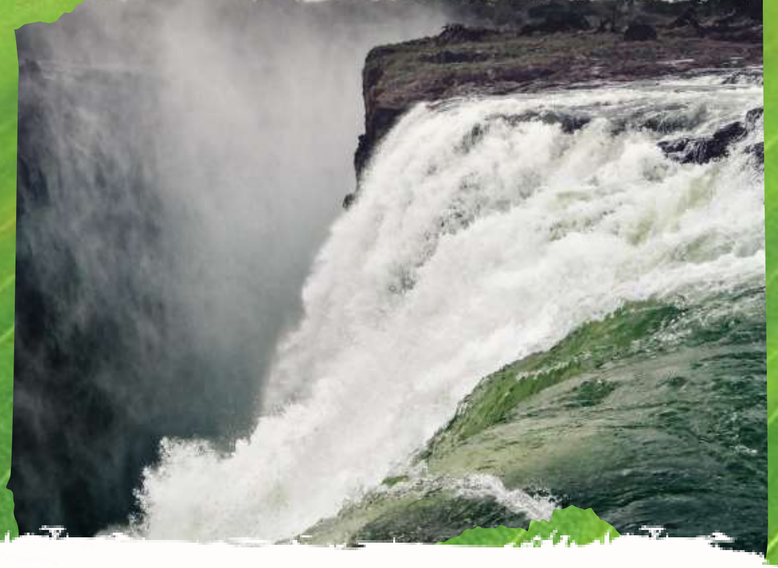


CASE STUDIES:

