recognised. Some key policy provisions, such as granting water entitlements to existing users, increasing the security of water allocation through monitoring and enforcement, the provision for government to pay the water management cost share for irrigation entitlement holders until

they are able to do so, and an open and transparent approach to all aspects of water resource decision making will help to safeguard the interests of irrigation water users in balance with other sectoral water users.

The importance of the hydropower sector is also recognized. National and multi-basin plans will take into account the need for least-cost coordinated generation.

5. **Strategies** This policy takes an integrated approach covering all aspects of water resources management. Co-ordination will also be ensured with other natural resources and with other national policies.

The National Water Resources Policy will be implemented largely through planning at the national, multi-basin and basin / aquifer levels (which will be conducted or coordinated by the National Water Resources Authority) and through project and operational planning (which will be carried out by other water agencies). Basin and aquifer plans will be implemented in a progressive manner through declared, priority basins.

A permanent National Water Resources Authority, Water Resources Council and Water Resources Tribunal will be formed to carry out selected water resource management functions and to co-ordinate and guide the activities of other agencies which will also continue to play a role in this field.

B. Water Rights and Allocation

Until now Sri Lanka has not had a formal or adequate water allocation system. A great deal of water resource development has taken place, largely through public investment. Water resource allocation has been managed by the public agencies which have developed this infrastructure and which deliver water and services to sectoral water users. To a certain extent, conflicts have been resolved through interagency agreement. In the area served by the Mahaweli Authority a more formal planning and management system has been developed.

At the local level water allocation has been carried out by the management activities of the public, water service agencies and, in rural areas, through a system of traditional allocation procedures and rights.

These allocation mechanisms have failed to ensure water allocation which recognises the rights of existing users and flexibility to meet the needs of new users. Water is allocated either on the basis of agreed priorities and not in accordance with principles of economic efficiency. Environmental and small-scale social uses are suffering at the expense of larger, consumptive uses.

1. **Entitlements** The right to use water will be granted through water entitlements. Small-scale users and individual water users supplied through group schemes will be exempt from the requirement to hold an entitlement. Entitlements will be granted for a fixed period of time, based on the specific water use. Water user compliance with the terms of their entitlements will be monitored and enforced.
2. **Environmental and Social Water Requirements** Environmental, social and cultural water uses will be protected by reserving minimum flows and storage volumes. This reservation of water will be made before water entitlements are issued.
3. **Water Allocation Priorities** Water will be reserved to protect small scale water users, other social and cultural purposes and environmental values. Water entitlements will be issued to existing water users and, to the extent that further water is available, to new applicants.

During periods of drought the first priority for water allocation will be domestic use. Other water users will share the available supply in proportion to their normal entitlements.

4. **River Basin or Groundwater Plans** River basin plans will be developed to guide the allocation of water. Planning will be carried out in specified river basins and groundwater aquifers. Plans will be implemented through the issuing of water entitlements and through the actions of various government agencies responsible for water and other resources. A future policy statement will be developed to specify the details of river basin planning.
5. **Transfers** Voluntary transfers of water entitlements will be allowed between entitlement holders or from entitlement holders to those seeking to acquire water use rights. Transfers will be subject to approval under of approved guidelines in order to protect third parties and environmental values. Transfers will normally involve compensation paid by the new entitlement holder.
6. **Sub-sectoral allocation** The National Water Resources Policy outlines a system of bulk allocation of water to large users and group schemes. Existing arrangements will be used, or new arrangements developed, to allocate water within group schemes (such as urban or irrigation systems) to individual water users.

