

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

Ministry of Agriculture, Rural Economic Affairs, Livestock Development, Irrigation and Fisheries and Aquatic Resources Development

National Policy, Strategies and Institutional Framework for Water Resources Development, Conservation and Management

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ABBREVIATIONS

BCM Billion Cubic Meters

IWRM Integrated Water Resources Management

NWRC National Water Resources Council

NWRMS National Water Resources Management Secretariat

WRT Water Resources Tribunal

NATIONAL POLICY, STRATEGIES AND INSTITUTIONAL FRAMEWORK FOR WATER RESOURCES DEVELOPMENT, CONSERVATION AND MANAGEMENT

1. THE VISION

National Policy on Water Resources Development, Conservation and Management envisions "A Society that values the sustainable use of water resources and recognizes the goal of a balanced environment conducive to social and economic development".

2. THE NEED FOR NATIONAL WATER RESOURCES POLICY

2.1. Introduction

Fresh water is the second most essential natural resource next to fresh air required by man, other living beings and vegetation on the Earth. Though water is available in plenty on the earth, the available fresh surface and ground water constitutes only a very small fraction of the total availability. There are many signals which point at the increasing water resource associated problems in Sri Lanka in the form of droughts, floods, depleting ground water aquifers and degeneration of the quality of water, while the demand is increasing in form and quantity.

The increasing population has a bearing on the growing demand for water for domestic needs and for food production. A direct impact is also made by the unplanned expanding land occupation for shelter and productivity, uncontrolled deforestation, all of which affect the capacity for surface retention and ground water recharging as a consequence. Droughts and floods result inevitably inflicting hardships on every one by way of water shortages and flash floods respectively. Researchers have shown that the impact of climate change has worsened the crisis with high intensity rainfall, long dry spells and rise of sea water level.

The trends of increasing economic activity in the form of expanding industry, diversifying agriculture, tourism and recreational interests are turning out to be considerable stakeholders in the competition for a share of the available water resources. The available water requires to be protected from degradation that can be caused by being polluted with industrial waste, domestic waste, agrochemicals and partially or totally untreated effluents from varied sources.

2.2. Status and Challenges of Sri Lankan Water Sector

The total renewable water resources available in freshwater ecosystems in Sri Lanka are estimated as 52 BCM surface water, 7 BCM groundwater and 7 BCM overlapping water. The source of freshwater is rainfall. The annual withdrawal amount was estimated as 13 BCM in 2005. Even though these figures indicate no overall scarcity in terms of aggregate statistics there are pronounced temporal and spatial aspects of water scarcity in the country largely owing to the bimodal pattern of rainfall.

Out of the total water withdrawal of 13 BCM, agriculture will remain the major user with current usage of 87 percent, while nearly 6 percent is for the industrial sector and another 6 percent was for the urban sector.

There are 103 river basins covering more than 90 percent of the land area, while the remaining area is covered by 90 small coastal basins. Except in few river basins, storage reservoirs with varying capacities and diversion schemes have been constructed that can be counted as surface water resources. Apart from the inflow from its own catchment, most of the Non-perennial Rivers get augmented through transbasin canals from perennial river basins. Internal water bodies cover about 2 905 km² and a considerable

portion of these consist of man-made reservoirs. Water springs numbering about 3540 are spread all over the island which are used as water sources.

Ground water is widely used for domestic, commercial and industrial purposes, and small-scale irrigation. About 80 percent of rural domestic water supply needs are met by groundwater from dug wells and tube wells. The demand for groundwater in Sri Lanka is steadily increasing. This trend still continues to gain due to introduction of solar energy supported pumps.

The quality of the groundwater is fairly good and relatively constant throughout the year. However, in the northern and northwestern coastal areas excessive concentrations of iron and nitrates, from agrochemicals and fertilizers, have been reported. Furthermore, quality and quantity of ground water depletes rapidly specially in coastal areas including Jaffna and Kalpitiya areas as a result of the uncontrolled abstraction of groundwater for domestic and agricultural uses, discharge of effluents from industries and brackish water intrusion.

