



Understanding Water Policy in Sri Lanka

10 OCTOBER 2025

AGENDA

- Welcome, Introduction and housekeeping
Afia Siddiqui, Learn Officer , IWA
- Evolution of Water Policy in Sri Lanka
M.T.A Bawa, Assistant General Manager (Environment & Water Resource), Environmental & Social Division, National Water Supply and Drainage Board , Sri Lanka
- Draft National Water Resources Policy of Sri Lanka
Eng. D.S.D. Jayasiriwardene , Climate Resilient Water Supply Specialist, UNDP , Sri Lanka
- Moderated Panel discussions including Q and A
Indrajith Udaya Kumara, Climate and Environmental Specialist , UNICEF, Sri Lanka
- Lessons learned & Closing
Afia Siddiqui, Learn Officer , IWA



INTRODUCTION



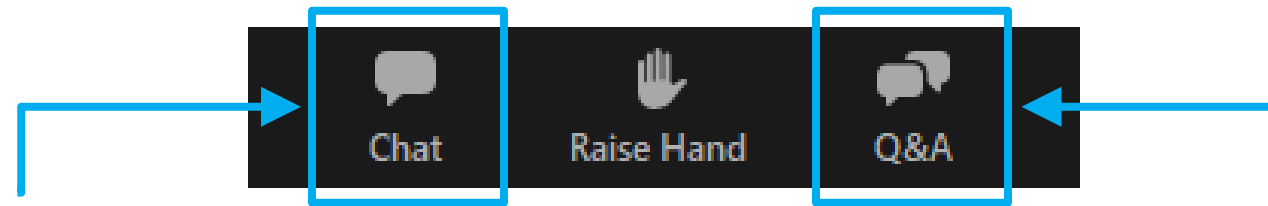
- This is the third webinar in our series ‘Understanding Water Policy in South Asian Countries’, and will focus on **Sri Lanka**.
- This session will explore the evolution of Sri Lanka’s National Water Policy in the context of global climate goals, address key governance and implementation challenges, and highlight proposed reforms to strengthen sustainable and climate-resilient water management.

WEBINAR INFORMATION



- This webinar will be **recorded and made available “on-demand”** on the [IWA Connect Plus](#) platform and IWA Network website, with relevant information.
- The **speakers** are responsible for **securing copyright permissions** for any work that they will present of which they are not the legal copyright holder.
- The opinions, hypothesis, conclusions or recommendations contained in the presentations and other materials are the **sole responsibility of the speaker(s)** and do not necessarily reflect IWA’s opinion.

WEBINAR INFORMATION



- **‘Chat’ box:** please use this for general requests and for interactive activities.
- **‘Q&A’ box:** please use this to send questions to the panelists. (We will answer these during the discussions)

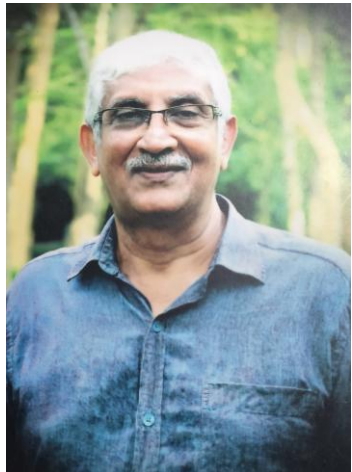
Please Note: Attendees’ microphones are muted. We cannot respond to ‘Raise Hand’.

SPEAKERS PROFILE



M.T.A Bawa, Assistant General Manager (Environmental & Social Division), National Water Supply and Drainage Board , Sri Lanka

Mr.Bawa is a Civil Engineer with over 25 years of experience in water supply and sewerage at the National Water Supply and Drainage Board (NWSDB), Sri Lanka. He currently serves as Assistant General Manager (Environment & Water Resources), overseeing water source development, environmental assessments, Water Safety Plans, and climate and disaster risk management in water infrastructure.



Eng. D.S.D. Jayasiriwardene , Climate Resilient Water Supply Specialist, UNDP , Sri Lanka

Mr. Sajjan is a retired Additional General Manager of NWSDB, Sri Lanka, with over 45 years' experience in water supply and wastewater management. A Fellow of IESL and Certified Water Safety Plan Auditor, he has extensive experience in water resource management and drinking water quality. He currently serves as Climate Resilient Water Supply Specialist with UNDP's Climate Resilient Integrated Water Management Project.

IWA WATER SAFETY CONFERENCE & EXHIBITION 2026

The National Water Supply and Drainage Board is proud to invite you to the 2026 IWA International Water Safety Conference and Exhibition (IWA–WSCE), to be held in Ratmalana, Sri Lanka, supported by the International Water Association.

Key focus areas will include:

Water Safety Plans (WSPs)

Climate-Resilient Water Safety Planning

Auditing of Water Safety Plans

Sanitary Safety Plans

Challenges in Drinking Water Regulations

Emergency and Incident Management

Innovations in Water and Sanitation Systems

Sustainable Water Quality Monitoring

For more details : <https://www.iwa-network.org/events/iwa-water-safety-conference-and-exhibition-2026>



IWA WATER SAFETY CONFERENCE & EXHIBITION
March 23-25, 2026 in Sri Lanka

Ensuring access to clean water is a fundamental human right, and we are determined foster global collaboration and knowledge exchange on Water Safety Plans and best practice for ensuring safe and sustainable drinking water.

We invite you to submit your abstracts under the following themes:

- 1 Climate Resilient Water Supply Systems
- 2 Advancements in Sustainable Water Quality Monitoring, Smart Analytics and Reporting
- 3 Next-generation Regulatory Approaches
- 4 Effectiveness of Emergency and Incident Management in Water Supply and Sanitation Systems
- 5 Outcome Based Innovations in Water Supply and Sanitation Systems
- 6 Innovations and Technological Advancements in Water Reclamation and Sustainable Reuse Practices
- 7 Success and Challenges in Water Safety Plan Auditing
- 8 Impact on Emerging Contaminants in Drinking and Reclaimed Water on Public Health
- 9 Water Safety Plan Implementation
- 10 Water Safety in Distribution Systems and Buildings
- 11 Water Safety in Rural and Community Based Water Supply Systems

Call for abstract and workshop Proposal Submission: 15.07.2025

Open Registration: 01.10.2025

Closing Abstracts and workshop Proposal Submission: 15.10.2025

Early Bird Registration Deadline: 15.01.2026

Full paper submission to IWA to journal: 30.04.2026

Conference web | | wspunitdev@gmail.com | +94 112638102 | +94773621970

Presentation 1

M.T.A BAWA (DEPUTY GENERAL MANAGER – ENVIRONMENTAL AND SOCIAL), NWSDB

OBJECTIVES

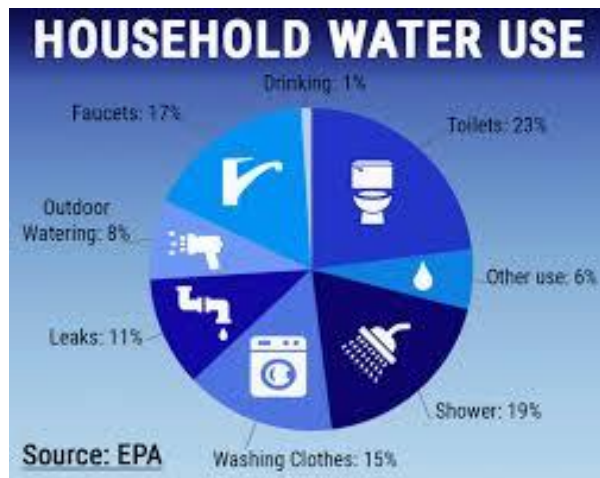
- Evolution of water policy in Sri Lanka
- Major challenges in Water Resources Management
- Water Resources Policy: The Need
- Policy areas in the domain water
- Water policy evolution in Sri Lanka
- History of Water Policy Development
- Legal & regulatory reform needs
- Policy- Practice Interface



WHY WATER POLICY MATTERS IN SRI LANKA



- Water **supports** agriculture (paddy irrigation), domestic supply, hydropower industry and Tourism....
- Island geography including **limited freshwater catchments** and **competing uses**.
- Climate variability** and **sea-level rise** increase risks to supply and quality.



