



National Policy on Protection and Conservation of Water Sources, their Catchments and Reservations in Sri Lanka

Ministry of Land and Land Development

“Mihikatha Medura”, Land Secretariat

1200/6, Rajamalwatta Avenue, Battaramulla

October 2014

01. Introduction

- 1.1 Water is one of the main natural resources in Sri Lanka and it is the main factor which contributes to the country's economic development since the past. Sri Lanka being an agricultural country, the irrigation has had a unique contribution towards country's agro economy from history to this date. In spite of that the water resource has become a prominent source in industry, supply of services, consumption (drinking) as well as recreation activities and tourism and hydro power generation. The requirement of a new strategic approach on water resources management in Sri Lanka has been included in the National Development Plans and agendas where the country is forging ahead towards development through a new economic vision apt for the 21st century. (Mahinda Chinthanaya: vision for a New Sri Lanka – A Ten Year Horizon Development Framework 2006-2016, Pages 202-204).
- 1.2 Sri Lanka is a country with 103 main rivers. Of these river basins, about 20 comes under perennial while the rest belonging to the category of seasonal rivers. The magnitude of the river basins varied depending on the extents which range from 10 to 10000 km². Geographically, the extent of land belonging to river basins is about 90% of the total land area of Sri Lanka.
- 1.3 Though there are no large scale natural reservoirs in Sri Lanka, the country is rich with a number of manmade tanks and an irrigation canal system, some of those tanks had been constructed centuries back and had been rehabilitated to the present condition. By now, about 14,000 tanks have been spread in Dry Zone areas of which the extent ranges from 01 to 6500 hectares. However the most of those tanks are less than 300 hectares in extent.
- 1.4 The cascade system created by interconnection of several tanks in the Dry Zone area is also an important component in Sri Lanka's water resources conservation.
- 1.5 In addition to the water sources described above, a large number of springs is spread all over the island. For instances there are about 1544 such water sources in Nuwara Eliya district while 204 in Kandy district 319 in Kurunegala District, 210 in Monaragala district and 288 in Mathale district, have been reported and the number of water sources identified in the entire island is 3540.
- 1.6 In addition, the aquifers laying within the inner limestone layers in the dry zone areas of the country are prominent in Sri Lanka. These aquifers play a major role in fulfilling drinking and agricultural water requirement of the country.
- 1.7 In general, but widely considered the definition of the term "Water Sources" contains; not only the rivers, streams, reservoirs, and their catchments, springs and wet lands but also the glaciers, ice caps, atmospheric vapor, clouds and Tornados. However, three main components related to conservation and Protection of water sources in Sri

Lanka have been taken into account when formulating this Policy depending on its importance.

- (a) Micro catchments which include rivers and streams, their reservations and their spouts and flood plains of the rivers.
- (b) Natural or manmade tanks and reservoirs and shallow lakes (villu), their reservations and “immediate catchments” of those tanks and irrigation canals and their reservations.
- (c) Existing underground or aquifers or surface springs or spouts or such sources which are potentially available for common use and necessary land extent to ensure their existence and protection.

- 1.8 The contribution of the catchments, source areas and reservations play a vital role in ensuring the sustainability of the water sources described above. Especially the micro- catchments in high altitudes by which the rivers are fed, tanks and catchments of reservoirs, reservations of rivers and streams and flood planes are the sources of water resources of Sri Lanka and also they are the sources that balance the flow regime and sustainable existence. Considering the utilization pattern of the country’s water resource, it appears that the protection of the above mentioned sources is a fundamental requirement for the sustainability of both the surface water bodies and ground water aquifers. For instance the capacity of the shallow aquifers in Kalpiytiya peninsular could have fulfilled the drinking water requirement of a large population. But such waters have been contaminated to a level which could not be purified due to the excess adding of chemical fertilizer, agro chemicals and insecticides to the soil. The adverse effects on land by population pressure and the use of land for various complex economic activities are being increased at an alarming rate day by day, which directly affect not only the existence of the water resources and their reservations but also the water quality.
- 1.9 The soil is polluted due to the excess use of chemical fertilizer in agricultural land use and high use of agro chemicals and pesticides which resulted in water pollution. It has already been reported that the water use for drinking purposes and for agriculture has been disturbed due to the pollution.
- 1.10 The catchment areas are being rapidly waned as a result of inappropriate constructions by unplanned clearing of the forest cover in micro catchment areas and improper cultivations. Due to this reason the annual flow regime of rivers and streams or their capacity reduction, causing a major problem of drinking water and scarcity of water for agriculture.
- 1.11 In spite of the above, excavation of soil, clay or sand and also mining in the lands reservation for rivers, streams and tanks and reservoirs have adversely affected the water resource at a greater extent.