Deteriorating water quality, in both surface water and groundwater resources, is an emerging issue where sufficient information is not available for analysis. The interdependency of surface water and groundwater cannot be overlooked. Pollution of either of the sources of water can therefore have adverse effects on the other as well.

Paddy is the single most important crop, occupying 34 percent of the total cultivated area. Since rice is the staple food, cultivating paddy provides food security for the nation, even though economically it is not so lucrative for the small scale rural farmer. More than 800 000 farmers and their families are directly involved in paddy farming. Rice accounts for 45 percent of the total calorie and 40 percent of the total protein intake of an average Sri Lankan. With the continuous intervention of successive governments Sri Lanka has achieved self-sufficiency in paddy production.

Sri Lanka imports large varieties of other food crops spending huge amount of foreign exchange, which government is planning to curb. With Introduction of different crop varieties and agricultural techniques, it is expected to achieve this goal.

The current population of 21.4 million would reach 25 million by 2042 and 25.8 million by 2062. It is projected that the demand for rice will increase at 1.1 percent per year and to meet this increasing demand rice production should grow at the rate of 2.9 percent per year. Increasing the cropping intensity and national average yield are the options available to achieve this production target.

Increasing wealth and the moderately increasing population will escalate the demand for both water and food. The importance of integrated urban water management in meeting the demand for water in a fast-urbanizing Sri Lanka is highlighted. The share of water used by the urban population in Sri Lanka is projected to increase from 45 percent in 2015 to 65 percent by 2030, which is bound to increase the pressure to meet the national targets for drinking-water. Service sector which is expanding rapidly also *places a* demand for high water quantity with high quality.

Inland fishing is another important agricultural component that depends on storage reservoirs. Inland fishing as a commercial activity started in 1952 with the introduction of exotic species. It is now recognized as an important contributor to the agricultural sector. Prawn farms were started in coastal ponds in the 1980s which has now become a lucrative trade that contributes to the national economy significantly. Hence this sector is an important stakeholder in the water sector.

For energy sector too, hydropower contributes significantly as a renewable source. In 1990's contribution of hydropower to this sector was 100%. However, it was declined due to introduction of other non-renewable resources. Even though the share of hydropower is estimated to reduce from 40.2 percent in

2007 to 19.5 percent by 2020, many new major and mini hydropower projects are under planning and implementation stage by now.

Water for nature is undoubtedly one of the most critical components in water sector that has to be addressed during development activities. Suitable norms and guidelines to be adopted for sustainability of the system need to be monitored regularly.

Water scarcity due to prolonged droughts could occur due to extreme weather events as a result of climate change. Because of rising temperatures and increasing evaporation and evapotranspiration, as a result of climate change, crop water requirement is likely to increase. Hence agricultural water demand may also rise due to climate change impact.

Already the coastal belt is affected by seawater intrusion. Recently, a significant number of river mouths are identified to be provided salt-exclusion structures. There is likelihood of issues emerging on the supply side of water as a result of climatic change. Hence water resource managers' attention needs to be also focused on how to mitigate this effect.

Under these circumstances, the noteworthy shortcoming currently observed is the non-availability of a suitable institutional and a legal framework to address the above challenges. Necessity of an organization responsible for overall supervision, management and control of water resources planning, development and conservation in the country is felt more than ever.

Development of natural resources on economic considerations and social benefits of the present generation cannot be isolated from a consideration of the aspirations of the future generation. The development of available limited resources should therefore be undertaken judiciously in consideration of all the relevant factors. Conservation of the available water resources require it to be properly managed to serve the present day needs in a manner that does not threaten but would assure the fulfillment of the needs of the future generations as well. That would be the basic rule to be observed for the sustainable development of this valuable but apparently dwindling resource. A well formulated policy is therefore a necessity of the present and of the future.

3. SCOPE

The National Policy on Water Resources Development, Conservation and Management applies to fresh and brackish waters of Sri Lanka. Marine waters are excluded from this policy.

4. OBJECTIVE

The overall objective of the "National Policy on Water Resources Development, Conservation and Management" is to encourage integrated water resources development and management, to ensure that the national water resources are conserved, efficiently managed and equitably allocated among all stakeholders to meet the needs of the society and the environment endeavor to sustainable economic development of the country.

