

# Promoting Rain Water Harvesting as a solution for polluted water related CKDu (Chronic Kidney Disease)

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# Clean and accessible water is a basic human right.

- Yet, water scarcity affect many people - mostly the poor.
- Experience in Sri Lanka ....
- Can we achieve the SDG target 6.1 – Safe and affordable drinking water for all ?



In the rural agricultural areas

- The same water resource is shared for
  - irrigate crops (paddy, mostly)
  - human needs
- Misuse and over use of chemicals are common among farmers.
- Thus, fertilizers and agrochemicals are added to water in many ways.



Village **poor** have no means of obtaining water .....

- No pipe water supply
- Impacts of climate change- less rain fall and droughts
- No option other than using reservoir water for drinking

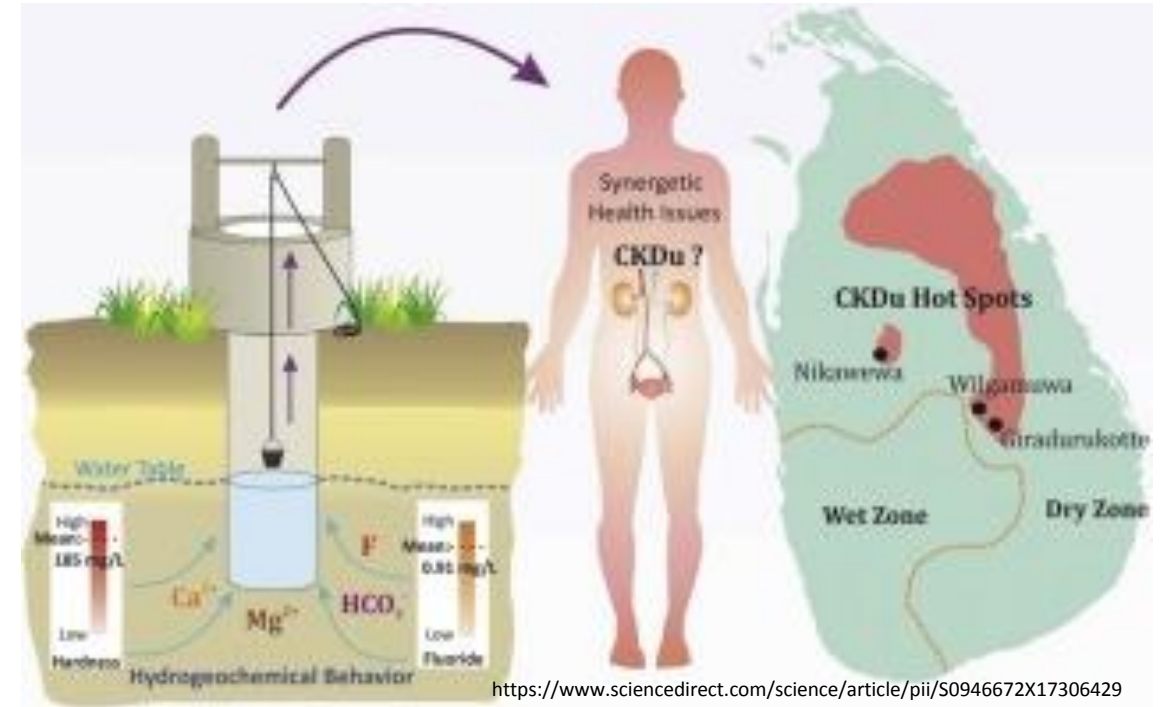


<http://unhabitat.lk/infocus/rehabilitating-the-kovilvayal-village-internal-access-road-in-kilinochchi/>



# CKDu

- Evidence suggests that the disease is related to one or more environmental agents.
- However, pinpointing a definite cause for CKDu is challenging.
- It is plausible that CKDu is multifactorial
- No specific guidelines or recommendations exist for treatment of CKDu.



The researchers reveal that there is a strong possibility of contamination of drinking water with high levels of

- fluoride
- water hardness
- pesticides
- heavy metals
- and may be cyanobacterial toxins



- Kidney disease was the seventh most common cause of death and an increasing cause of death in Sri Lanka in 2012 (WHO).
- Farming was reported as the main occupational/environmental risk factor for CKDu.



- CKDu problem affects not only the local economy and development but also stability of the family lives of the patients.
- Most of the affected people are the chief occupant or the bread winner of the family which drag the entire family unit into a misery.



<http://www.dailymirror.lk/article/Landmark-in-the-history-of-Lanka-s-Fight-against-kidney-disease-153090.html>

# Solution- Rain Water Harvesting (RWH)

## RWH: clean, free water

- To ensure health, dignity to all
- To tap rain water at your door step



<https://puritas.lk/>

- Rain water harvesting is an eco friendly alternative.
- Since rain water does not contain any pollutant and regarded as a clean source of drinking water it could enhance water and sanitation in the affected areas.



- Providing safe and clean drinking water will not only save the comminutes from the deadly diseases
- but also help them obtaining clean water from their residence reducing time wasted for fetching water form outside.



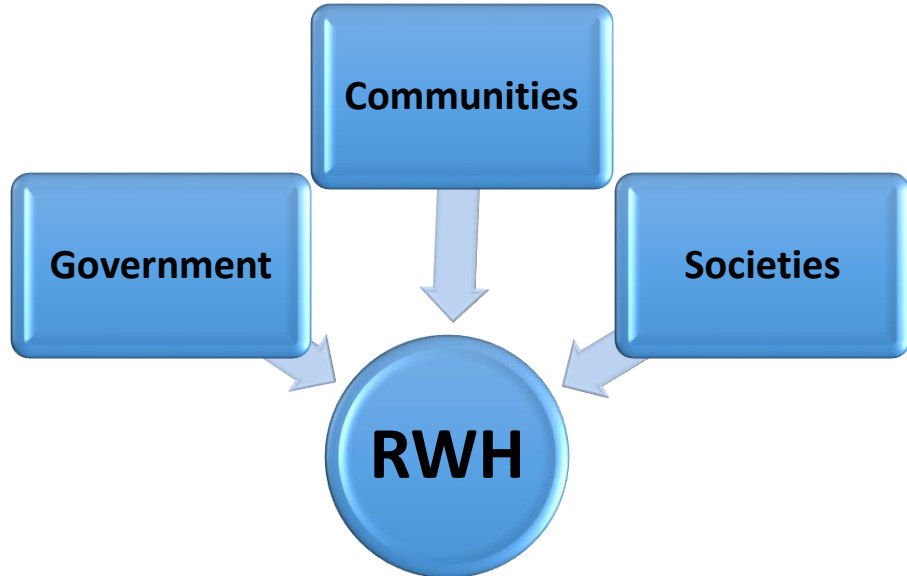
# Highlights

- This project proposes to form **village level rain water harvesting societies** and promote use of same to overcome water shortage issues.
- Members of the societies will be educated why they should not use contaminated tank water and switch to RWH.
- Selected families will be donated with RWH tanks and will be given a short training how to maintain those with periodical cleaning.

35 RWH tanks- schools, hospitals, individuals in  
Kurunegala District

Training and awareness

**Monitoring - Participatory approach**



## Other benefits

- Attitudes: Willingness to change
- Awareness raising – water sources conservation, good practices
- School children as conservation messengers
- Increased stakeholder participation
- Innovative solutions using freely available natural resource



Thank You!