C. Demand Management

1. **Transferable Water Entitlements** Establishment of transferable water entitlements will promote water conservation and improved water allocation.
2. **Water Management Cost Sharing** Basin water resource management costs will be shared with water users in a transparent manner. These costs will be shared on the basis of such things as the entitlement holder's quantity of water use, ability to pay, and the consumptive or non-consumptive nature of the water use. Information on the value of water in different types of use will be reflected in basin plans. Government will pay the current share of water management costs for the irrigation sector through a transparent subsidy, in recognition of the low level of returns in this sector. As returns for irrigated agriculture grow in the future, as reliable, it is expected that the irrigation sector will have greater ability to share in the cost of water resource management.
3. **Regulatory Control** Water entitlements will be an important tool in demand management since unauthorised water use will be controlled. Entitlements may also contain terms and conditions regarding water conservation measures which entitlement holders must implement. Water conservation agreements may also be developed to specify more general water conservation activities or those falling outside the scope of water entitlements.
4. **Water Saving Technology** Water measuring devices will be required as a condition of water entitlements. Water saving technology and research will be promoted.
5. **Education and Awareness** Public education and awareness programs be used to develop awareness of the value of water resources and activities which can be taken to conserve water. Water resource managers will be trained to improve water use efficiency through their own actions and in co-operation with water users. Technical assistance on water conservation will be given to users on request.
6. **Capital Investment, Operation and Maintenance** Water conservation will be promoted in all publicly-funded water management projects and programs. Capacity building, proper financial accounting, asset management and rehabilitation of schemes will be used to promote water use efficiency.

7. **Information and Demand Management Performance** Information on water resource demand will be used in planning. Achievements in meeting demand management targets will be made public.

D. Groundwater Management

Groundwater is widely used for domestic, small-scale irrigation, industrial and other uses in Sri Lanka. There are many types of both shallow and deep groundwater aquifers, each with its own characteristics and management needs. In addition to providing a ready source of water for consumptive purposes, shallow aquifers play an important role in discharging water to rivers and other water bodies during low flow periods. They also support wetlands and native vegetation.

The major groundwater issues are related to the fact that groundwater is essentially an unregulated resource. Ownership and management responsibilities for groundwater are not clearly defined. Although groundwater studies have been conducted and well-drilling data collected, there has been no ongoing monitoring and co-ordinated information system for groundwater. Intensive urban, industrial, tourism and other development has contributed to over-use and contamination of some aquifers. Subsidy programs to promote the development of shallow "agro-wells" has also resulted in heavy use of shallow groundwater in parts of North Central and North West Provinces.

1. **Sustainable Management of Groundwater** The rate of groundwater replenishment and other distinctive features of aquifers will be taken into account in groundwater planning and management. A long-term perspective will be used in its management.
2. **Co-ordination of Surface and Groundwater Management** Surface water and groundwater, particularly in shallow aquifers, are closely related resources. They must therefore be managed in an integrated manner. All of the policies applied to surface water will also apply to groundwater management. In areas where there are special, urgent groundwater issues, planning and management of groundwater may go ahead without full river basin planning.
3. **Management of Small-Scale Groundwater Use** Small users will be exempt from the requirement to hold entitlements, but local governments will be encouraged to register small wells and to apply guidelines on well density in groundwater management areas. Information on groundwater and water conservation will be provided to groundwater users.
4. **Groundwater Information Management** Groundwater data collection and information management will be strengthened, focussing on priority aquifers.
5. **Groundwater Quality** Groundwater quality and other environmental objectives will be pursued in co-ordination with national and provincial environmental agencies.
6. **Awareness and Participation** Greater awareness of groundwater resources will be promoted through co-operative programs. Stakeholders will be encouraged to participate in planning and monitoring of the resource.
7. **Strategic Approach** Groundwater management will be focussed on priority aquifers. Action plans will be developed and implemented by appropriate national and other government agencies in a co-ordinated manner.

E. Information Management

Water resources data and information are essential for the effective management of the resource, including policy development and planning, water management operations, project planning, public awareness and education, and investment planning. A number of water management agencies collect data, primarily for their own use as well as some sharing with other agencies and release to the public. Data is collected on both an ad hoc and project basis or on an ongoing basis in some areas.

