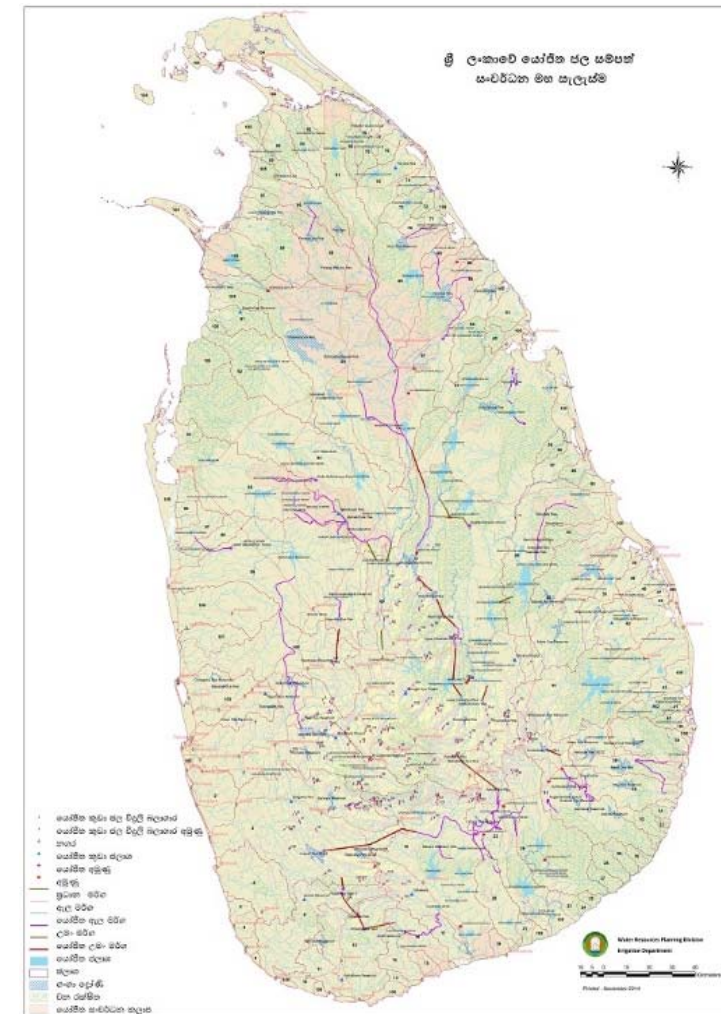
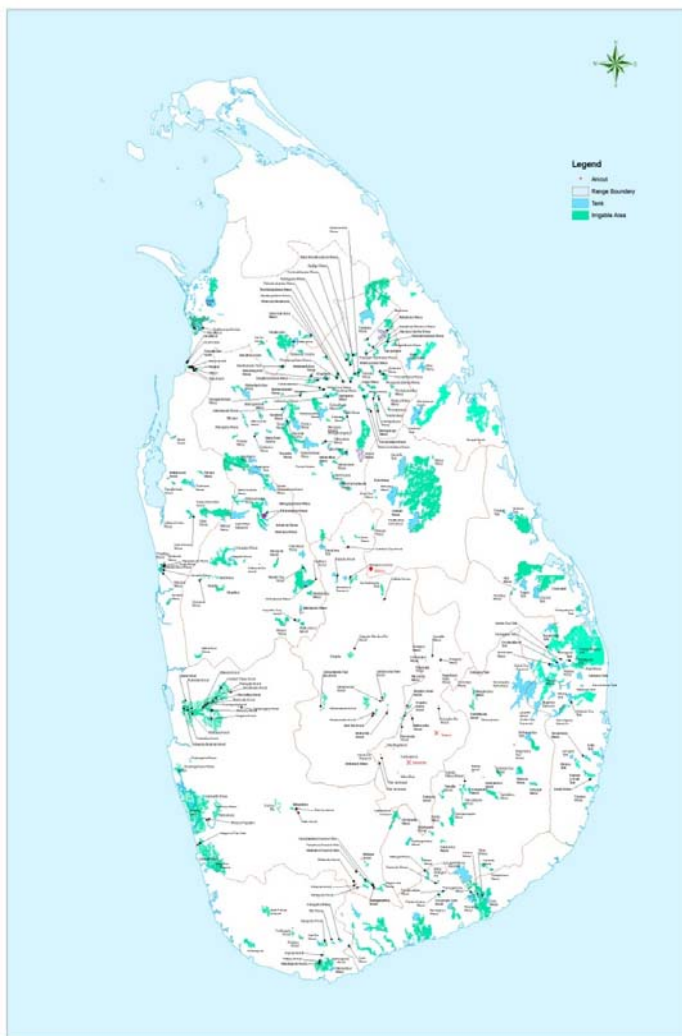


