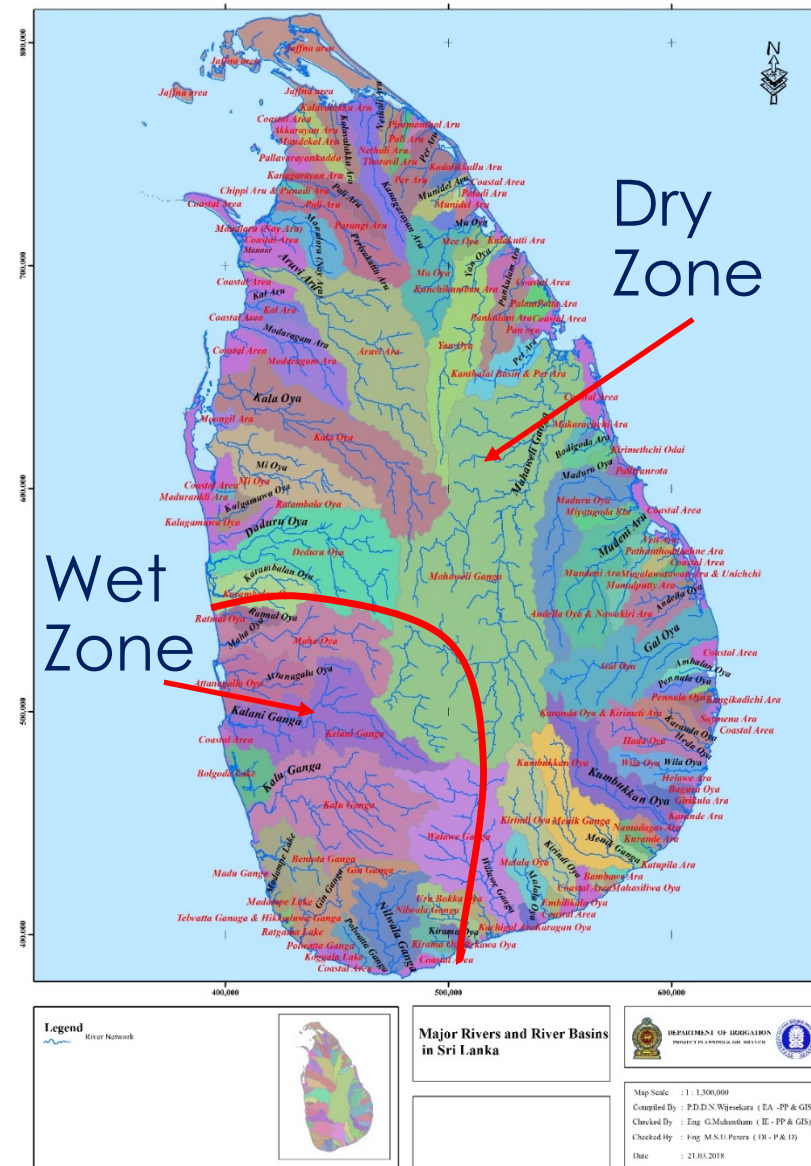


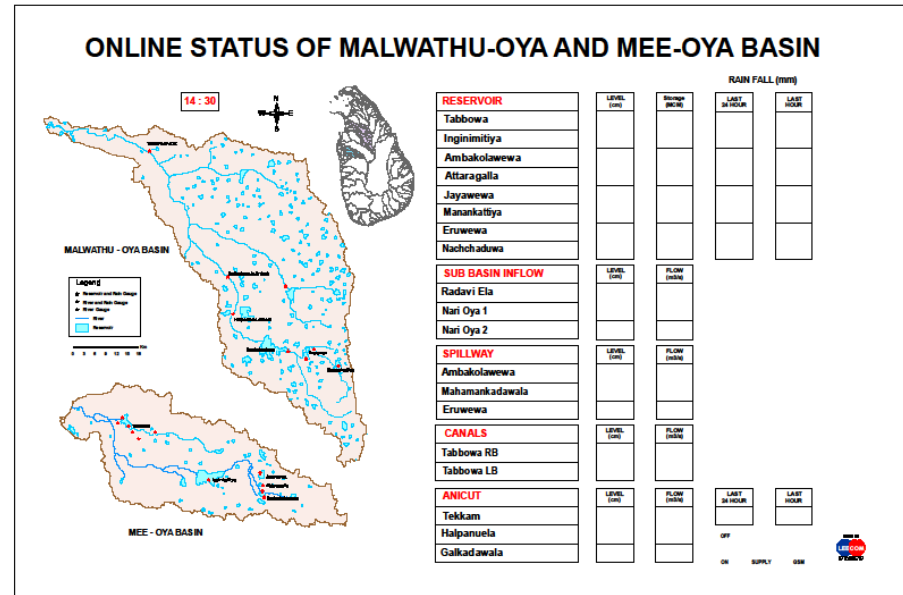
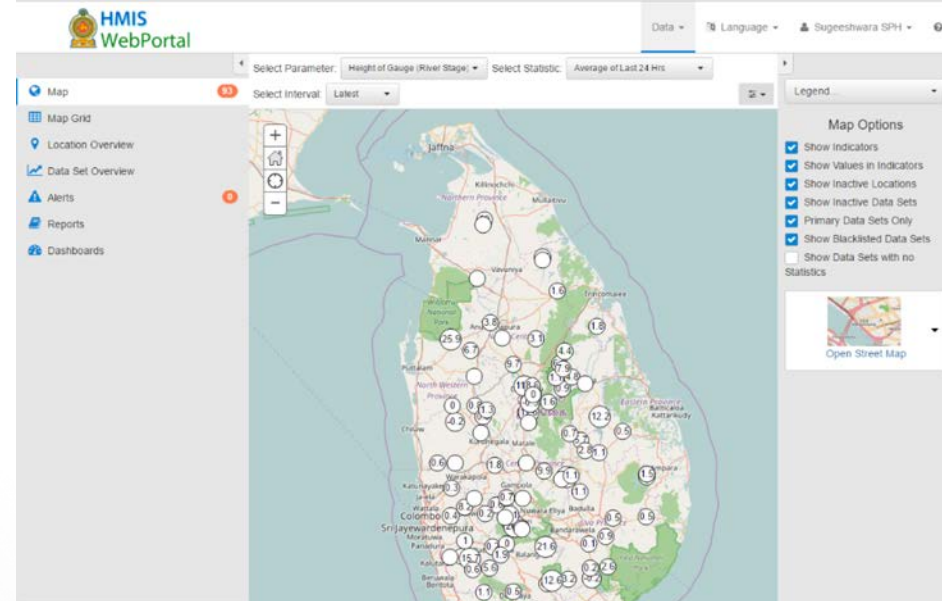
## Introduction to River System and Flood Situation in Sri Lanka

- There are 103 river basins.
- Around 25 river basins are vulnerable for floods.
- Almost all of the south-western river basins are vulnerable for floods (ex: Kalu, Gin, Nilvala, Bentara, Attanagalu Oya).
- Most of the eastern, north central, and north eastern river basins are vulnerable for both flood and drought (Ex: Malvathu Oya, Mundeni Aru, Mahaweli, Yan Oya, Gal Oya, Deduru Oya etc).