MAJOR CHALLENGES IN WATER RESOURCES



Sri Lanka is **Water Rich** nation

Water has its **own dynamics** that are fairly **nonlinear**.

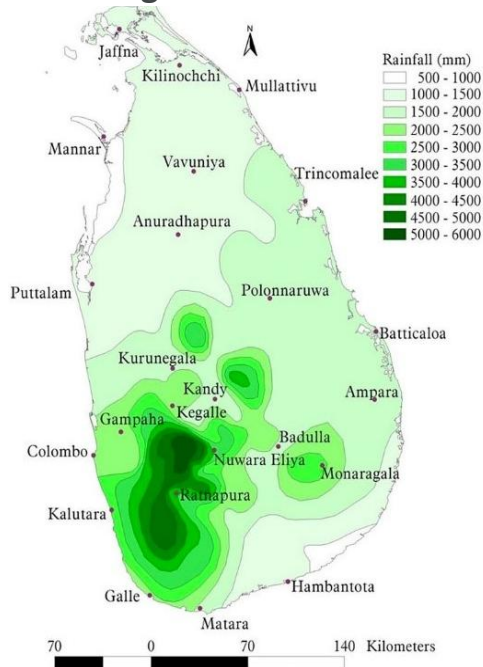
- **Rainfall is not evenly distributed** (spatial and temporal variability)
- **Water Resources are not evenly distributed** (20 perennial/ 83 seasonal rivers)
- **Populations are not evenly distributed**

Zones	Rainfall (mm)
Wet	2,000-5,000
Intermediate	1,300-3,500
Dry	1,000-2,000
Arid	< 1,000

Island geography



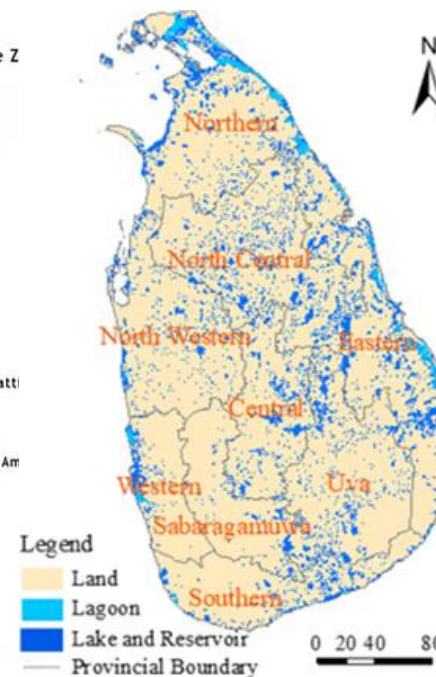
Average Annual Rainfall



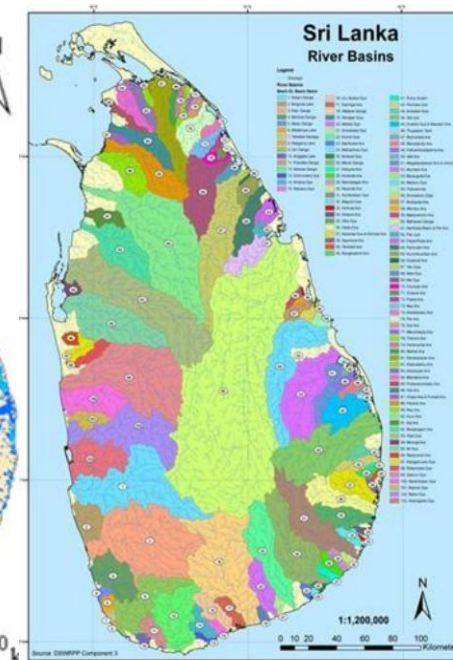
Climate Zones



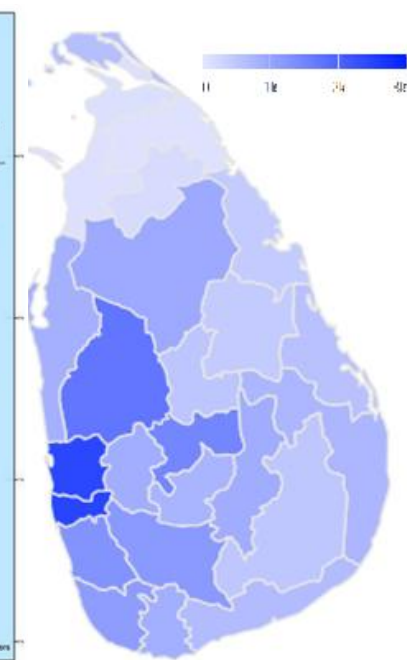
Water Resources



River Basins (103)



Population (2023) ('000)



MAJOR CHALLENGES IN WRM IN SRI LANKA



- Fragmented institutional responsibilities & weak coordination
- Incomplete data/ monitoring for surface and groundwater resources
- Pollution of water sources (industrial, agricultural and urban) and ignorance by the responsible authorities
- Funding constraints and operation & maintenance gaps
- Climate variability and increasing demand

Rathupaswala Protest for Water



Uma Oya Protest



WATER RESOURCES POLICY: THE NEED



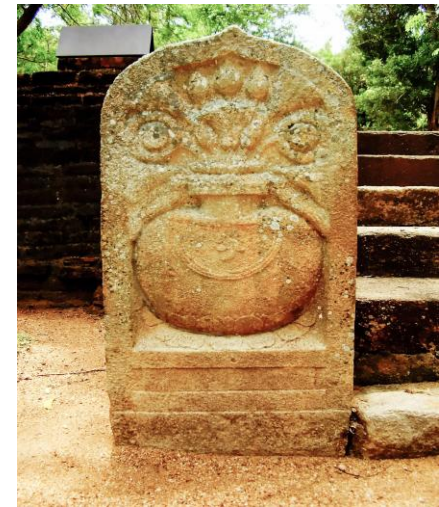
- Ensure the **sustainable use** of water resources.
- **High level** supports and coordination for water resource development, Conservation and Management
- Gain the **maximum return** from the Investments by Multi-Stakeholder participatory approach in planning of River Basin development projects
- Ensure **fair allocation** among all the Stakeholders and Identify **Priorities** of Allocation **during Scarcity**.
- Adhering to the national and global agendas on **sustainable development**.
- **Simplify** the **decision-making process**.
- Change a **practice** that is **no longer valid** and **hinders progress**.
- To adopt **innovative** and **integrated** approaches.
- Strengthen the implementation of the **legal** and **regulatory framework**.