CLIMATE INFORMATION APPLICATION BENEFITS AND OF DEVELOPMENT INTERVENTIONS

Integrating

- ***SCIENCE***
- ***INSTITUTIONS***
- ***SOCIETIES***

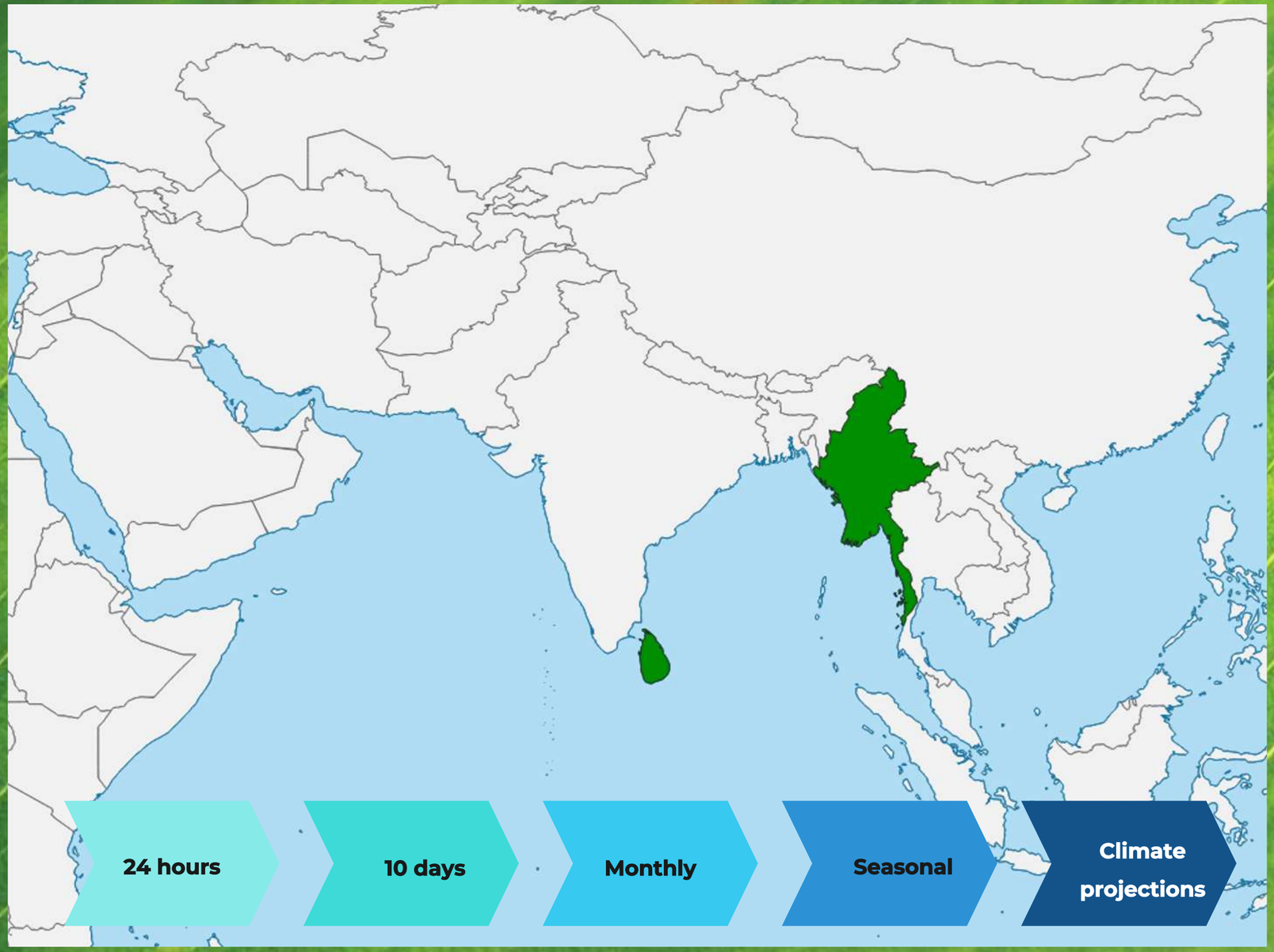
CLIMATE APPLICATIONS: A CAPACITY BUILDING PROCESS

CAPACITY BUILDING OF NMHSs and USER SECTORS

FEEDBACK AND INPUTS

SUSTAINED CO-DEVELOPMENT PROCESS OF TUNING SERVICES TO STAKEHOLDER DEMANDS/REQUIREMENTS

How did we start?



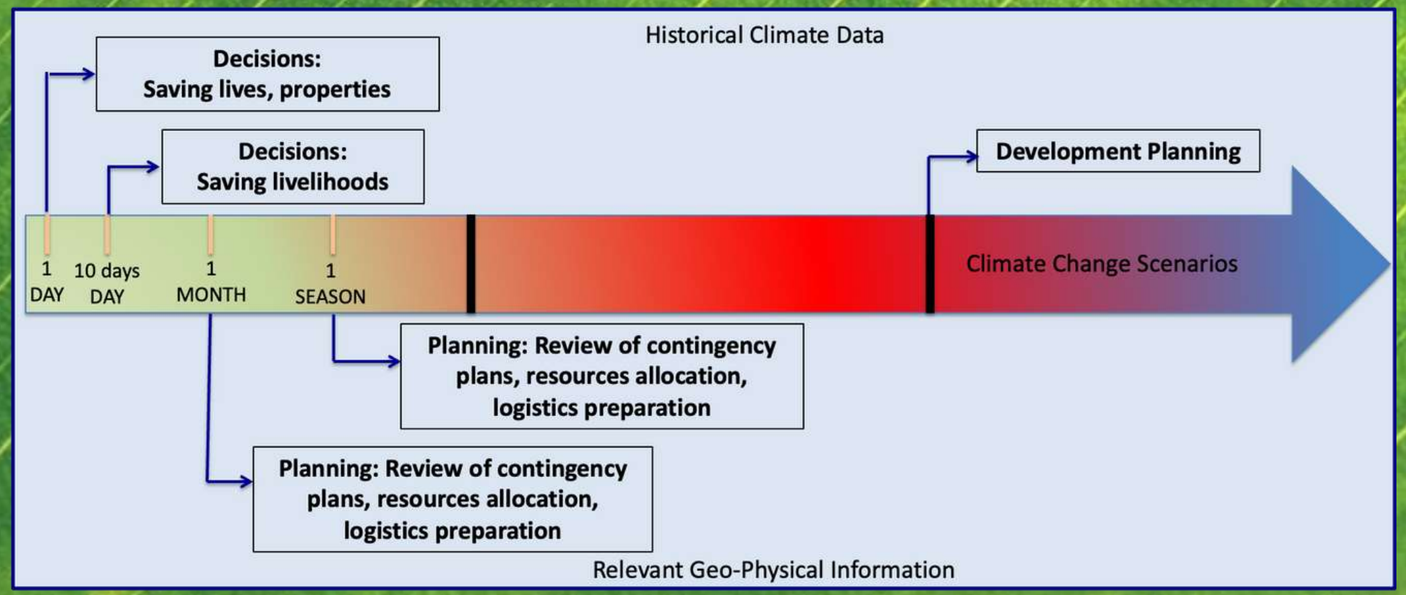
What is our strategy?