However, the data and information system is inadequate in terms of consistent data standards, accuracy and accessibility of data and information. A number of aspects of the data collection, storage, processing and distribution system suffer from inadequate procedures, resources and training. In general, the current data and information system is not adequate to meet the needs of the integrated water resource management system recommended throughout this policy or the needs for efficient operations in the water sector.

1. Data Ownership

Water resources data collected by national government agencies are the property of the state.

2. Data Co-ordination and Sharing

Data and information exchange and sharing will be ensured through a series of agreements between data collection agencies ("Custodian Agencies") and the National Water Resources Authority. These agreements will specify data collection and management standards, data and information access and pricing and compilation of data sets by the NWRA.

In exchange for data sharing from Custodian Agencies to the NWRA, a co-ordinated and mutually beneficial approach to strengthening the overall data and information system will be undertaken. Overall priorities will be identified in a co-operative manner and funds accumulated by the NWRA through charges for water information will be used to strengthen the capacities of the Custodian Agencies. Co-operating Custodian Agencies will also be given free access to data from the NWRA.

3. Data and Information Access

Data and information will be made available to water agencies through data sharing arrangements and to the public through both active awareness and educational programs and in response to requests. Consistent pricing of water data and processed water information will be encouraged.

F. Institutional Structure for Water Resources Management

A new and permanent National Water Resources Authority (NWRA), a permanent Water Resources Council (WRC) and a Water Resources Tribunal (WRT) will be established at the national level. These bodies will be responsible for overall co-ordination of water resource management and for a number of specified functions.

1. Functions of the NWRA The functions of the NWRA will be:

- preparation of national water resources policy
- long-term national and river basin planning, including co-ordination of local input
- co-ordination and collection of water resource data and information management, water monitoring and commissioning of research

- water allocation through the issuing of water entitlements
 - advice to government regarding drought and flood management
 - policy and monitoring regarding riverine activities
 - public information and awareness
2. **Reporting Relationship and Structure** In order to make them effective in policy development, in water resource planning and regulation and in dispute resolution, the NWRA, WRC and WRT will be neutral with respect to sectoral interests and in a strong and authoritative position in government. These bodies will be parallel in terms of reporting directly to the chief executive of government (the President of Sri Lanka). The NWRA, WRC and WRT will together form the water sector apex body and as such, and in their areas of responsibility, will be considered to have a higher level of authority than other national water agencies.
- The NWRA will report to a Board which will consist of seven members selected on the basis of clearly specified professional qualifications covering a range of water related specialities. The chief executive of the NWRA will be the Director General. Its internal divisions are expected to be a) Policy and Planning, b) Operations (water allocation, riverine control, information) and c) Corporate Services (administration and finance).
- The NWRA will be responsible for co-ordination, planning, regulation and monitoring of Sri Lanka's water resources but will not be responsible for the planning, operation and maintenance of infrastructure, sectoral water delivery or for implementation of capital projects.
3. **Delegation and Contracting** The NWRA will delegate to, or work in partnership with, various national and other government agencies in order to carry out technical and decentralized functions. Policy development will be the responsibility of the NWRA but an open and consultative approach will be used. Technical aspects of national and river basin planning will be largely delegated or undertaken in partnership with agencies which have parallel responsibilities. Data and information will be managed in a decentralized system in which the NWRA will serve as coordinator. The NWRA will establish and coordinate the proposed system of bulk water entitlements, with appropriate responsibilities to the district or divisional level with appropriate capacity building and supervision. Where the NWRA lacks technical capacity or staff, it may also contract tasks to other government agencies or private or non-government groups.
4. **Water Resources Council** The Water Resources Council will advise the Minister on water resource issues and on the resolution of inter-provincial and interagency water disputes. It will co-ordinate activities in water resource management at the national level and will review and endorse draft policies and national and river basin plans. The membership of the WRC will consist of the following:

- seven secretaries of national ministries responsible for subjects such as water supply, irrigation, agriculture, and hydropower and (on a rotational basis) the subjects of fisheries, lands, plantations, industry, environment, finance and planning, provincial councils and social issues such as health, education and poverty alleviation
- heads of the Irrigation Department, Mahaweli Authority of Sri Lanka, Ceylon Electricity Board, and National Water Supply and Drainage Board
- nine non-government representatives, including two representatives of private water users, two representatives of farmer organisations, two representatives of non-government organisations active in the field of water resource management, two representatives of academic institutions concerned with water resources (including their social aspects) and one gender representative.

- 5. Water Resources Tribunal** The Water Resources Tribunal (WRT) will be an independent appeal tribunal which will resolve issues relating to the administration of water entitlements by the NWRA. The WRT will be responsible to the Minister for administrative purposes but will have statutory independence. Its judgements will be final aside from appeal to the courts on matters of law. The WRT will be comprised of a legally trained Chairman assisted by a panel of technically qualified persons. Three or more members of the panel will be summoned on an ad hoc basis by the Chairman to hear appeals. The WRT will face time limits on rendering decisions and will have administrative procedures designed to ensure its efficiency.
- 6. Relationship of NWRA, WRC and WRT to Other National Agencies** The NWRA, WRC and WRT will together form the water sector apex body responsible for coordination, planning, regulation and monitoring national water resources and resolution of disputes in the water sector. In their areas of responsibility they will be considered to have a higher level of authority than other national water agencies. Those other agencies will all be subject to the oversight and direction of the NWRA, WRC and WRT.
- 7. Provincial and River Basin Water Resources Administration** River basin and major aquifer planning will be co-ordinated and technically supported by the NWRA and partner agencies. Priority river basins and aquifers will be identified for planning and management on the basis of water management issues and officially declared as "water management areas" and "groundwater sensitive areas."

River Basin Committees or Groundwater Committees will be established in declared areas. These committees will be responsible for identification of water management issues and preparation of terms of reference for plans. They will review draft plans prepared by the NWRA, conduct public consultation with the basin or aquifer area, recommend changes to the NWRA and monitor the implementation of plans. These committees will also review the implementation of river basin plans on an annual basis and will report to the WRC. River basin and groundwater committees will be composed of representatives of national water resources agencies, provincial and other levels of government and water users.

The Mahaweli Authority of Sri Lanka, like other water management agencies, will be subject to national water resources policy and river basin plans approved by the WRC and government and to the guidance, coordination and dispute resolution of the NWRA, WRC and WRT. The NWRA will delegate responsibilities and powers to the MASL or utilize the capabilities of the MASL through partnership arrangements. Delegation of regulatory responsibilities will be subject to the clear separation of regulatory and water use functions within the MASL.

- 8. Groundwater Administration** In any declared water management or groundwater management area, all surface water and inter-connected groundwater will be planned and managed in an integrated manner and in accordance with the Groundwater Policy. The NWRA will contract and delegate many responsibilities for technical and decentralised functions. Groundwater Committees will be formed in the same manner as River Basin Committees.
- 9. Water Quality Administration** The NWRA will fully co-ordinate its activities with those of the Central Environmental Authority and provincial environment agencies. Water quality issues will be considered along with water quantity in the river and groundwater planning process. River and groundwater plans will be prepared and publicly reviewed in a way which ensures they are comparable with broad environmental impact assessments. Issuance of water entitlements and monitoring and enforcement of compliance with entitlements will be co-ordinated with environmental licensing procedures.

10. Watershed Management The NWRA will not take on the responsibility to plan and manage all natural resources such as land, forests, soil, etc. However, it is recognised that water resource management and the protection of water sources cannot be separated from these other resources. The NWRA will therefore work in close co-ordination with other resource managers. It will also promote sound resource management in a way which benefits water users throughout river basins.