IRRIGATION DEPARTMENT – SRI LANKA

- The mandate of the department
 - ✓ Water Resources Development and Management of all 103 basins except Mahaweli declared area
 - ✓ Flood Management in all river basins



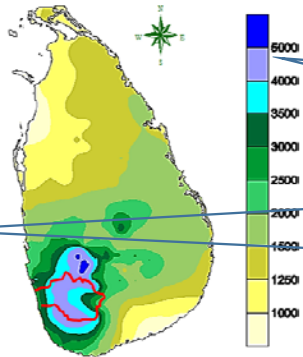
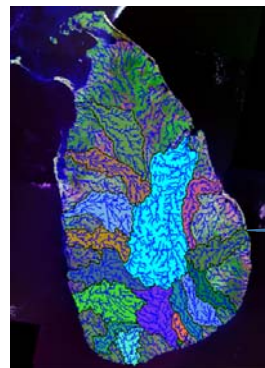
Flood Profile in Sri Lanka



Geographical location of Sri Lanka

Sri Lanka is highly a flood prone country due to geographical and metrological nature.

- Sri Lanka is consisting of 103 river basins
- Mahaweli is the largest with catchment area of 10,000 square kilometers.
- There are 4 river basins namely Kaluganga, Kelaniganga, Malwathu Oya, and Deduru Oya larger than 2000 square kilometers.
- 25 river basins are identified to be highly vulnerable for floods.