WATER POLICY EVOLUTION IN SRI LANKA



- Sri Lanka's sophisticated irrigation **history spans over 2,500 years**.
- The ancient kings made **rules** and **regulations** for water management.
- The governance implemented many **hydraulic structures** to conserve and manage the water, governance text related to water was published in the 4th century BC.
- Firm regulations on water governance, community-based local systems for water management and a well-established revenue system for the water management systems are found from the ancient Sri Lankan History .

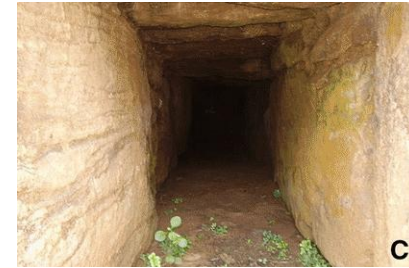
“Not let **a single drop of rain water** flow to the sea without first being used for the **welfare of mankind**”.



WATER POLICY EVOLUTION IN SRI LANKA



- First tank is built on Sri Lanka -Abhaya wewa, 4th century B.C
- Most remarkable Era in History of Sri Lankan Irrigation is King Parakkramabahu's Reign (1153-1186 A.D.) -163 major tanks/ 2376 minor tanks.
- **Technological Advancements:** The Sri Lankan were **pioneers in constructing** fully **artificial reservoirs** (tanks) and intricate **underground canals**.
 - ❖ Dense irrigation facility at a **high technical level** such as **Yoda Ela** (Great canal);
 - ❖ Lowest **gradient** at its time, **biso kotuwa**;
 - ❖ Flow **control structure** attached to sluice, anicut system;
 - ❖ Control water **flow to downstream** and reservoir schemes, **Sigiriya** (the **lion rock**);
 - ❖ **Recycle** and **reuse** of water by a networking series of small- to large-scale reservoirs.
- **Tank-Cascade Systems:** A network of interconnected tanks and canals developed across the **dry zone**, forming complex irrigation systems.



WATER POLICY EVOLUTION IN SRI LANKA



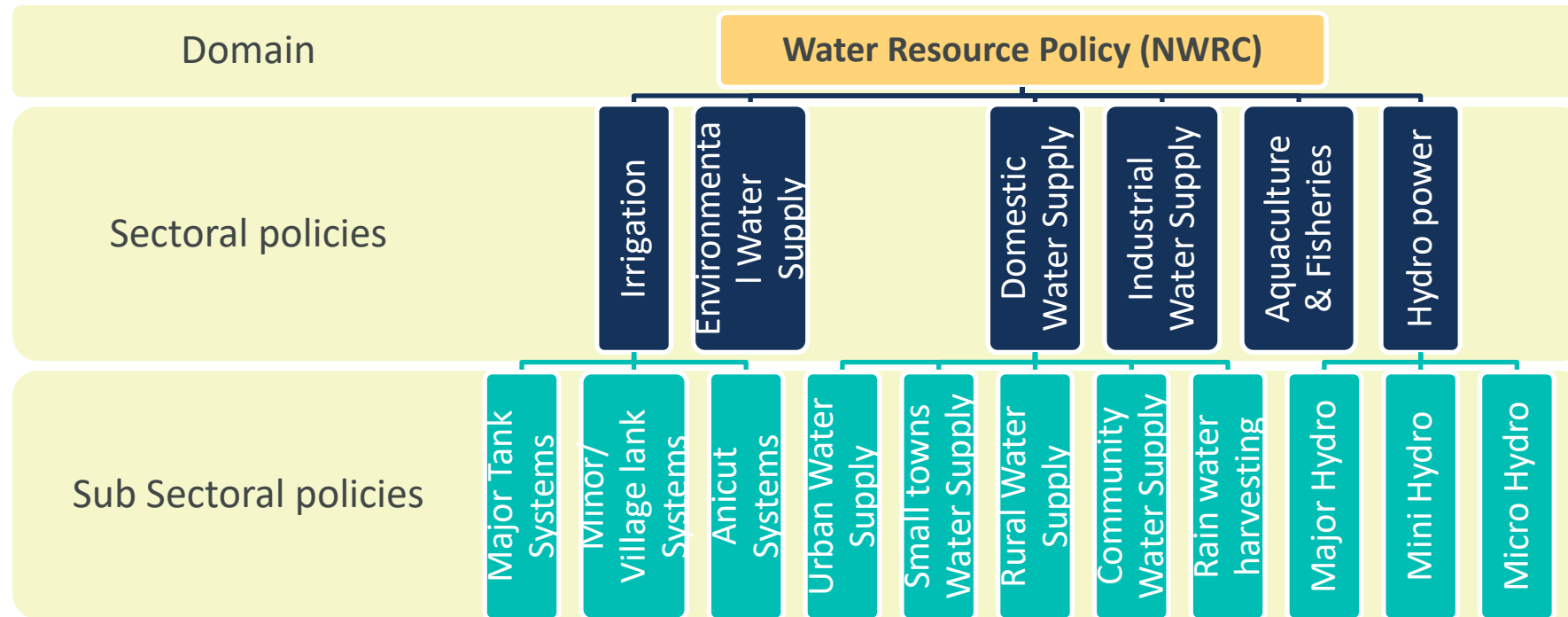
- A water policy is a crucial part of **water governance**.
- In the absence of a **legitimized written water policy**, other **mutually exclusive legislation** must be necessary for water governance.
- Water policy must address information on
 - a) **ownership** and entitlements of water,
 - b) accessibility of users to **affordable** clean water,
 - c) institutions and legislations **responsible** for the water policy,
 - d) the **economic value** of water and **taxation**.
- Sri Lanka had various **water policy proposal** consultations with local and foreign aid institutions.
- Since 1855, the British Governors showed significant interest in the **restoration of ancient irrigation works** in Sri Lanka. Therefore, as a first step, in 1887, an ordinance was passed, creating a **Central Irrigation Board** to serve the irrigation facilities, and in 1900 the present Irrigation Department was initiated.
- After **independence** from the British in 1948, ID contributed massively to the **development of irrigation infrastructures**. After **colonial independence**, the development of water resources of Sri Lanka was **boosted** and GOSL introduced many **legislations** and **new institutions** for the water sector.
- Most of the legislation was **amended to cater to the changes** in the social, economic, and environmental requirements of Sri Lanka.