In reaching the overall goal, the policy is intended to:

- Facilitate national development ensuring water for domestic and sanitary needs, national food security and environmental needs including wildlife and bio- diversity as primary requirements
- Conserve and recognize the value of the scarce water resources.
- Guide strengthening the existing laws, propose suitable institutional mechanism and identify the strategies for implementation
- Ensure flexible water allocation criteria which will promote social harmony among competing users;

- Recognize water rights of past, current and new users amicably;
- Promote adherence to standards in the maintenance of water quality of all water resources required for various water uses.
- Promote sustainable management and development of surface water on the basis of river basin plans
- Conserve the upper watersheds, wetlands, riverine systems, estuaries and lagoons ensuring sustainability of water sources
- Promote sustainable management and development of ground water resources preventing over exploitation, on the basis of identified aquifers.
- o Identify climate change impacts on water sector and review the planning, development, conservation and management strategies periodically to mitigate same
- Ensure combined (conjunctive)use of surface and ground water for optimum benefits while recognizing their interdependency.
- Ensure that national, provincial and local interests are harmonized in development, conservation and management of water resources.
- Highlight the economic value of water, considering the capital investments, maintenance and operational costs of water resources infrastructure to prevent wastage and inefficient use
- Recognize traditions and customs in managing water resources while planning development activities
- Adopt the current policies, development goals and management principles appreciated and agreed upon by the Sri Lankan government in strategic planning.
- Promote stakeholder participation and gender roles in decision making in development and management of water resources. Adopt a transparent approach for good governance in all the above matters.

5. POLICY PRINCIPLES

The National Policy on Water Resources Development, Conservation and Management is based on the following principles:

- I. The Government of Sri Lanka is the custodian of all water resources such as surface water, ground water and rain water.
- II. Water is a limited and valuable resource which has to be considered as a common resource for the social wellbeing of community and Eco- system.
- III. Prevention of pollution, over-extraction from the sources, over-use and wastage of water resources need to be regulated.
- IV. Access to safe water is a basic need of all living beings and will be recognized. Water for drinking (human and animals) and sanitation will be considered as highest priority need while achieving food security, followed by sustenance of eco-system needs.
- V. While granting upholding Riparian rights rest of the water will be allocated to establish economic efficiency among different uses and users.
- VI. Water uses may be transferable to most efficient uses for more economically viable fields after ensuring the drinking water and sanitation water requirements, domestic water requirements, food safety and ecosystem safety.
- VII. All the elements in water cycle are interdependent. Hence River Basin/ sub basin/ connected basin is the hydrological unit for planning, development and management of surface water resources. Clusters of river basins with a prevailing situation of excess and surplus water also need to be identified as a unit.

- VIII. Urban water bodies and wetlands will be treated as important constituents in the water resources that need to be conserved.
- IX. Ground water aquifer is the hydrogeological unit for planning, development and management of ground water resources.
- X. Impact of climate change is a key factor that needs to be considered in all planning activities to ensure necessary resilience.
- XI. New water resources development plans will include compensatory reforestation to mitigate and minimize any adverse effects as much as possible.

6. POLICY STATEMENTS

Policy statements in following broad areas are identified in the current context. It is needed to review and upgrade periodically to suit the changing social, technical, economic and environmental scenarios.

- a. Water rights and responsibility
- b. Role of state
- c. Water resource planning, development conservation and management
- d. Water Allocation by needs and priorities
- e. Sharing the conservation and management cost of water resources infrastructure
- f. Data and Information Management
- g. Research and Development
- h. Training and Capacity Building
- i. Institutional Arrangement

6.1 Water Rights and Responsibility

- o Riparian rights, prior rights and customary rights to water will be recognized.
- Water rights (other than that are used for drinking, sanitation, domestic use, food security and eco-system services) may be transferable on a compensated basis to most efficient uses
- Appropriate mechanism will be used to regulate large scale water uses in order to safeguard small scale users.
- o Water rights of wild life and eco-systems will be identified and ensured
- Third party rights to water will be recognized.