Extensive River network

High rainfall throughout the country



Ratnapura floods in 1st June 2003

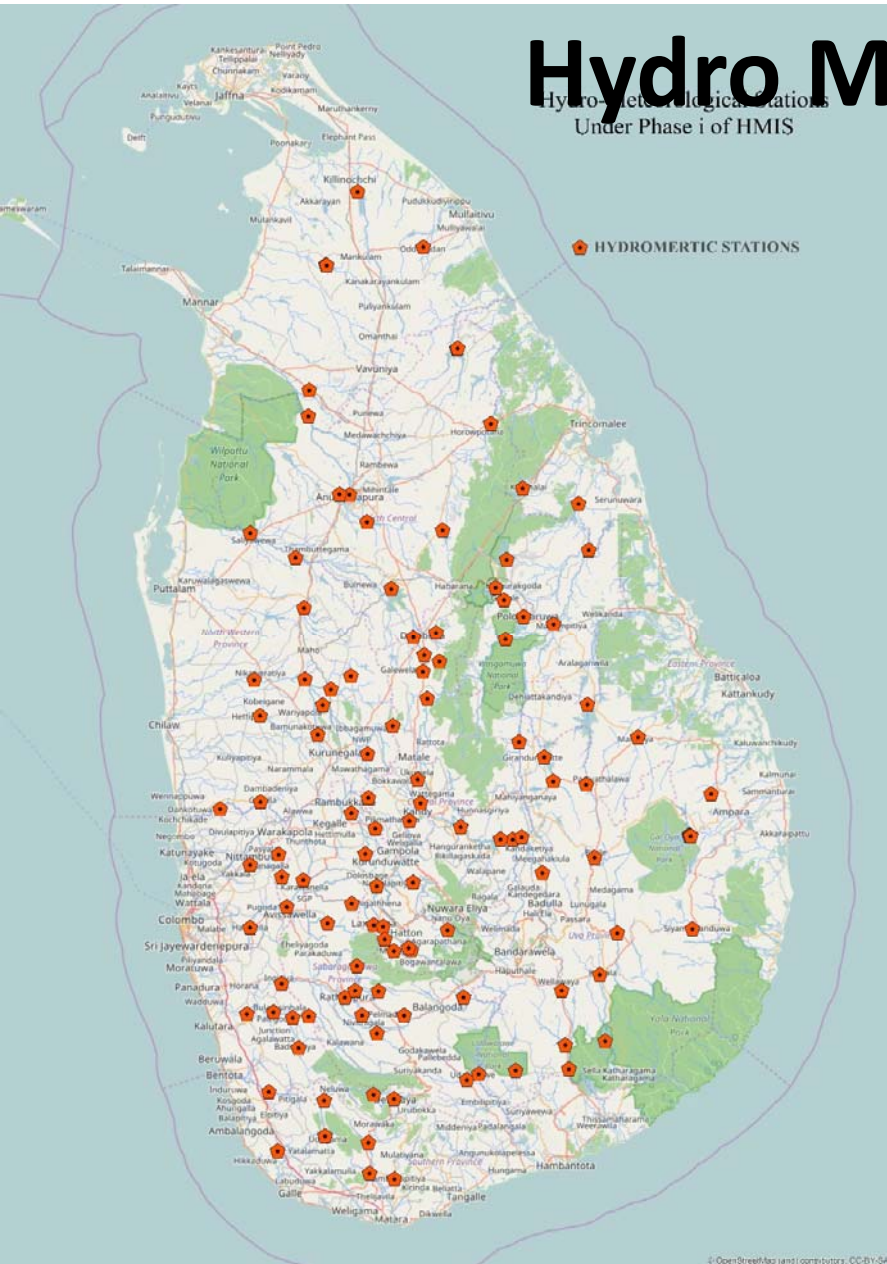
Batticaloa Floods in May 2011

Kelaniganga Floods in May 2016

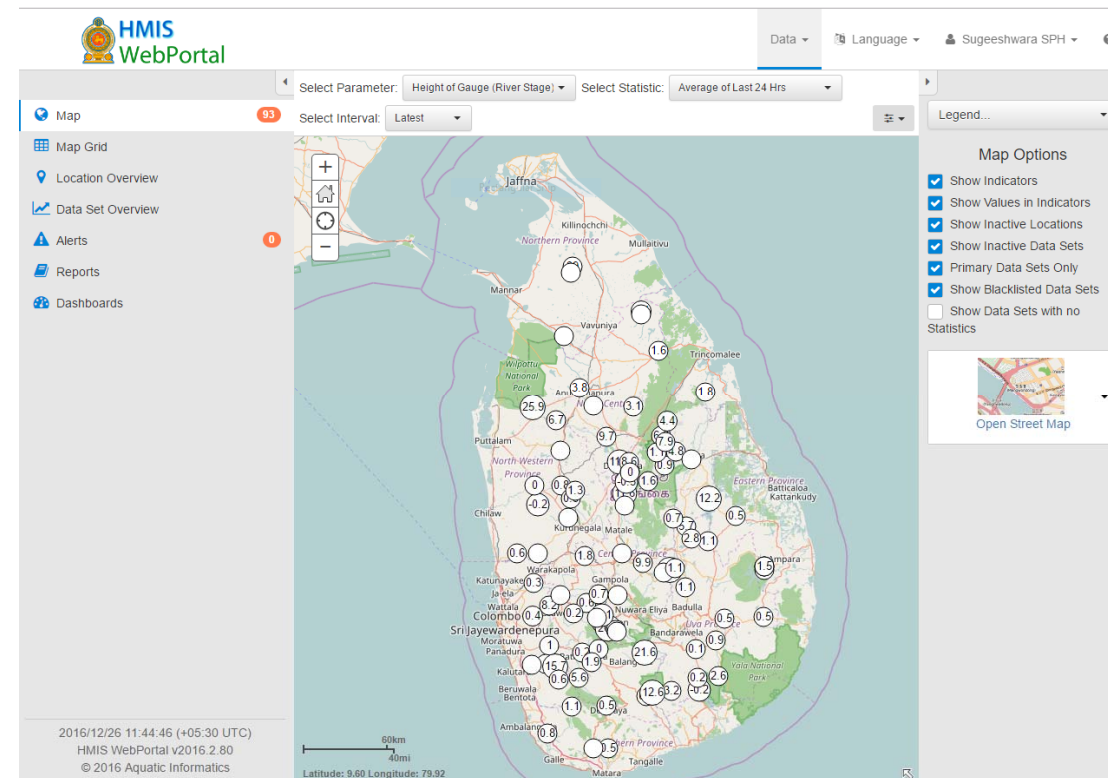
Ratnapura town June 2014

Hydro Metrological Information System

Hydro-metrological Stations
Under Phase I of HMIS

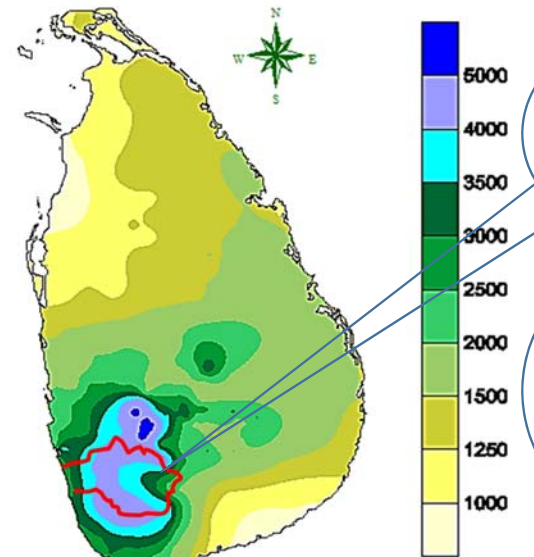