- 1.12 Furthermore the capacity of the springs and water spouts with common use is being deteriorated and gradually being destroyed due to misuse of land.
- 1.13 Today Sri Lanka is badly experiencing the threat of silting in reservoirs which generate hydro power and supply irrigated water due to the clearance of catchment areas in high altitudes and poor water and soil conservation practices. For instance 38 percent of the capacity of Rantambe reservoirs has been silted within 09 years of its construction while Polgolla and Rantambe reservoirs are being silted annually by 2.52% and 6.95% respectively.
- 1.14 Damages are caused to the water sources as a result of global warming, other climatic changes and the natural disasters. Accordingly, when formulating future strategies for conservation of water resources, the attention should be drawn on the instances such as the increase of the salinity of the ground water in coastal areas due to rise of sea level and the contamination of drinking water in the coastal areas due to tsunami.

02. Strategies so far practiced in conserving and protecting water sources.

- 2.1 Each and every successive government before and after independence had introduced various kinds of policies and laws pertaining to the conservation of Sri Lanka's water sources. National Policy on Watershed Management, National Land Use Policy, National Forest Policy, and National Environment Policy are some of such prominent policies.
- 2.2 In the laws passed since the year 1930, the laws pertaining to the water sources conservation have been included under various sectors namely land development, water and forest conservation and soil conservation etc. It appears that by now, the matters related to the water sources conservation is included in about 40 various legislations. However their implementation is in a lower stage which has also been affected by the lack of resources as well as a large number of various technical and institutional matters. On the other hand these enactments had been passed few decades ago which have therefore failed to grant legal provision as to give firm solutions to the problems arisen at present.
- 2.3 Though there are number of institutions involved in various activities related to the conservation of water sources they are not properly conserved and protected due to the dearth of human and physical resources, various institutional as well as technological factors and improper exchange of spatial data related to this. Though some foreign funded projects were launched for the conservation of catchment areas, their objectives could not be achieved as they are not carried out after the prescribed project period. Therefore, preparation of an appropriate programme for the sustainable management of water sources and their reservations and catchments has become a timely requirement. It would not only be a sustainable programme for the sustainable agricultural development and fulfilling the future drinking water

requirement but also be a fruitful strategy in achieving the country's new economic policies and objectives.

2.4 The Parliamentary Consultative Committee of the Ministry of Land and Land Development appointed a subcommittee on 07.02.2013 with the leadership of the Hon. Deputy Minister of Land and Land Development to investigate and report this matter conducting 08 sessions and 04 workshops with the participation of the several Institutions has identified 08 main issues / obstacles pertaining to this matter.

2.5 Main issues / obstacles Identified

2.5.1 The boundaries of the areas with water sources, reservations of water ways, catchments of the reservoirs / tanks have not been identified and marked physically on the ground.

2.5.2 Issues in the present laws, rules and regulations

2.5.3 Institutional problems regarding the conservation of water sources.

2.5.4 Misuse of land allied to the areas related to water sources, reservations of water ways and catchments of reservoirs / tanks and other activities that cause water pollution
2.5.5 Encroachments made for various activities related to the areas described above.

2.5.6 Lack of public participation in protecting the areas related to the water sources.

2.5.7 Unavailability of sufficient resources with authorities concerned to take necessary action to conserve the areas related to water sources, reservations of water ways and catchment of reservoirs / tanks.