6.2 Role of the State

- Regulation of water resources planning, development, conservation and management activities as the custodian of natural resources in the country.
- o Establish policy, legal and institutional framework for Integrated Water Resources Management
- Facilitate development of water resources by the various sectors for optimal utilization of the scarce resource, through scientific approach.
- o Enforce regulations for measures on sustainability of water resources infrastructure
- Maintain a repository of data and information and share with relevant entities using same for development, management and research.
- Foster participatory approach as a principal in planning, development, conservation and management of all water resources in a sustainable manner.
- Facilitate water corporation at local, regional, river basin and national levels by engaging all stakeholders.
- Promote open and transparent approach in all its endeavors in managing the nation's water resources and water rights of the different user groups.

- Ensure adequate water for domestic needs, sanitation, agriculture environment and social needs at all times.
- Promote water efficient irrigation and agricultural technology (micro irrigation such as sprinkler, drip and green house, vertical agriculture etc.)
- Transfer appropriate water management responsibilities to stakeholders and user groups according to their capability.
- Support an institutional framework for sound water resources management by facilitating capacity building, legislative instruments and inter organizational linkage
- o Introduce international best practices and knowledge on integrated water resources management adoptable to local scenario
- o Impose penalties for polluters and illegal users

6.3 Water Resource Planning, Development, Conservation and Management

- A Water Resources Development Conservation and Management Plan shall be prepared for each
 of the larger river basins or for a collective group of smaller river basins where it is relevant.
- All surface water bodies (rivers, streams, springs, lagoons, wetlands and man-made reservoirs)
 and ground water aquifers are considered as common properties that need to be managed by
 the state.
- Water resources planning will be focused on both climate extremes; floods and droughts and hence operation plan will address both events
- Ground water Development, Conservation and Management Plan shall be prepared on the basis
 of one or more aquifers. Potential for extraction of ground water will be determined periodically
 and Development Conservation and Management Plan will be revised accordingly.
- Appropriate Ground Water Management measures will be introduced to regulate the use and to ensure sustainable utilization. Sustainable groundwater management will be encouraged through identification of distinctive characteristics specific to different aquifers. Groundwater sensitive areas will be declared as "Groundwater Management Areas".
- o Rainwater harvesting will be promoted especially in areas where water is an acute problem.
- o Each organization or individual user will adopt measures to minimize wastage of water.
- Each organization or individual user will be held responsible to prevent pollution of water and to avoid actions that have detrimental effects on the quality of water.
- The importance of water quality management will be recognized and anti-degradation measures will be introduced to minimize contamination of water bodies due to point or diffused sources of pollution. The errant will be punished and made to compensate any harm caused.
- De-centralization of management of water resources will be in accordance with the constitution of the country.
- The government will from time to time gazette water management areas on the recommendation of the National Water Resources Council.
- o All measures will be taken to minimize excessive use or waste of water in all sectors.
- Watershed management through extensive soil conservation, catchment area protection, preservation of forest and increasing forest cover will be promoted with active participation of the water users.
- Water Resources Development projects will be complimented with the proposals for compensatory reforestation and of expansion of forest cover.
- Emergency Action Plans will be prepared for flood management where water hazard risk is high.

 Precautionary action will be taken by all the water users to ensure the safety of storage dams and other components of water resources development infrastructure.

6.4 Water Allocation by Needs and Priorities

- Allocation of water among different users will be in accordance with the water resources
 Development, Conservations and management plans prepared for each river basin cluster, river
 basin or aquifer.
- Water Resources Management measures will be introduced to reserve water for allocation to different uses according to the river basin or ground water development and management plans.
- At times of water shortages, priority will be given to meet the basic water requirement of drinking and sanitation followed by environmental needs including wild life. Guidelines for such allocations will be issued by National level body set up for implementation of water policy.

6.5 Sharing the Conservation and Management Cost of Water Resources Infrastructure

The conservation, operation and management costs of infrastructure developed by the state shall be shared by the state and proportionately by the bulk users (irrigation, urban water supply, inland fishing, hydropower etc). Methodology of sharing the cost will be decided by the resource allocating authority.