- Sri Lanka has a good hydro metrological monitoring system that has recently automated under HMIS project funded by World Bank.
- However good flood early warning systems are lacking in Sri Lanka



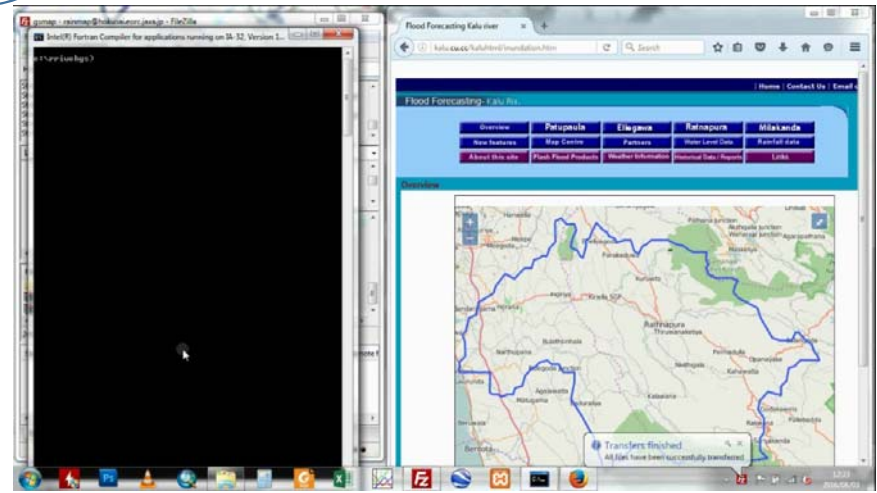
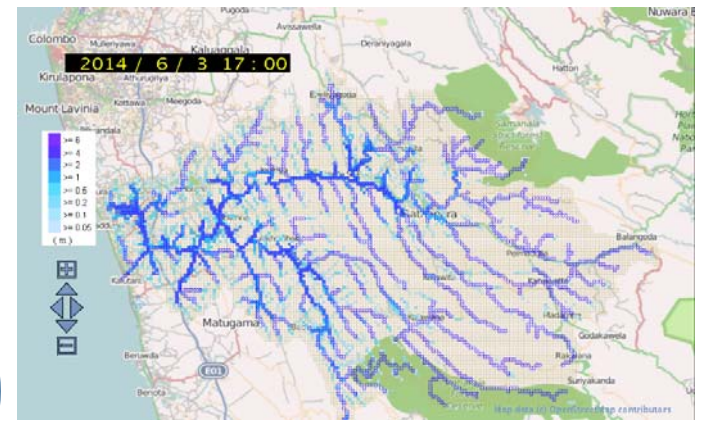
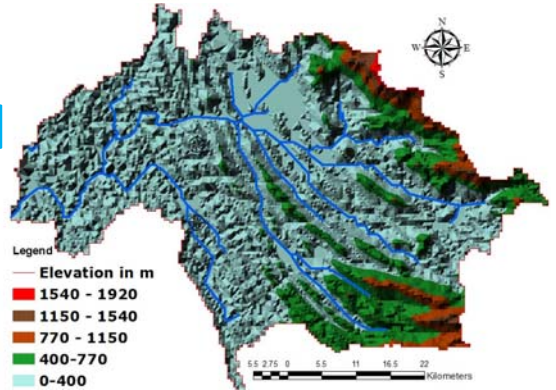
Flood early warning model is being developed for Kalu River basin under JAXA's SAFE initiatives with the Technical support of ICHARM.