HISTORY WATER OF POLICY DEVELOPMENT

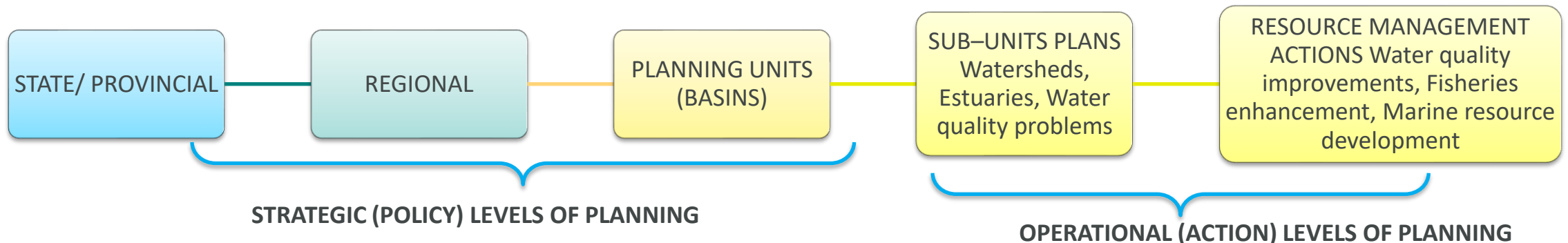


Year	Details of Policies	Institute/Policy proposer
1802	Monarchs guided by the Buddhist monasteries governed ancient WRM	Ancient King, monasteries & Farmers, village headman (Gamarala)
1815-1948	British Governance introduced laws and institutions	New institutions
1980	Water Resource Bill	Ministry of Irrigation, Power and Mahaweli Development
1988	Participatory Irrigation Management Policy	GOSL and USAID (financial support) in consultation of MASL
2000	National Water Resource Policy and Institutional Arrangements	GOSL/ ADB
2001	National Drinking Water Policy	Ministry of Water Supply
2001 Jul	National Policy for rural water supply and sanitation	Ministry of Urban Development, construction and public utilities
2002	National Policy on Water Supply and Sanitation	Ministry of Housing and Plantation Infrastructure
2003	The Water Services Reforms Bill	GOSL
2004	National Watershed Management Policy	MOE & Natural Resources
2006	National Policy on Wetlands	MOE & Natural Resources
2019 Mar	National Policy, Strategies and Institutional Framework for Water Resources Development, Conservation and Management	Ministry of Agriculture, Rural Economic Affairs, Livestock Dev., Irrigation and Fisheries, and Aquatic Resources Development
2021 Sep	A Strategic Mechanism to adopt a common watershed management policy	Cabinet Appointed Committee, Ministry of Water Supply
2022	National Environmental Policy	Ministry of Environment
2023 Jul	National Water Resources Policy of Sri Lanka	Ministry of Irrigation

POLICY AREAS IN THE DOMAIN OF WATER



- Water Safety Policy
- Climate Change Policy
- Disaster Management
- Policy on GESI & Social safeguards
- NAP/ NDC



INSTITUTIONAL SETTING



National level	
Non-Sectoral Players	
Apex body (Proposed)	Policy formulating body for Water Resource Development, sharing
CEA	Environmental Quality Standards, EIA Procedure (Tolerance limits for discharge of effluents into inland waters)
DMC	Responsible for implementing and coordinating national and sub-national level for reducing risk, preparing for, responding to emergencies and providing assistance to effected people.
Sectoral Players	
Irrigation Department	Irrigation development and maintenance
CEB	Power generation, transmission and distribution
Mahaweli Authority	Water and related infrastructure development in designated basins; Water Panel for Water Sharing
NWSDB	Development and O&M of Drinking Water Supply and Sanitation facilities (Urban/ Small –Town)
Department of Agrarian Development	Village irrigation
Department of Fisheries	Aquaculture, marine fishing
NARA	Scientific research and provide service for aquatic resources

National level	
Water Resources Board	hydro geological investigations into groundwater
National Aquaculture Development Authority	Promotion of Aquaculture and inland fisheries
Provincial Level	
Provincial Ministry of Irrigation	Providing sustainable irrigation, flood control, drainage and salt water exclusion in provinces.
Ministry of Local Government	Provide local services in the governing areas such as waste collection & disposal, housing, roads and parks, building permissions , social cares.
Divisional Level	
Divisional Secretary	Divisional Agricultural Committee, Kanna meetings
Farmer Organizations	O&M of field channels, and distributary channels. Village irrigation
Local Government Level	
Municipal Councils	Urban water supply systems
Urban Councils	Unintegrated urban systems, small towns water supply schemes.
Pradeshiya Sabhas	Rural Water Supply Schemes
Village Level	
CBO/NGO*	Community water supply schemes (piped, gravity schemes, rainwater harvesting schemes.)

STAKEHOLDER PARTICIPATION ACROSS INSTITUTIONAL LEVELS



Parameters	Conventional Approach	Proposed Approach
Planning	Top-down Planning with episodic consultations	Bottom-up planning with basin stakeholder forums with statutory advisory roles.
Inclusivity	Women, estate communities, indigenous knowledge holders under represented.	Gender-responsive participation quotas and capacity support
Grievance redress	Fragmented channels; low transparency of outcomes	Single digital window, public dashboards of cases & outcomes.
Private sector	Reluctant engagement beyond CSR; unclear incentives or obligations.	Higher potential for Possible engagement
Tariffs & Subsidies	Unbalance loading systems	Social tariffs & targeted subsidies for the poor; pro-poor connection policies.
Community involvement	Unclear delineation of responsibilities and cost recovery in small schemes.	Community co-management for small schemes; formal O&M compacts and training.

STAKEHOLDER PARTICIPATION: WATER SHARING



- The water allocation priorities are **not declared**, but are commonly shared **based on necessity**. The **WMP** was **established in 1985** to allocate, manage, and monitor bulk water primarily for the drinking, irrigation, and hydropower sectors within MASL jurisdiction.
- Water panel meetings are held through water management secretariat - Mahaweli Authority of Sri Lanka to solve the **water sharing issues** in Mahaweli controlled areas.
- ACRES **Irrigation Demand Model**: uses 30 years of hydrological data to compute a **monthly water demand** series for irrigation schemes; ACRES **Reservoir Simulation Program**: develops the **water balance requirement**; and **Data Entry Retrieval System (DERS)**: generates the technical **Seasonal Operating Plan (SOP)** for stakeholders
- However, Water Resource Management involves Water Source **Planning, Development, Conservation, Sharing, Pollution Control** and **Sustainable use**.

Details	Weekly Water Panel	Seasonal Water Panel
Holding Frequency	Every Friday	Both seasons (Maha & Yala)
Participation	Director (WMS) and Representatives from <ul style="list-style-type: none"> • Irrigation Department • Mahaweli Authority • Ceylon Electricity Board • National Water Supply & Drainage Board • Wildlife Department 	<ul style="list-style-type: none"> • Ministers • Chairman – DG, MASL • Core Chairman – DG, ID • Secretary – Director (WMS) • Head of the Department & Institution such as Irrigation, MASL, CEB, NWSDB, WLD, etc. • District Secretaries • Government Regional Officers • Farmer Organization
Decision	Water Allocation & distribution Power Generation, Drinking Water Requirement	Type of Cultivation Starting and ending of water issue

LEGAL & REGULATORY REFORM NEEDS

- Strengthen enforcement of pollution controls and permitting systems to ensure safe drinking water supply through **Water Safety Plan**
- Clarify roles & accountability between national, provincial and local levels
- Modernize water allocation mechanisms to be more transparent and flexible covering **all river basins needed**.