6.6 Data and Information Management

- A well-developed system for water related data and information for planning, development, conservation and management of water resources shall be established.
- A database needs to be established for storing, transferring and dissemination of data and information to improve the present data collection mechanism and its reliability.
- The custodian agencies would be required to establish, upgrade and modernize their ability to collect data, preserve, process and provide information regarding surface and ground water adopting up-to-date state of the art methodology and technology.
- o Information and data for planning, development, conservation and management of water resources, will be shared among custodian agencies, users and researchers.
- Use of advanced technology by custodian agencies for resource management shall be appreciated at all levels of management.

6.7 Research and Development

- o Perform investigations and research studies to establish aquifer boundaries, periodically determine effects of changing surface runoff catchment area characteristics, climate change etc
- Adopt measures to assess the extent of water harnessed, water demand forecasting, water quality assessment, water use efficiencies, possibilities of water conservation and water economics.
- Disseminate the results of research through discussions and research publications to ensure sustainable water resources development, conservation and management.

6.8 Training and Capacity Building

- Develop the capacity of all the stakeholders to perform their role, efficiently and effectively by giving opportunity for training.
- Conduct training and capacity buildings of individuals and groups enabling to accomplish their responsibilities

 Develop and continuously update the training modules on all related subjects for all the stakeholders

6.9 Institutional Arrangement

- Allocate the responsibilities identified under the current policy framework to the existing agencies/institutions
- Identify the new roles and responsibilities define in new policy that have to be assigned to newly proposed institutions (NWRMS, National Water Resources Council (NWRC) and Water Resources Tribunal (WRT)
- o Identify individual and joint responsibilities and define functions of the organisations accordingly

7. STRATEGIES

Strategies to be adopted in implementation of basic policies are identified in the following table. However, It is not a conclusive list as there may be many issues arising from other cross cutting sectors that will be identified when conflicts of interests arise.

| | Policy | Strategy |
|---|--|--|
| 2 | Facilitate national development ensuring water for domestic needs, national food security and environmental needs including wildlife as primary requirements. Conserve and recognize the value of the scarce water resources. | Identify national development plans and sectoral water requirement, priorities and allow water allocation accordingly. Assess water requirements in each sector. Assess basin wise and aquifer wise water availability. Establish norms for equity, priority and allocation of water Establish water quality standards for different sources and uses. Monitor water quality changes. |
| 3 | Cuidanae and strongthening the | Create awareness in the society. (for all age groups) Encourage civil society involvements in monitoring sustainable water quality adherence. Punish the violators. |
| 3 | Guidance and strengthening the existing laws, propose suitable institutional mechanism and identify the strategies for implementation | List out water related laws and identify the gaps Recognize the current and future requirements and amend the legislations accordingly. Identify the changes necessary for implementation mechanism |
| 4 | Ensure flexible water allocation criteria which will promote social harmony among competing users; | Participatory decision making. Introduction of water conservation techniques. Methods for re-allocation during period of crisis. Work out compensation system. |
| 5 | Recognize water rights of past, current and new users amicably; | Identify riparian rights. Study the current demand. Assess the water demand of new users. Identify the institutional mechanism of water resources development and management. Assess transferability of water quantity. Recognize the share of current water usage. |
| 6 | Promote adherence to standards in the maintenance of water | Establish water quality standards for different uses |