- Kalu River basin is highly vulnerable for floods.
- It is planned to disseminate flood warning message through a web page developed for the purpose and possible flooded area map will be depicting in the web site.



Kalu River basin

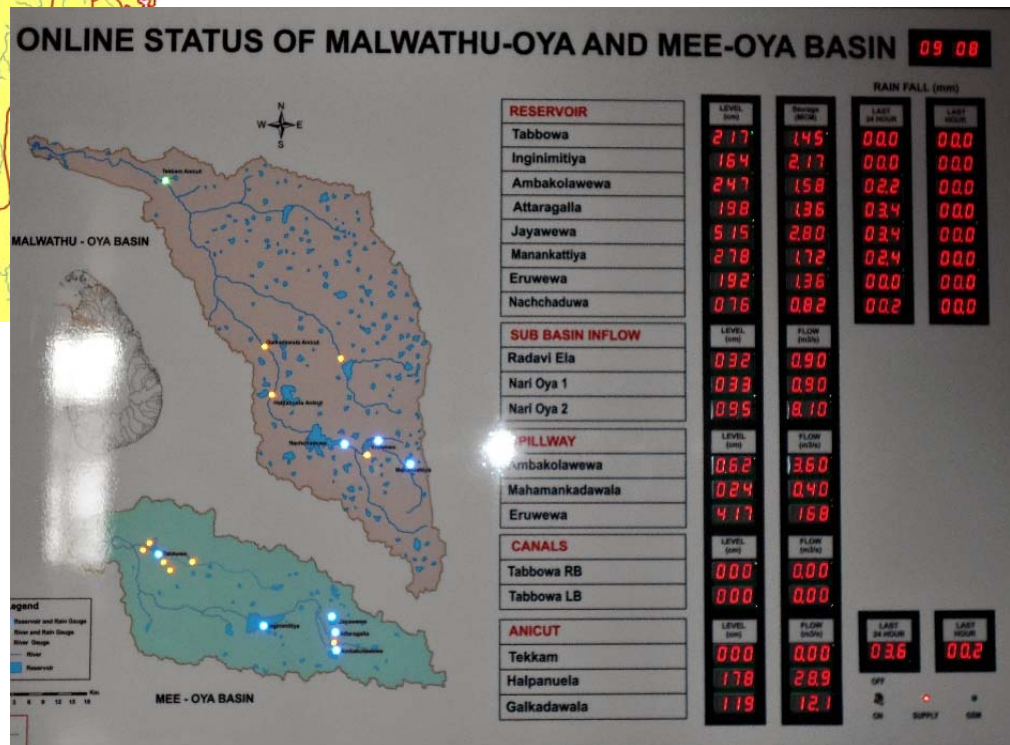
RRI model and Web Page



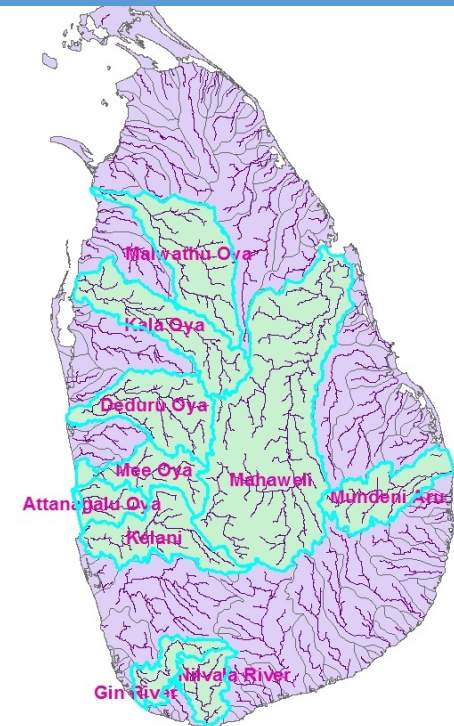
Present Projects

Just started as a Pilot Project – Malwathu oya & Mee Oya River Basins

Under this pilot project Rainfall data, Reservoir Water Level, Discharge data of Canal & River flow data is updated every minute and depicting at the Manager's room in a digital board and in the website