Anchored around climate seasons

Multi-hazard

Multi-timescales

Multi-timescales



INFORMED RESOURCES AND RISKS MANAGEMENT:

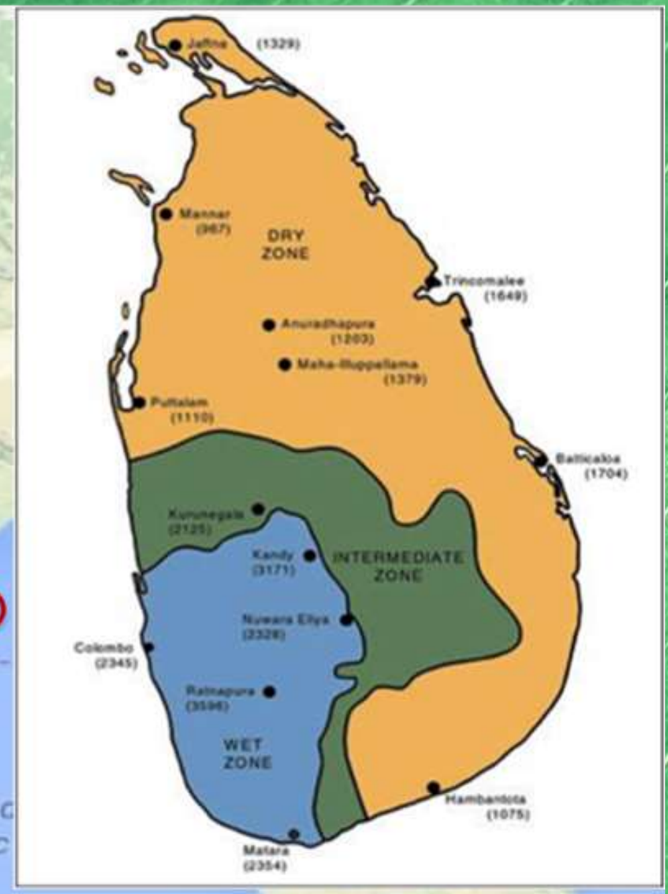
From Hazard to Resource: Cyclone Maarutha, April 2017, Myanmar