Garbage into a River

Industrial Discharges to Source Water



Sand/ Gem Mining



Septage Discharge (Gully bowsers/ Inundation/direct)



Vehicle Accident (Petroleum / Agrochemical)



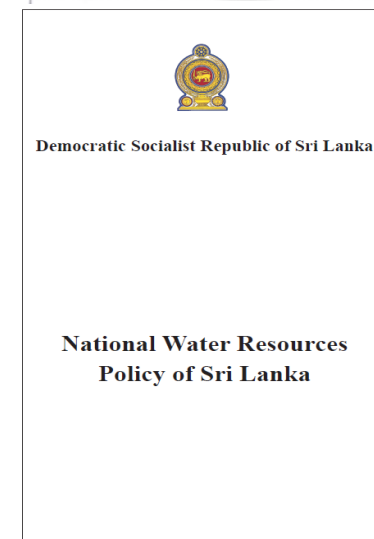
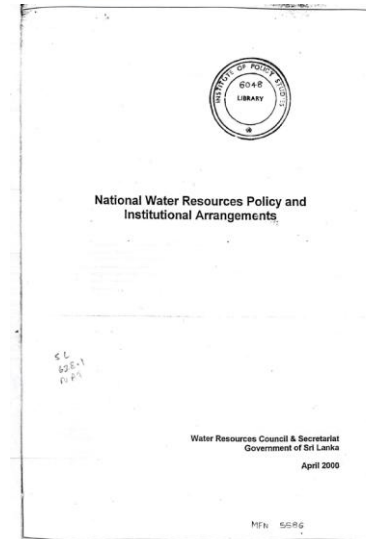
POLICY- PRACTICE INTERFACE

(HOW A RULE BECOMES REALITY)



From policy to practice pipeline

1. **Policy intent** → goals, principles, standards.
 2. **Legal instruments** → Acts, regulations, by-laws, licenses/permits.
 3. **Implementation tools** → plans, guidelines, technical standards, budget/ programs.
 4. **Delivery systems** → utilities, basin offices, local authorities, contractors.
 5. **Monitoring & Enforcement** → inspections, penalties, incentives.
 6. **Feedback & Learning** → audits, evaluations, citizen reporting.
- **Friction points:** mandate ambiguity, unfunded mandates, data gaps, weak enforcement economics, fragmented financing.





Think big, Start Small to achieve the goal

Any Questions?



Presentation 2

ENG. D.S.D. JAYASIRIWARDENE
CLIMATE RESILIENT WATER SUPPLY SPECIALIST, UNDP



The United Nations World Water Development Report 2020

'Water and Climate change'

Main Messages

Water is the medium through which nature and human societies experience most of the impacts of climate change. Sustainable water management is an essential part of the solution to climate change.

CONTENTS



- Water Resources of Sri Lanka
- The Local Context
- Vulnerability
- Draft National Water Resources Policy of Sri Lanka– presently under review
- Nexus with National Climate Change Policy
- Groundwater Usage, behavior, and Issues
- Challenges in Groundwater

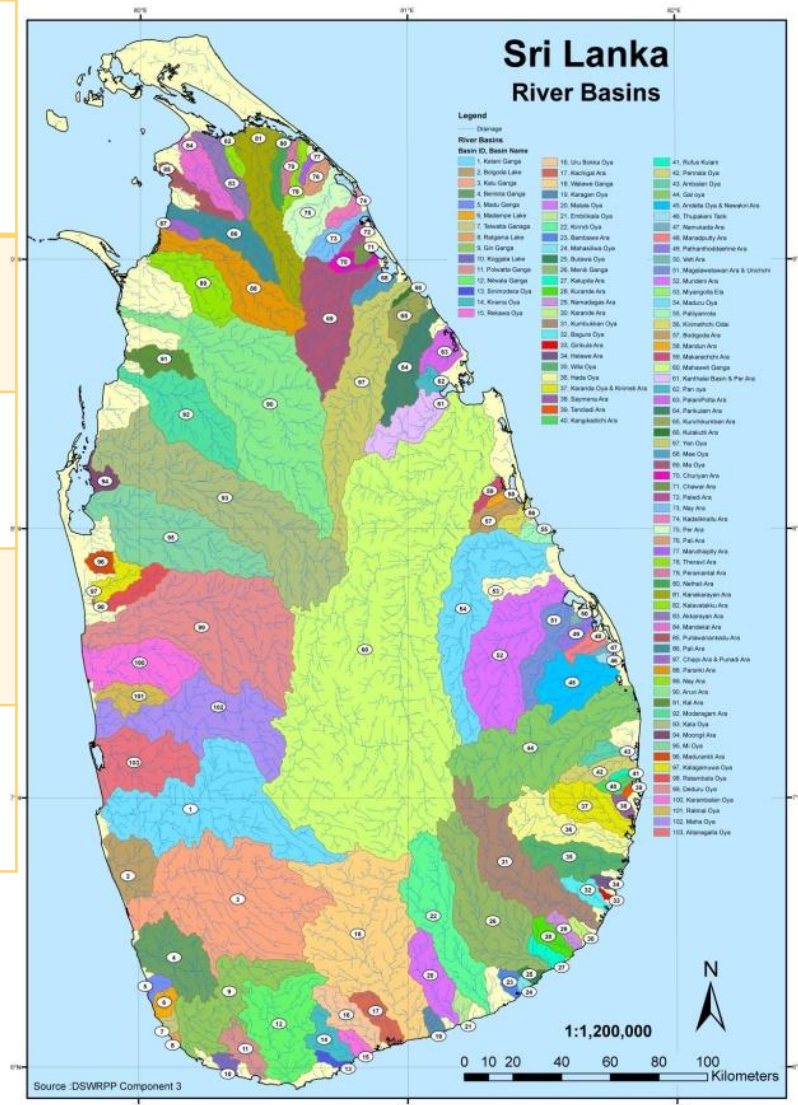
POPULATION & WATER SOURCES



- 80 Km southeast to the Indian Subcontinent
North Latitude 5° 55' & 90 50'
East Longitude 79° 31 & 81o 53'
- Area 65,612 Km²
Land 62, 709
Inland waters 2905
- Coastline 1585 Km

- Population 2024 Census - 21,763,170
- Population Density - 350 persons / sq.km
- Average Household size - 3.8 persons
- Expectation of Life at Birth (2017) - 75.5 years
- Literacy Rate (2019) - 92.9 %