| | quality of all water resources | • | Monitor the water quality by using Water Quality Index |
|-----|---|---|--|
| 7 | required for various water users. Promote sustainable | _ | in rivers and open water bodies. |
| ′ | management and development of | • | Develop river basin plans for current and future needs. Catchment area protection, reservation protection, |
| | surface water on the basis of river | | Monitoring, regulating of effluent discharges |
| | basin plans | | Monitoring, regulating of enfuent discharges |
| 8. | Conserve the upper watersheds, | • | Prepare guidelines for upper watershed management in |
| | wetlands, riverine systems | | accordance to the watershed management policies. |
| | ensuring sustainability of water | | |
| _ | sources | | |
| 9. | Ensure combined use of surface | • | Develop aquifer basin plans. Identify re-charge zones. |
| | and ground water for optimum benefits while recognizing their | • | Regular monitoring. Baseline data development. |
| | interdependency. | • | Promote sustainable management and development of |
| | interdependency. | | ground water resources preventing over exploitation, on the basis of identified aquifers. |
| 10 | Identify climate change impacts on | • | Conduct practical research and identify vulnerability in |
| | water sector and review the | | water sector due to climate change. |
| | planning and management | • | Identify and implement mitigatory measures that will be |
| | strategies periodically to mitigate | | in-built in short-term, medium term and long-term action |
| | same | | plans or projects. |
| 11 | Ensure that national, provincial | • | Promote development according to river basin or sharing |
| | and local interests are harmonized | | water among basins for both flood and drought |
| | in development and management | | management. |
| 42 | of water resources. | | |
| 12 | Highlight the economic value of | | Considering the capital, maintenance and operational |
| | water to prevent wastage and inefficient use | | cost highlight the value of water resources infrastructure Make aware the users, beneficiaries and general public |
| | memcient use | • | over the capital investment made by the government on |
| | | | development activities and more specifically on |
| | | | operation, maintenance and rehabilitation cost of the |
| | | | infrastructure for them to appreciate the value of |
| | | | services. |
| 13. | Recognize traditions and customs | • | Obtain local level stakeholder participation in |
| | in managing water resources while | | development and management activities and encourage |
| | planning development activities | | traditions and customs to be introduced in promoting |
| | | | best practices |
| | | | Take necessary action to promote local technology and traditional water management systems |
| 14. | Adopt the current international | • | Develop interactions with international professional |
| | policies, development goals and | | organizations, UN agencies and donor agencies to |
| | management principles | | acquire information on international policies and best |
| | appreciate and agreed upon by | | practices. |
| | the Sri Lankan government in | • | Encourage relevant organizations to enter into MOU or |
| | strategic plans. | | treaties that will benefit the water users and water |
| 4- | | | managers in the country. |
| 15. | Promote stakeholder participation | • | Institutionalize committees at various levels to make |
| | in decision making in development and management of water | | decisions on water related issues, identifying all the stakeholders. |
| | resources through a transparent | | Develop mechanism to share information on problems |
| | approach for good governance | | and solutions |
| | approved to occupance | | 4114 3014(1011) |

8. INSTITUTIONAL ARRANGEMENTS FOR IMPLEMENTATION OF WATER POLICY

National Water Resources Management Secretariat (NWRMS) will be established to facilitate to carry out the new functions identified in water sector viz. regulation, advising and arbitration. Organizations currently responsible for development, management and conservation of water resources will continue their current functions with the set of guidelines prepared by the regulatory organization.

NWRMS shall be the apex agency to implement the policy, which will work in collaboration with partner agencies to carryout delegated functions. It will not engage in project implementation activities but function as a regulatory body. Further it will be an independent agency devoid of sectoral interests and hence it will not be placed under a line ministry but would come directly under an independent Ministry in charge of National policy formulation.

NWRMS is represented by the public sector organizations currently responsible for water resources development, conservation and management from national government and the Ministry in charge of provincial councils having equal responsibility in policy implementation.

A National Water Resources Council (NWRC) will be appointed to act as the advisory board to the Secretariat while a Water Resources Tribunal (WRT) also will be appointed to resolve conflicts among users. Membership of NWRC will consist of representatives from Government, experienced professionals, academia, private sector, non-governmental Organizations in water resources sector. Secretarial assistance for NWRC and WRT shall be provided by NWRMS.

9. AWARENESS AND CAPACITY BUILDING

The development of water resources in Sri Lanka is undertaken mainly by state organizations. A minor role is played by the industrial and other private sector organizations. Participation of civil society in coordination with these agencies should be encouraged for conservation, development and minimizing pollution and degradation of water quality thus avoiding any harmful effects while promoting healthy conditions. Awareness and capacity building of the civil society and private sector is needed to be done by much experienced government sector and also the regulator, NWRMS.

The NWRMS in exercising its mandate will promote research, training and capacity building of water sector agencies to meet integrated water resources management (IWRM) goals. Facilitate mobilizing partner institutions such as Universities, Research Organizations, Government Departments, private sector institutions and non-governmental Organizations for consultation and awareness to promote stakeholder commitment for water resources management. NWRMS will commission water related research.