2.5.8 Lack of information / data on the activities take place at present in the areas described above.

The concurrence of the subject related experts was obtained on subject matters as to grant permanent solutions to the problems discussed above and this policy has been formulated on that context.

03. Policy Vision

“Water Resource for the Future Generation”

04. Policy Goal

The primary intention of this policy is to ensure the protection and conservation of all the water sources and their source areas in Sri Lanka through an optimum management.

05. Policy Objective

The main objective of this policy is to protect and conserve all the water sources their reservations the conservation areas and immediate catchment areas to ensure the existence of the water sources in Sri Lanka.

06. Policy Elements

- 6.1 When it is generally considered, water is not a scarce resource in Sri Lanka. But not only the unequal geographical distribution of water resources, the fluctuations in the rainfall pattern but also the inequality of water use have caused water a scarce resource while granting a high economic value. Accordingly, if the sustainable existence of water is not ensured, it would result in social, economic as well as environmental adverse effects, though it is “not a finite resource.”
- 6.2 Therefore this policy on protection and conservation of water resources has been formulated based on the below mentioned principles.
 - 6.2.1 Take action treating all the water sources of Sri Lanka as an invaluable Public Natural Resource as well as a Global Asset.
 - 6.2.2 The public has the right to receive and consume clean and quality water for the well being of the human being as well as the environment.
 - 6.2.3 The role of all the communities and responsible agencies shall be to ensure sustainability of the water resource in Public Consumption and all sort of other uses including various development activities.
 - 6.2.4 The common responsibility of each and every citizen shall be to protect and conserve the water sources and their source areas for the future protection and preserving the quality of the water resource.
 - 6.2.5 Water sources and their source areas shall be protected and conserved without considering their location or the nature of the ownership. Conservation strategies and mechanisms shall be prepared based on the nature of the ownership.
 - 6.2.6 Water users of all levels, planners and the decision making personnel and institutions shall contribute for the protection conservation and management of water sources with Participatory Planning Approach.
 - 6.2.7. Present rules and regulations regarding the water sources in the state lands and the lands belonging to the Land Reforms Commission shall be unchanged and further adhered to.

- 6.2.8. In respect of the water sources located in the lands belonging to Plantation Companies and the private lands it is expected to declare them as Environmentally Sensitive Zones in terms of the National Environment Act through Participatory Management Method or acquire to the government only in an instance where such water sources have to be conserved or developed

07. Policies

It appears that the nature of implementing the policy matters in achieving the objectives envisaged in this policy has been connected with various subjects. Accordingly the entire policy is presented under the following areas.

- 7.1 Identifying, determination of borders, demarcating boundaries, protection and conservation of water sources.
- 7.2 Empowering the institutions related to the conservation and protection of water sources.
- 7.3 Monitoring of activities and follow up action.
- 7.4 Awareness and participation.
- 7.5 Granting financial provision and facilities.

The policies pertaining to the 05 areas given above are as follows.

08. Policies for the identification, demarcating of boundaries, conservation and protection of water sources and related areas.

- 8.1 Determine and demarcate the limits / boundaries of water sources and their catchments and legally declaration of such areas.
- 8.2 Conserve the lands in the areas demarcated as water sources and their catchments and related reservations by adopting suitable strategies taking in to account their present ownership and use.
- 8.3 Avoid inappropriate use of land in the areas related to water sources through the preparation of land use plans.
- 8.4 Rehabilitate the degraded lands in the areas related to water sources.
- 8.5 Identify amendments needed in existing laws and legislations and introduce new laws with regard to the protection of the areas related to water sources, if necessary.

- 8.6 Pay special attention on protection and conservation of the areas related to water sources when preparing all the development plans including regional development plans and include such plans in the development plans.
- 8.7 Make compulsory the adoption of conservation based land use patterns suitable for environmentally sensitive areas and the lands over 5000 feet above the sea level for the protection and conservation of the areas related to water sources.
- 8.8 Not to release the state lands in the areas related to water sources, identified for conservation for any purpose other than the protection of such lands.
- 8.9 Follow a holistic approach for the management of areas related to water sources.