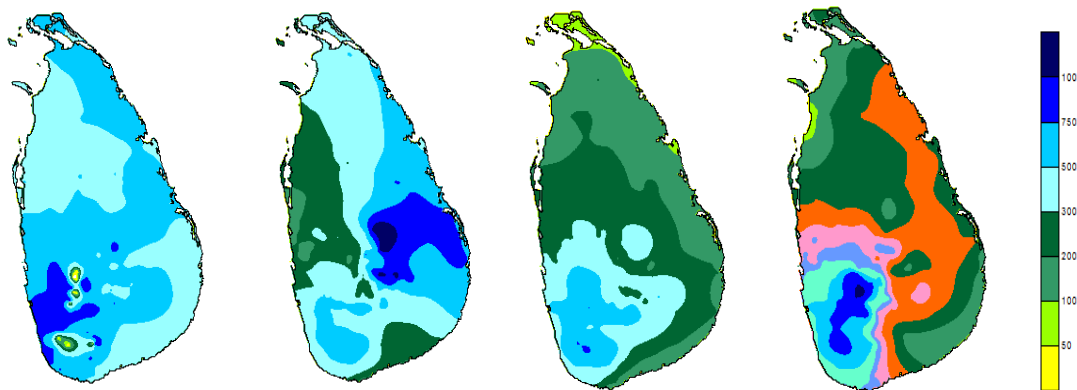
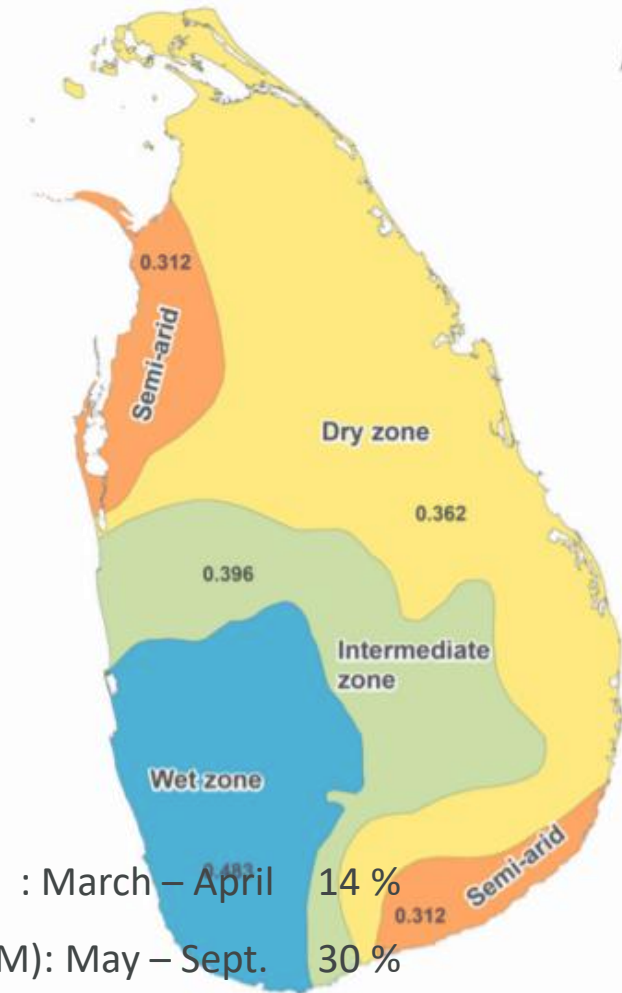
Water Source	No
River Basins	103
Ramsar Wetlands	06
Major Reservoirs	73
Medium Reservoirs	171



CLIMATE – TROPICAL WITH MONSOON RAINS TOPOGRAPHY - FLAT WITH CENTRAL HILLS



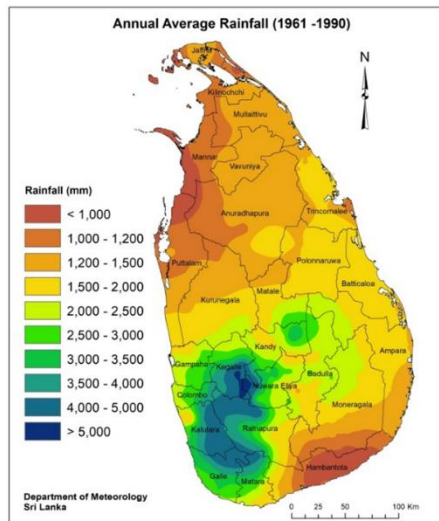
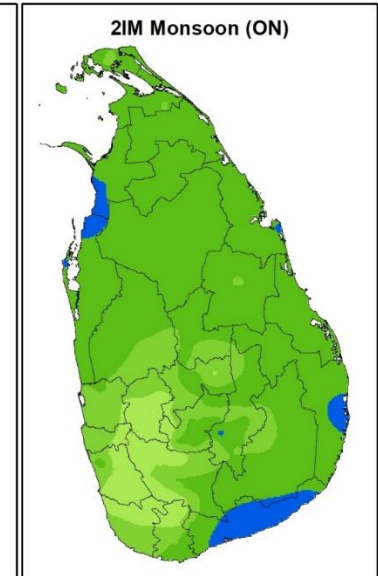
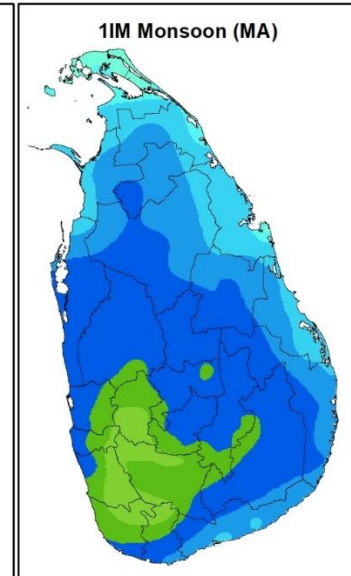
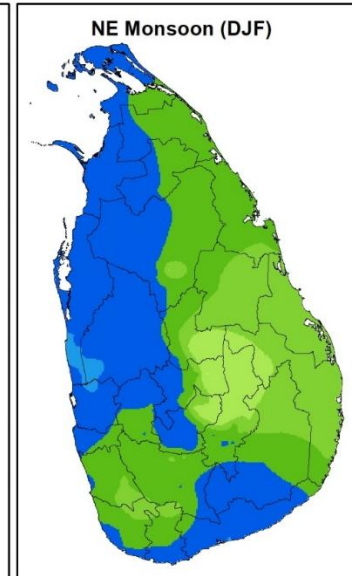
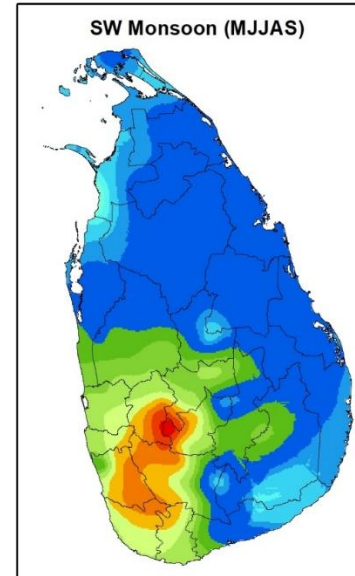
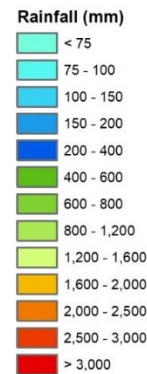
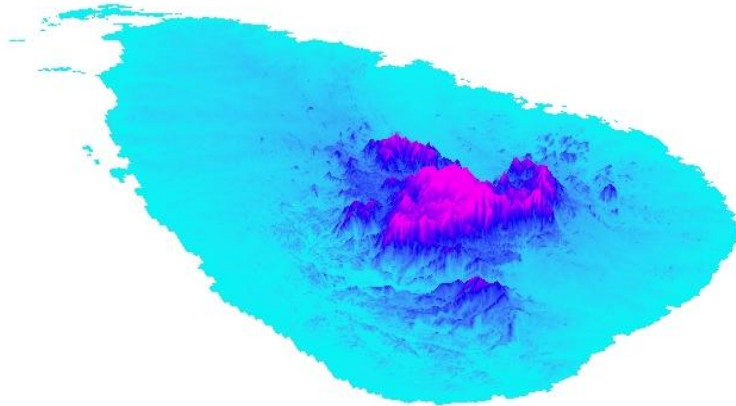
- Four major climatic zones (Avg. rainfall/year mm)
 1. Wet zone : > 2500
 2. Intermediate Zone : 1900-2500
 3. Dry Zone : 1200-1900
 4. Semi Arid Zone : 800-1200