10. MAIN THRUST AREAS AND RESPONSIBLE AGENCIES

The following table list out the main thrust areas and responsible government agencies currently in respective areas. None of the Ministries are listed here, but only the implementation agencies.

| Main Thrust Area | Responsible Agencies |
|--|---|
| Water resources (both surface and ground | Irrigation Department |
| water) assessments, maintain data base | Mahaweli Authority of Sri Lanka |
| | Water Resources Board |
| | Agrarian Development Department |
| | National Water supply and Drainage Board |
| | Provincial Councils/Provincial Irrigation |
| | Department |
| | Ceylon Electricity Board |

| | 1 |
|--|--|
| Development of water Resources Planning | Irrigation Department |
| for national and regional development | Mahaweli Authority of Sri Lanka Water Resources Board |
| | |
| | National Water Supply and Drainage BoardProvincial Councils |
| | |
| | Sri Lanka Land Reclamations and Development Corneration |
| | Corporation • Ceylon Electricity Board |
| Cot out national nalisies, regulations and | Ceylon Electricity Board |
| Set out national policies, regulations and standards | rioposed tracer resources equiter |
| Standards | Proposed National Water Resources Management Secretariat |
| Dispute resolutions among sectors and | Proposed Water Resources Tribunal |
| institutes | |
| Approval of water resources development | Proposed National Water Resources Management |
| plans | Secretariat |
| | Central Environment Authority |
| Demand management of water and Water | Proposed National Water Resources Management |
| allocation among sectors and reallocation | Secretariat |
| Basin level Water management during | Sub committees formed by Proposed NWRMS |
| drought and floods | |
| Setout standards for economic value of | Proposed National Water Resources Management |
| Water Resources Management | Secretariat |
| Infrastructure | |
| Domestic Water Supply and Sanitation | National Water Supply & Drainage Board |
| | Department of National Community Water Supply |
| | Water Resources Board |
| | Municipal Councils / Urban Councils |
| Urban water bodies management | Sri Lanka Land Reclamations and Development |
| | Corporation |
| | Central Environment Authority |
| | Urban Development Authority |
| | Department of Wildlife |
| | Provincial Councils / Provincial Irrigation |
| | Department / Municipal Councils / Urban Councils |
| Protection and conservation of water | Irrigation Department |
| | Irrigation DepartmentMahaweli Authority of Sri Lanka |
| resources | Central Environmental Authority |
| | Provincial Councils/ Provincial Irrigation |
| | _ |
| | Department/ Municipal Councils/ Urban Councils |
| | Agrarian Development Department |
| | National Water Supply and Drainage Board |
| | Water Resources Board |
| | Agriculture Department |
| | Urban Development Authority |
| | Ceylon Electricity Board |
| | Department of Coast Conservation and Coastal |
| | Resources Management |
| | Sri Lanka Land Reclamations and Development |
| | Corporation |
| | Forest Department |
| | Wildlife Department |

| | Disaster Management Center |
|--|--|
| Management of water related disasters | Irrigation Department |
| Wallagement of Water related disasters | Mahaweli Authority of Sri Lanka |
| | Agrarian Development Department |
| | Ceylon Electricity Board |
| | Provincial Councils/ Provincial Irrigation |
| | Disaster Management Center |
| | National Water Supply and Drainage Board |
| | Department of Coast Conservation and Coastal |
| | Resources Management |
| | Sri Lanka Land Reclamations and Development |
| | Corporation |
| | Urban Development Authority |
| | Agriculture Department |
| | Water Resources Board |
| Operation maintenance and assurance of | |
| Operation, maintenance and assurance of safety of water related infrastructure | Barrer. z ebarrine |
| salety of water related illitastructure | Mahaweli Authority of Sri LankaProvincial Councils/ Provincial Irrigation |
| | Agrarian Development Department |
| | National Water Supply and Drainage Board |
| | Ceylon Electricity Board |
| | Sri Lanka Land Reclamations and Development |
| | |
| | Corporation |
| | Water Resources Board |
| | Department of Coast Conservation and Coastal |
| | Resources Management |
| Assurance of sustainability of eco-system | Irrigation Department |
| | Mahaweli Authority of Sri Lanka |
| | Water Resources Board |
| | Agrarian Development Department |
| | Department of Coast Conservation and Coastal |
| | Resources Management |
| | Central Environmental Authority |
| • | Forest Department |
| | National Aquaculture Development Authority |
| | Wildlife Department |
| | Sri Lanka Land Reclamations and Development |
| | Corporation |
| | Provincial Councils/ Provincial Irrigation |
| | Department/ Municipal Councils/ Urban Councils |
| | National Water Supply and Drainage Board |
| | Ceylon Electricity Board |
| Watershed management and protection of | Irrigation Department |
| natural springs | Mahaweli Authority of Sri Lanka |
| | Agrarian Development Department |
| | Water Resources Board |
| | Central Environmental Authority |
| | Forest Department |
| | Wildlife Department |
| | Department of Coast Conservation and Coastal |
| | Department of coast conservation and coastar |