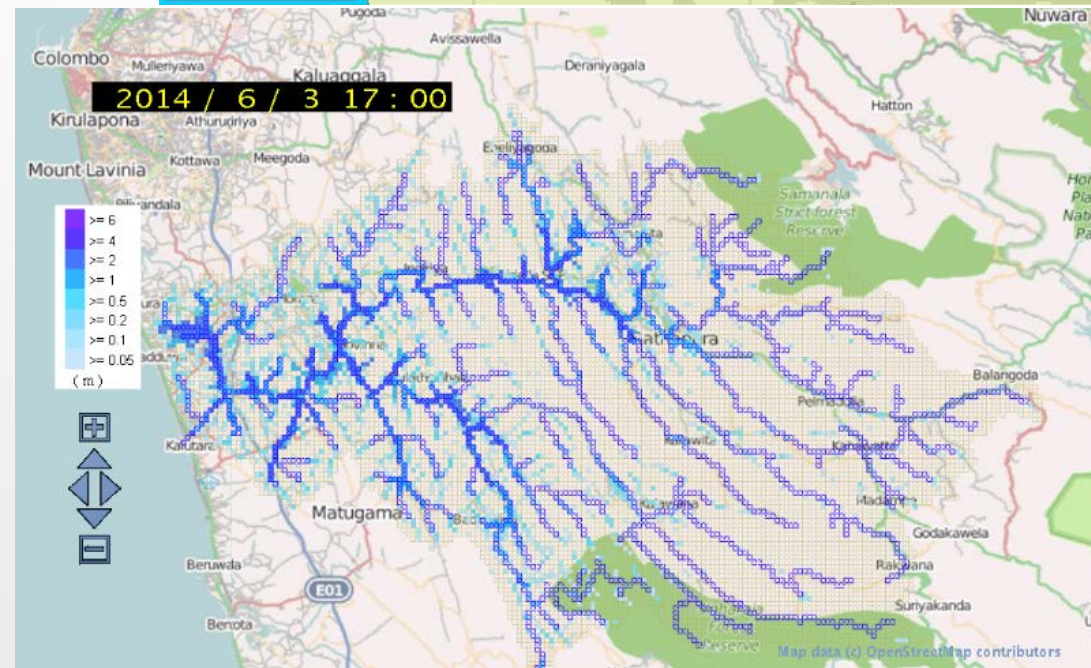
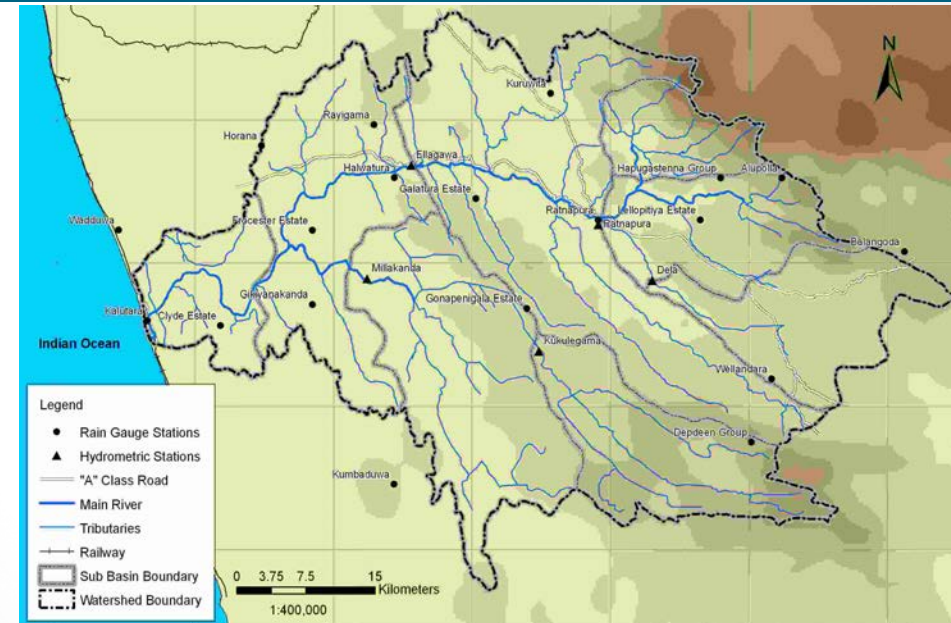
## FLOOD EARLY WARNING AND R/F MONITORING

- Real Time R/F and River Stage monitoring system containing around 135 river gauges and 160 rainfall stations island wide (HMIS).
- Flood early warning is mainly based on the HMIS system.
- Separate online Systems for Malwathu Oya and Mee Oya for flood and drought monitoring.
- Plans are underway to enhance HMIS monitoring system by increasing number of monitoring stations and incorporating flood forecasting and dissemination systems.



## FLOOD EARLY WARNING AND R/F MONITORING

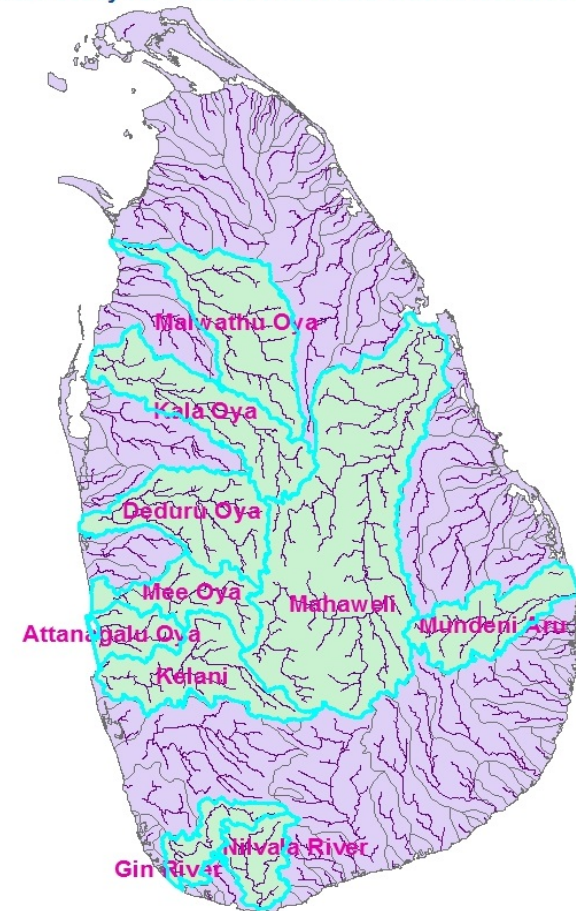
- ID has developed a flood forecasting model for **Kalu River** with the support of ICHARM and JAXA using RRI
- Dissemination system is not successful yet (need support).
- Expect to enhance this system for some more river basins.