1. First Inter Monsoon (FIM) : March – April 14 %
2. South West Monsoon (SWM): May – Sept. 30 %
3. Second Inter Monsoon (SIM) : Oct. – Nov. 30 %
4. North east Monsoon (NEM): Dec. – Mar. 26 %

Climate Seasons In Sri Lanka

30 Year Climatological Average (1961-1990)

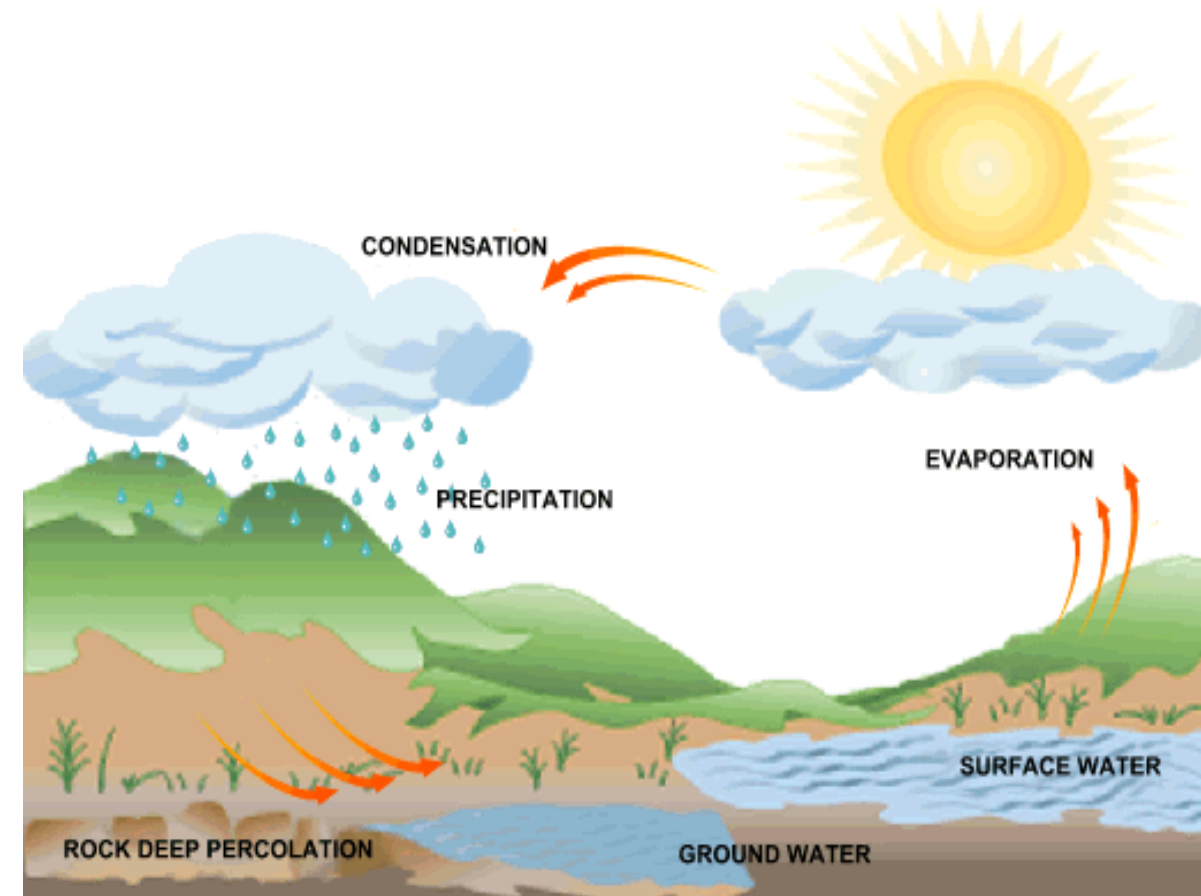


Seasons	Southwest Monsoon	Northeast Monsoon	First Inter-monsoon	Second Inter-monsoon
Period	May-Sep	Dec-Feb	Mar-Apr	Oct-Nov
Rainfall (Average)	556 mm	479 mm	268 mm	558 mm
% of Annual Average	30%	26%	14%	30%

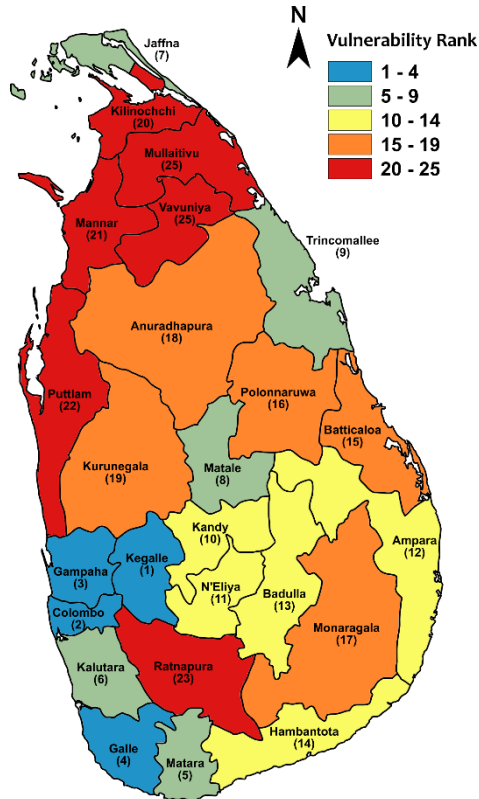
WATERS OF SRI LANKA



	Volume	Unit
Precipitation	112	BCM
Surface water	52	BCM
Groundwater storage	7.8	BCM
Run off	52	BCM
Water consumption	~400	m ³ /person/yr



Vulnerability



Sri Lanka Mapping by District: UNDP / DOA 2013

(The rankings of Districts are based on exposure, sensitivity and adaptive capacity to climate change)

District	Rank	District	Rank	District	Rank
Mullaitivu	25	Monaragala	17	Tincomallee	9
Vavuniya	25	Polonnaruwa	16	Matale	8
Ratnapura	23	Batticaloa	15	Kalutara	6
Puttalam	22	Hambantota	14	Matara	5
Mannar	21	Badulla	13	Galle	4
Killinochchi	20	Ampara	12	Gampaha	3
Kurunegala	19	N'eliya	11	Colombo	2
Anuradhapura	18	Kandy	10	Kegalle	1

DRAFT NATIONAL WATER RESOURCES POLICY OF SRI LANKA– PRESENTLY UNDER REVIEW



The Vision

National Water Resources Policy envisions “A State and a Society that values the sustainable use of Water Resources and recognizes the goal of a balanced Environment which is conducive to National Development”

Scope

The “National Water Resources Policy” applies only to Water Resources other than Marine Water in the territory of Sri Lanka.