09. Policies for the strengthening of Institutions

- 9.1 Identify the institutions which contribute directly or indirectly for the protection and conservation of the areas related to the water sources. (As per schedule 1)
- 9.2 Develop human and physical resources in such institutions enabling the implementation of the policy.
- 9.3 All the responsible institutions shall include the activities pertaining to the conservation of water resources in their Annual Action Plans.
- 9.4 Establish a National Level Operational Committee comprising the subject related experts for decision making on protection, conservation and management of the areas related to the water sources.

10. Policies on monitoring and follow up action.

- 10.1 Establish a methodology to inform the authorities about the unauthorized and harmful activities conducted in the areas related to water sources in advance and empowerment of its implementing mechanism.
- 10.2. Establish a follow-up mechanism to monitor all the activities pertaining to protection and conservation of the areas related to water sources.
- 10.3 Continuous testing of the volume and the standards of the quality of reservoirs, waterways and their sources and introduce remedial measures if there are defects and establish a prior warning system.
- 10.4 Develop a data base to facilitate the protection and conservation of the areas related to water sources and connect it with the data base stated in the Cabinet Memorandum submitted by the Minister of Land and Land Development on

07.08.2013 regarding “setting up a formal National Program for the Common Use and Sharing of Spatial Data and Information”.

- 10.5 Sharing data and information on protection, conservation and management of water sources through the District Secretariat, Divisional Secretariat and Local Authorities and other institutions concerned.

11. Policies related to awareness and participation.

- 11.1 Encourage the stakeholders and the community participation on the protection and conservation of the areas related to water sources.
- 11.2 Take action to educate all the stakeholders including the General Public and the students through the school curriculum on the importance of protection and conservation of the areas related to water sources.
- 11.3 Take action to use indigenous knowledge and methods to protect and conserve the areas related to water sources.
- 11.4 Encourage the private sector participation in protection and conservation of the areas related to water sources and implement the programmes through the Public Private Partnership.
- 11.5 Encourage a Public Private Partnership programmes for the conservation of the areas of water sources and take action according to Corporate Social Responsibility (CSR).
- 11.6 Encourage the studies and researches directly contribute for the protection and conservation of water sources.

12. Policies on the funding mechanism

- 12.1 Allocate required financial provisions to all the public institutions concerned for the plans prepared for the protection and conservation of the areas related to water sources from the National Budget, funds of the Provincial Councils and the funds of the local government.
- 12.2 Take action to allocate a part of the funds utilizes for water related projects implemented under state financial allocations and private funds and foreign funds for the protection and conservation of the areas related to water sources.

13. Operational Mechanism

13.1 When the matters stipulated above in this policy are analyzed the responsibility of implementing this policy would be entrusted with a number of institutions under a several subject areas. Mainly the institutions related to the subjects such as land, water resources, irrigation, Mahawali, Agriculture Agrarian Development, Wild Life and Forest Conservation, Environment and Education are the pioneering institutions in implementing this policy. In addition provincial, district and divisional administration and all the subject related institutional structured connected with the subject are the main stakeholders in implementing this policy. Also, the Land Use Policy Planning Development falling under the purview of the Ministry of Land and Land Development will function as the coordinating institute in implementing this policy. An Operational Committee comprising the institutions mentioned below will be implemented under the coordination of the Land Use Policy Planning Department and the said departments will be considered as the Implementing Agencies.

These Agencies shall prepare Corporate Plans, Strategic Plans and Action Plans as to achieve the objectives of the protection and conservation of water sources.

- Ministry of Land and Land Development
- Ministry of Environment and Renewable Energy
- Ministry of Plantation Industries
- Ministry of Water Supply and Drainage
- Ministry of Irrigation and water Management
- Ministry of Local Government and Provincial Councils
- Ministry of Education
- Land Use Policy Planning Department
- Land Commissioner General's Department
- Survey Department
- Water Board
- National Water Supply and Drainage Board
- Department of Agrarian Development
- Department of Irrigation
- Department of Agriculture
- Central Environment Authority
- Department of Wildlife Conservation
- Department of Forest Conservation
- Mahawali Authority of Sri Lanka
- Sri Lanka Land Reclamation and Development Corporation
- Urban Department Authority

- Land Reform Commission
- Department of National Physical Planning

14. Terms of References of the Operational Committee/ National Expert Committee

The Operational Committee mentioned above will be entrusted with the under mentioned “Terms of References” (TOR) to ensure the effective and efficient implementation of this policy.