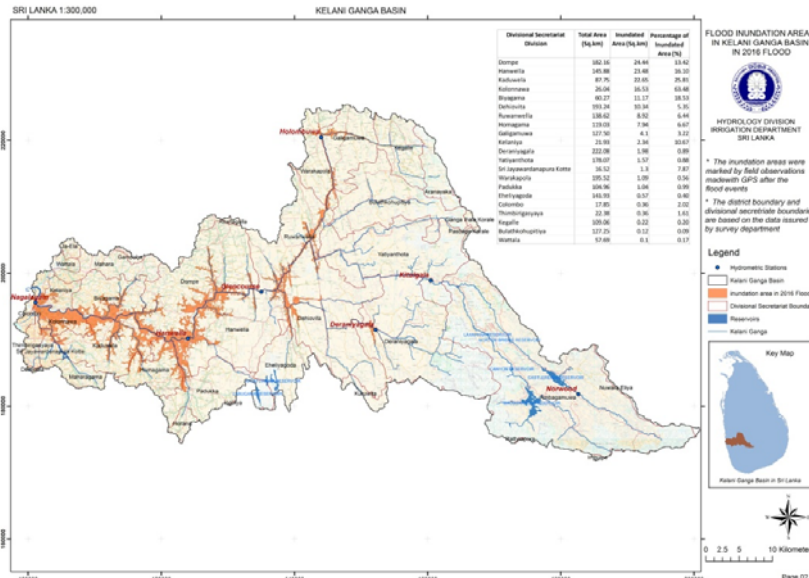


River Basins under study for Flood Management and Water Resources Development



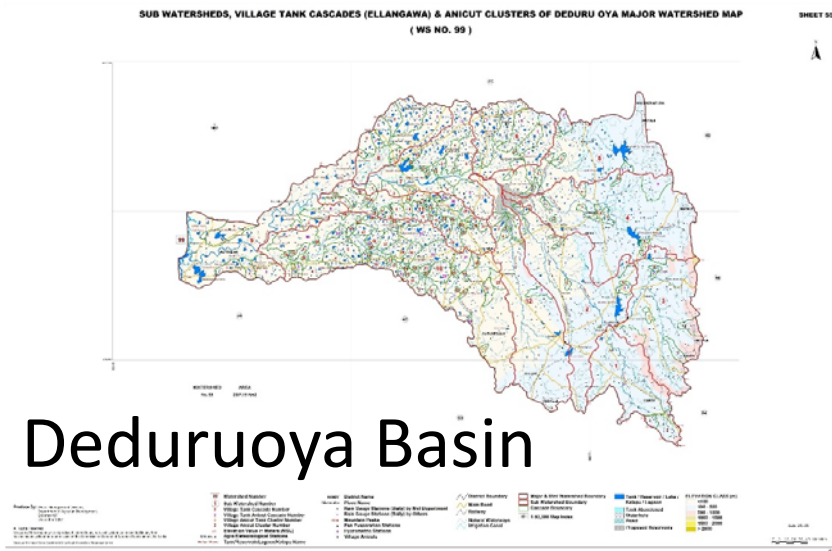
With the assistance of the World Bank 10 mostly critical river basins are being studied for flood and Drought Management

Kelani Ganga Basin Flood – 2016 May



Loss of Damages estimated as 100 billion SLR

Future Plan on River Basin Management



- Developing Real Time Observation with model studies to the Deduruoya basin with the assistance of University of Moratuwa, Sri Lanka
- Proposing separate management office for Kelani Ganga Basin as a Pilot program which is a vulnerable basin in Sri Lanka to bring all the stakeholders in one roof

What is needed to proceed the Future Plans

- Common Platform to bring all the institution involved in flood management
- Knowledge on different models and the skills to work on appropriate models
- Assistance to develop models and proper training to handle the models
- Necessary equipment to get the proper data and training to handle those equipment
- Exposure visits to the officers involved in this work to see what is happening around the world in this regards

Thank You!