# ADAPTATION PLANNING: CLIMATE CHANGE, URBANIZATION

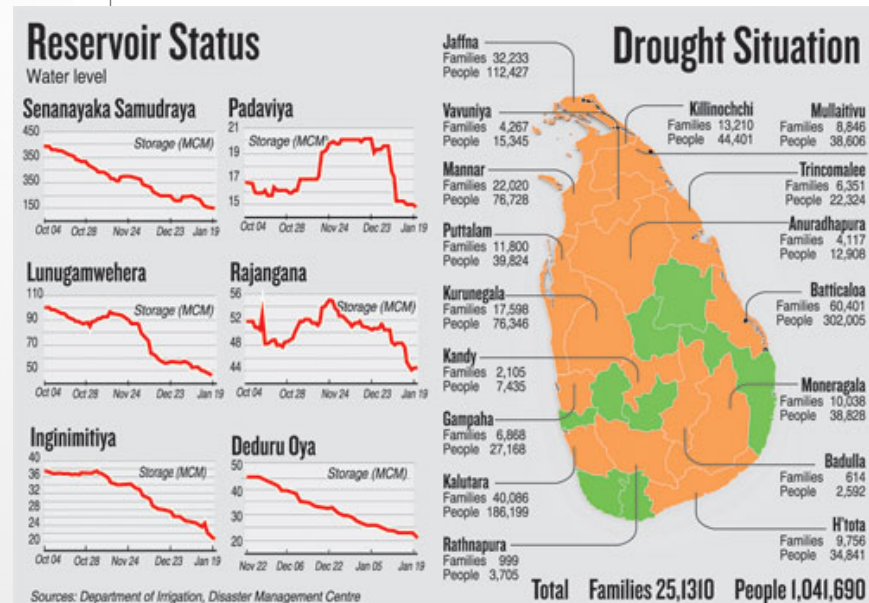
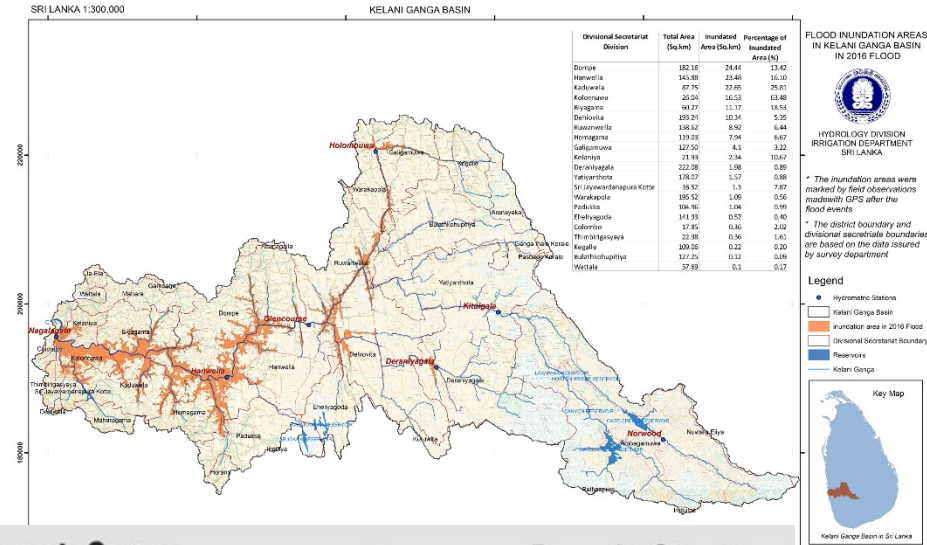
- Ministry of Irrigation and Water Resources & Disaster Management with Irrigation Department has started a detail study for critical 11 river basins covering almost one half of the country.
- The main task is to prepare an investment plan for these 11 river basins for mitigating flood and droughts considering climate change and future development scenarios.
- ID has initiated to study other basins too. However we expect international support in this regards.

River Basins Under Study for Flood Control and Water Resources



## 3. ECONOMIC EFFECT OF FLOOD AND DROUGHT DISASTERS

- Highly urbanized area of Kelani River went under flood in June 2016. Economic Damage was estimated to be 100 Billion LKR.
- In May 2017 severe flood attack mainly 5 river basins, Kalu, Gin, Nilvala, Kelani & Attanagalu Oya. The damage was estimated to be more than 150 Billion LKR.
- Need simple loss and damage estimation methods and train government staff on such exercises.
- Need to develop comprehensive and collaborative action plans for minimizing loss and damage caused by floods.



**Thank You All**