- 14.1 Identify all sort of water sources springs and rivers, reservations of streams on priority basis and the reservations of the reservoirs and mark them in detail maps.
- 14.2 Establish a Geographical data base, based on such data and make available such information to the institutions concerned.
- 14.3 Survey and demarcate the location of the water sources, springs and their reservations and the reservations of the rivers and streams which are to be protected and conserved.
- 14.4 Declare the water sources, springs and their reservations and the reservations of rivers and streams that are to be protected and conserved as “Conservation areas”.
- 14.5 Take action to evacuate the present encroachments and uses of the reservations of rivers, streams and reservoir through adopting the existing laws.
- 14.6 Draft new laws and a new National Policy which would be required pertaining to the conservation and protection of rivers, springs and reservations and other water sources. (As per schedule 02)
- 14.7 Prepare land use plans for all sort of water sources, spouts and reservations of the rivers and springs and their source areas.
- 14.8 Prepare and implement media programmes, curricular development, awareness and educational programmes on conservation of water sources.

Schedule – 01

It is proposed to entrust the below mention Institutions with the responsibility of protecting and conserving the rivers, tributaries, low lands, reservoirs/ tanks, and streams according to their location and the nature

Main trust area	Responsible Agency
I. Main rivers and the parts of the main tributaries that join with such rivers	Department of Irrigation
II. River mouths of the all the rivers, lagoons and natural water spreading areas close to the sea	Department of Coastal Conservation
III. Upper and lower reserves of all the main, canals and drainage channels of all the reservoirs and tanks falling under the Central government and maintenance and operational activities of such reservoirs	Department of Irrigation, Mahaweli Authority of Sri Lanka , Ceylon Electricity Board, National Water Supply and Drainage Board
IV. All the drainage channels in the areas subject to flood and the parts spreading up to the coast along with the rivers to which said drainage channels join.	Department of Irrigation
V. All the main rivers and medium scale tanks and connected rivers and drainage channels which do not fall under (III) above.	Department of Irrigation
VI. Tanks of which the command area is over 200 acres and all the connected rivers and all the river parts that do not belong to category (1) and do not fall under the Central Government	Provincial Irrigation Department or in case if it does not functions well, the Department of Agrarian Development
VII. All the tanks and canals that do not belonging to III, IV, V above and all the rivers (oya) and streams that are not included in II, V and VI above	Department of Agrarian Development
VIII. All the drains and drainage channels systems located in small high lands where the streams are regionally created due to the flow of storm water.	Divisional Secretary
IX. Canal Systems related to low lands and activities related to flood control in such areas.	Sri Lanka Land Reclamation and Development Corporation
X. Activities related to the protection and conservation of the water sources in wildlife reserves, forest reserves and environmentally protected areas	Wildlife Department, Forest department, Central Environment Authority and other stakeholder agencies
XI. Use of ground or surface water resources springs and sprouts for drinking water projects and/or agricultural purposes.	National Water Supply and Drainage Board, Department of Agrarian Development, Divisional Secretary and other agencies concerned.

Schedule - 02

List of the enactments the Committee deems that amendments to be introduced as for the betterment of the protection and conservation of water sources

- I. State Land Ordinance
- II. Land Development Ordinance
- III. Irrigation Ordinance
- IV. Agrarian Development Act
- V. Water Resource Development Act
- VI. Forest Ordinance
- VII. Wildlife Conservation Act
- VIII. National Water Supply and Drainage Board Act
- IX. Soil Conservation Act
- X. Disaster Management Act
- XI. Coastal Conservation Act
- XII. Urban Development Authority Act
- XIII. Land Reform Law
- XIV. Acts pertaining to plantation crops including Tea/ Rubber/Coconut
- XV. Mahaweli Authority Act