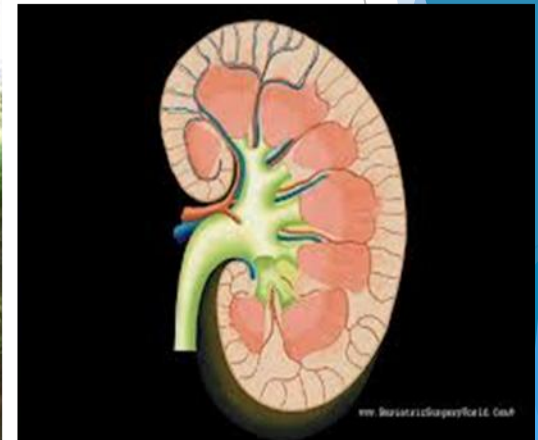


# Short – Term Measures to Control Chronic Kidney Disease Unknown etiology – (CKDu)



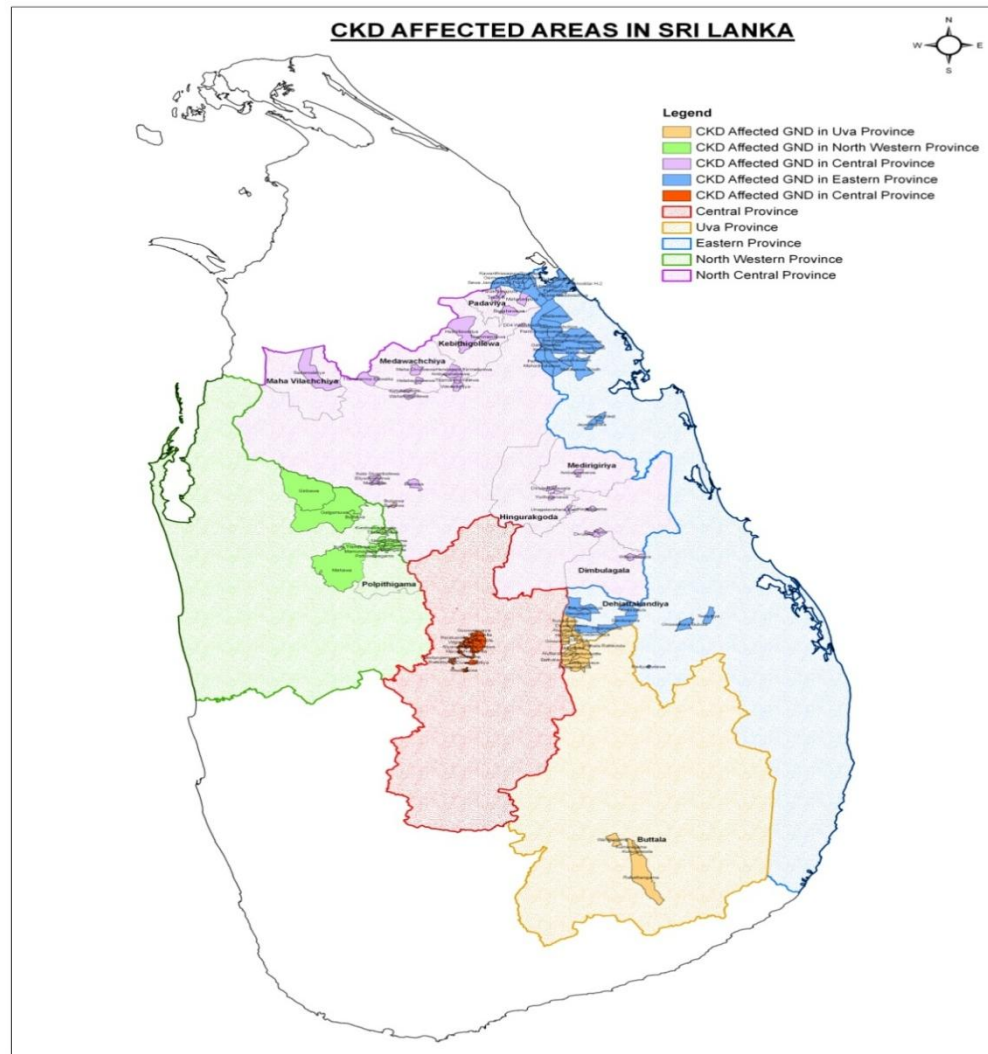
# CKDu Prevalence

Affected Areas – North Central Province  
Parts of North Western Province  
,, Central Province  
,, Uva Province  
,, Eastern Province