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| | Sri Lanka Land Reclamations and Development Corporation |
| | Provincial Councils/ Provincial Irrigation |
| | Department/ Municipal Councils/ Urban Councils |
| | · · · · · · · · · · · · · · · · · · · |
| | National Water Supply and Drainage Board Coulon Floatricity Board |
| Management for Discoving recognition | Ceylon Electricity Board As identified by National policy on the protection |
| Measures for Riverine management for sustainability of surface water sources | As identified by National policy on the protection and conservation of water sources, their |
| sustainability of surface water sources | catchments and reservations in Sri Lanka through |
| | Irrigation Department, Mahaweli Authority of Sri |
| | Lanka and Provincial Councils (According to the |
| | Gazette No. 1894/3 dated 22/12/2014) |
| Prevention of pollution and contamination | Irrigation Department |
| of water sources | Mahaweli Authority of Sri Lanka |
| | Agrarian Development Department |
| | Central Environmental Authority |
| | Department of Coast Conservation and Coastal |
| | Resources Management |
| | Water Resources Board |
| | National Aquaculture Development Authority |
| | Agriculture Department |
| | Sri Lanka Land Reclamations and Development |
| | Corporation |
| | Plantation Industry (Public & Private States) |
| | Provincial Councils/ Provincial Irrigation |
| | Department/ Municipal Councils/ Urban Councils |
| | National Water Supply and Drainage Board |
| Description and control of water veges in | Ceylon Electricity Board Irrigation Department |
| Regulation and control of water usage in irrigated agriculture by imposing best | Irrigation DepartmentMahaweli Authority of Sri Lanka |
| practices in water management | Water Resources Board |
| practices in water management | Agrarian Development Department |
| | Provincial Councils/ Provincial Irrigation |
| | Department/ Municipal Councils/ Urban Councils |
| | National Water Supply and Drainage Board |
| Regulation and control of urban water | Irrigation Department |
| usage | Mahaweli Authority of Sri Lanka |
| | Water Resources Board |
| | Agrarian Development Department |
| | Provincial Councils/ Provincial Irrigation |
| | Department/ Municipal Councils/ Urban Councils |
| | National Water Supply and Drainage Board |
| Stakeholder participation | Irrigation Department |
| | Mahaweli Authority of Sri Lanka |
| | Water Resources Board |
| | Agrarian Development Department |
| | Agriculture Department |
| | Central Environmental Authority |
| | Department of Coast Conservation and Coastal |
| | Resources Management |
| | Forest Department Middlife Department |
| | Wildlife Department |

| | National Aquaculture Development Authority National Water Supply and Drainage Board Plantation Industry (Public & Private States) Local Government Authorities Sri Lanka Land Reclamations and Development Corporation Ceylon Electricity Board Disaster Management Center Urban Development Authority Community based organizations/ Farmer Organizations/Non-governmental Organizations Other relevant Public and Private Sector Organizations |
|---|---|
| Capacity Development, research and training | Training/ Research Institutes of all above Government Organizations Proposed National Water Resources Management Secretariat Universities/ Technical Institutes |