POLICY PRINCIPLES



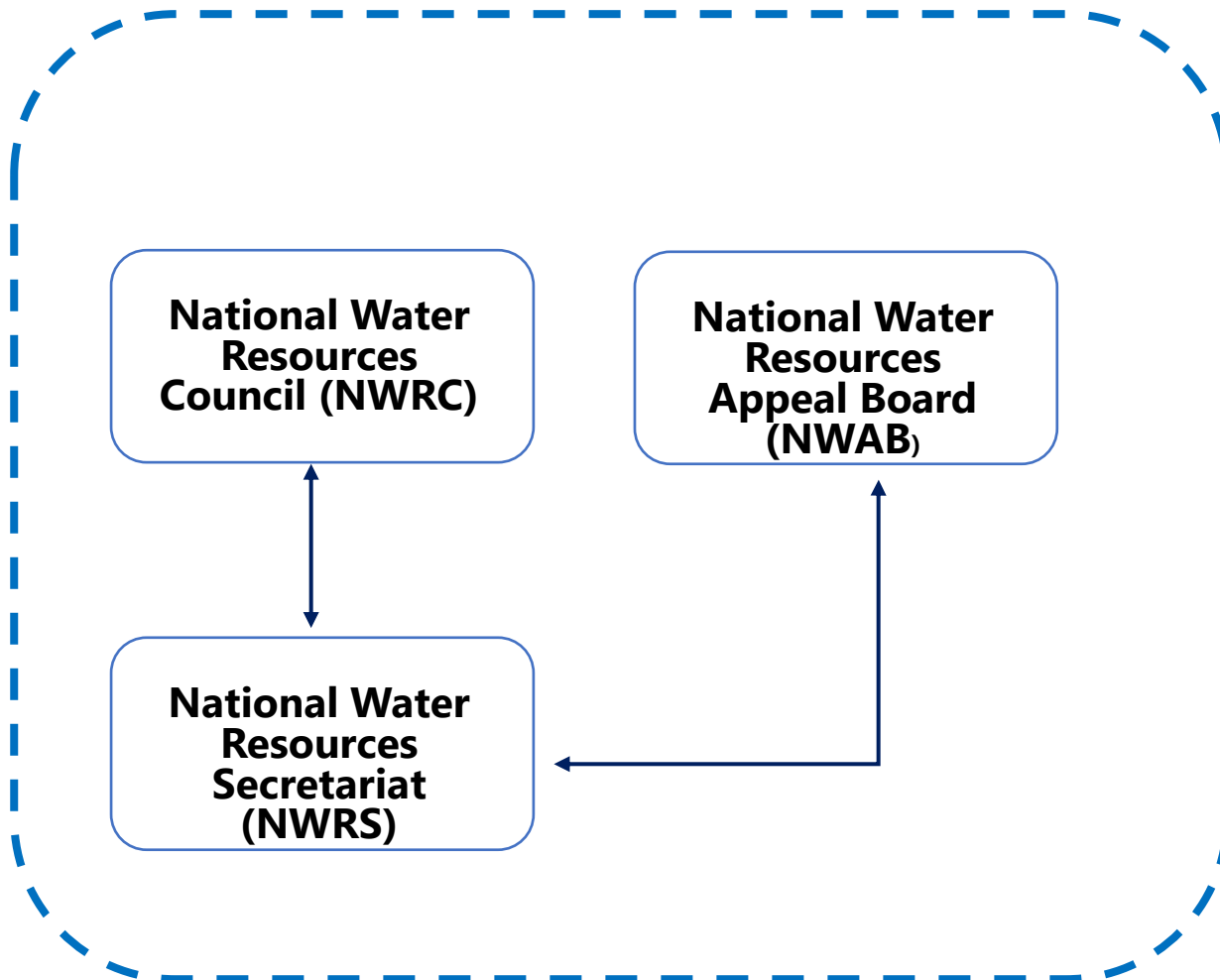
- Fresh water is recognized as a finite and vulnerable natural resource which is essential to sustain the life on earth, human activities and the sustainability of the environment.
- Access to safe water is a basic need of all living beings and therefore water is considered as a Common Public Property for the prosperity and social well-being of the communities and the eco-systems.
- Prevention of pollution, over-extraction from the sources, over-use and wastage of water resources needs to be regulated.
- The importance of taking actions for achieving high water productivity through various practices, while ensuring the rights of all parties using riverine water.
- Water resources management is a holistic task and factors that are related to water management need to be considered in planning, development, management, and conservation stages while integrated approach in WRM is recognized as a key pre-requisite at all levels.
- Urban water bodies and wetlands will be treated as important constituents in the efficient water resources management that need to be conserved.

POLICY PRINCIPLES



- New water resources development plans need to include virtual water concept with water footprint assessments, volumetric and measurable approach, compensatory reforestation, removal of invasive plants and other relevant measures to mitigate any adverse effects.
- The natural river basins, sub basins, cascades connected basins and hydraulically connected aquifer systems form the fundamental units for planning, development and management of all water resources.
- Water resources management should only be based on a participatory approach, involving users, planners, policy makers, and executors at all levels.
- Importance of maintaining baseline data related to all water resources, establishment of hydrological and hydraulic models of individual as well as combined watersheds based on the baseline data is a pre-requisite. The models shall be calibrated and validated at appropriate time intervals. Developed new models will form the scientific basis of all decision making related to water quantity and quality related issues faced among the stakeholders.
- Replacement of traditional systems by pipe borne water systems should not be the prime goal until safety of those existing water sources are fully ensured. Where feasible, introduction of unrefined parallel water supply systems for non-potable uses should be encouraged in urban areas, through competitive pricing mechanisms to ensure restricting the use of drinking refined water for sanitation, watering of gardens and car washing etc.

Proposed Organizational structure



Note : There are discussions/deliberations continuing for an Interim Arrangement without crating new institutions

NEXUS WITH THE NATIONAL CLIMATE CHANGE POLICY OF SRI LANKA -2023



Vision

A future where climate change will have no adverse consequences on Sri Lanka.

Mission

Addressing climate change issues locally while engaging in the global context

Goal

Adaptation to and mitigation of climate change impacts within the framework of sustainable development

Conservation of water resources and biodiversity

- Take action to minimize the impacts on water resources due to erratic precipitation patterns temperature rise and sea water rise caused by climate change.
- Promote integrated watershed and water resources management and efficient water use through technologies and behaviors adaptive to changing weather patterns and trends.
- Enhance climate change resilience of natural ecosystems and its diversity.

GROUNDWATER USAGE, BEHAVIOR, AND ISSUES



Agricultural purposes

- Cash crops and perennial crops during dry period .
- Combined use with surface water.
- 150,000 Agro-wells –(0.2- 0.8) hectares per well. Some springs used for Agriculture.
- Well density(number of well per Km²)- NC province:4.8-9.5, In some area-27 per Km² , Kalpitiya and Jaffna- 200 wells per Km².
- Quality, quantity, interference, cyclic use, unprotected nature.

Water Supply Purposes

- NWSDB-80 WSSs and DNCW-2400 WSSs, 2 million dug wells.
- Extraction up to 12,000 m³/day (Mannar WSS) .
- Intake types: Deep TW, Shallow TW. Large diameter Dug wells, lateral wells, springs.
- Decreasing of pumping quantity and deterioration of water quality in pumping wells several years after commissioning.
- Life time issues

CHALLENGES IN GROUNDWATER



- Gaps in groundwater legislations and functionality.
- Gaps in executing management measures at field level.
- Complexity of hydrogeological environment.
- Lack of sufficient knowledge of groundwater among user communities
- Data collection, management, and sharing.
- Stakeholder participation



Thank You...!!



Q&A AND PANEL DISCUSSION

INDRAJITH UDAYA KUMARA, CLIMATE AND ENVIRONMENTAL SPECIALIST , UNICEF

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