- ❖ In affected areas prevalence is about 12% to 15% (as per WHO)
- ❖ Mortality rate - Anuradhapura District > 200 deaths per annum  
- Increasing in other areas also



# CKD Affected Areas in Sri Lanka



# Status of CKDu

- ❖ Disease occurs without pre-existing conditions
  - Hypertension & Diabetes
- ❖ Possible Reasons
  - Cadmium-According to WHO
  - Hardness of Water
  - Fluoride in combination with Aluminium
  - Arsenic
  - Agro chemicals
  - Algal toxins



We believe that safe quality  
water has a positive impact  
on control of CKDu



# Available Water Sources in CKD Affected Areas

- ❖ Few areas have surface water based piped water supply
- ❖ Majority use groundwater
  - Tube wells
  - Hand pumps
  - Dug wells



# Requirement of Water for Drinking and Cooking

According to NWS&DB

- 20 liters per household / day (four members)
- 5 liters per capita / day



# Programme to control CKDu

- ❖ Short term programmes
  - ❖ Medium term programmes
  - ❖ Long term programmes
- } Large & medium scale water supply projects

With the assistance of NWS&DB & NCWT





# Short term programmes

Safe quality water  
only for  
Drinking and Cooking



# Available options

1. Reverse osmosis plants – (Small treatment plants)
  - ▶ To purify groundwater - wells and boreholes
  - ▶ Operation & maintenance mainly by (CBOs)
  - ▶ Depending on the distance water bowzers are deployed to transport water



# RO Plants Installation by National Community Water Trust (NCWT) 2013

District	DS division	GNDs with RO plants	Progress
Anuradhapura	Medawachchiya	Mahadivulwewa, Kidawarankulama Mahakubukgollawa Periyakulama	Commissioned Commissioned Commissioned Commissioned
	Rambewa	Wahamalgollewa	To be commissioned
Polonnaruwa	Medirigiriya	Diulankadawala	Commissioned
Kurunegala	Giribhawa	Solepura	Commissioned
		Parakumpura	To be commissioned



# RO Plants Installation by National Water Supply & Drainage Board (NWS&DB)

District	DS division	GNDs with RO plants	Progress
Anuradhapura	Padaviya	Parakramapura Track B Bogahawewa Sudarshanagama	Commissioned To be commissioned To be commissioned
	Rambewa	Thabalagollawa Wahamalgollewe	Commissioned To be commissioned
	Kebitigollawa	Padaviya 18 <sup>th</sup> Post	To be commissioned
Polonnaruwa	Dimbulagala	Vijayabapura	To be commissioned
	Medirigiriya	Ambagaswewa	To be commissioned



## 2. Bowser supply from existing water supply schemes

- to Community tanks
- to households



# Bowser Supply by National Water Supply & Drainage Board

District	DS division	GNDs with Bowser Supply	Progress
Anuradhapura	Kebitigollawa	Eethalawiddawewa, Thibiriwewa	70 Community tanks placed. 90% completed
	Medawachchiya	Puhudiula, Unagaswewa	On Going
	Rambewa	Kalanchiya, Nabadagaswewa	70 Community tanks placed. 80% completed
	Mahawilachchiya	Bilaewa, Sandamaleliya	In Operation
Polonnaruwa	Medirigiriya	Kauduluwewa, Kahambiliyawa	Procurement of PE Tanks under way
Badulla	Mahiyanganaya	Theldeniya	17 Community tanks placed.
		Hoberiyawa	On Going
Monaragala	Buttala	Kukurampola, Rahathangama, Kum aragama	21 Community tanks placed.
	Wellawaya	Warunagama	Tanks being procured
Trincomalee	Gomarankadawala	Kalyanapura , Bakmeegama	On Going
	Kanthale	Jayanthipura	On Going
	Padavisripura	Sinhapura	On Going



### 3. Rain Water Harvesting Systems



# RWHS by National Water Supply & Drainage Board

District	DS division	GNDs with RWHS	Number of households	Progress
Anuradhapura	Kebithigollawa	Thammannawa, D4 Wahalkada, Hallmillawatiya	163 30	Complete 50%
	Madawachchya	Thammannaelawe ka	95	Complete 60%
	Rambewa	Abagahawewa, Thalgahawewa, Kedewa	50	Procurement Underway
Kurunegala	Polpithigama	Polpithigama	153	Completed
	Maho	Maho	100	In progress





# 4. Service extension from existing piped water supplies



# 2014 Budget Speech

Rs. 900million for 2014 to install Reverse Osmosis Plants in North Central Province



# Thank You



Ministry of Water Supply & Drainage

10<sup>th</sup> December, 2013