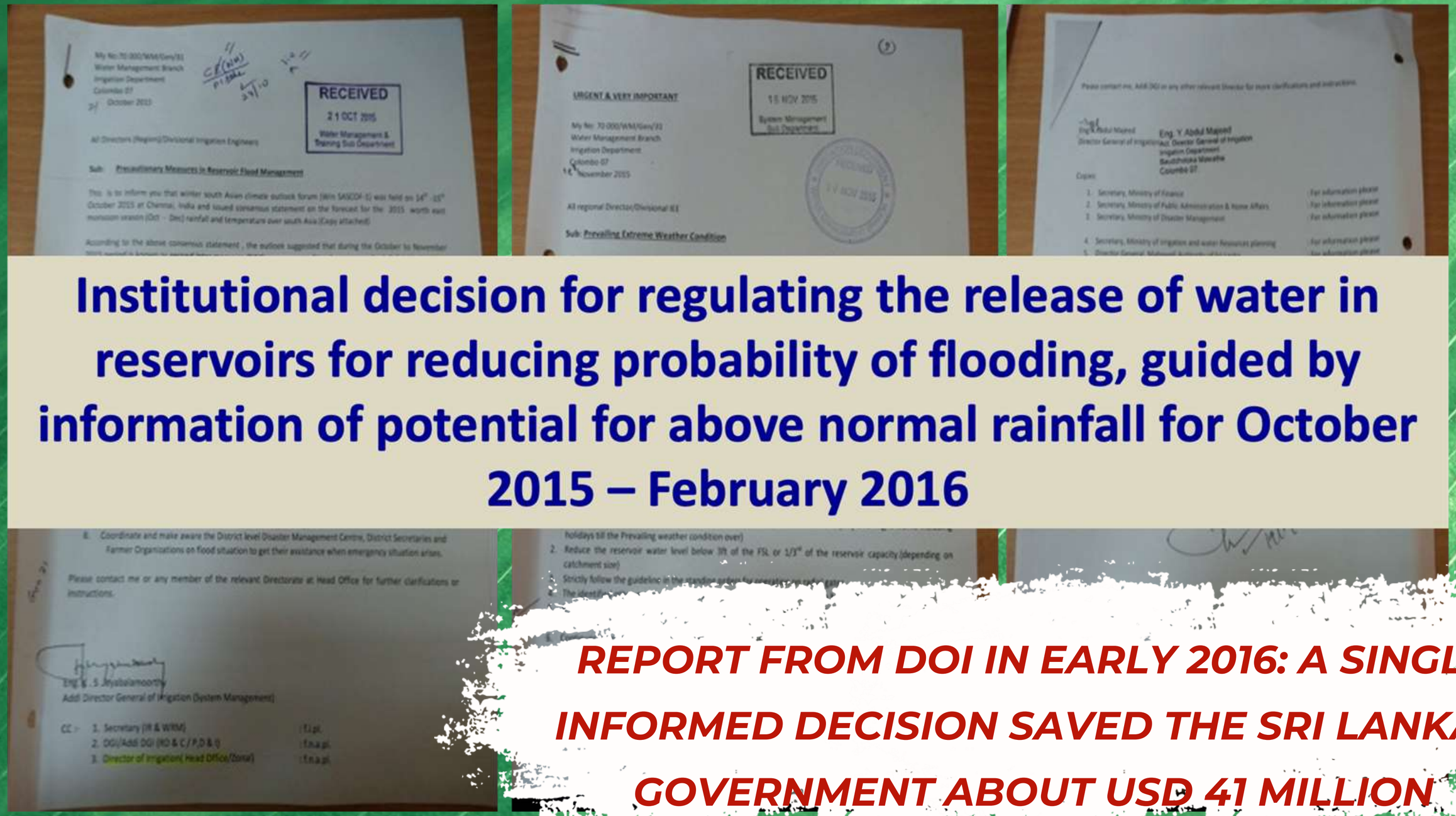
- April is typically a very dry month in Myanmar
- Farmers in the Central Dry Zone are usually drying harvested crops during the month
- Cyclone Maarutha formed in the Bay of Bengal on 15 April 2017, made a landfall in Myanmar's Rakhine Region on 16 April 2017, and started dissipating on 17 April 2017
- Timely receipt of information and provision of advisories by DOA officials and extension workers, through SESAME, not only enabled farmers in the CDZ to save their harvested crops from being damaged, but also enabled them to immediately prepare farm inputs and facilitate early planting of 3-month variety of sesame
  - planted in mid-April, instead of the usual mid-May
  - recorded good harvest in July; first good harvest in 7 years

INFORMED RESOURCES AND RISKS MANAGEMENT:

Circumventing El Nino impacts into economic gains – examples from Sri Lanka

- 2014 Yala Season: productivity in Sri Lanka's Batticaloa District (dry zone) despite 2 consecutive seasons of suppressed rainfall
- 2015 Yala Season: 96% cultivation rate despite extended dry spells and suppressed rainfall
  - 23% increase against 5-year Yala season average
  - Increase in cultivation of other field crops compared to 2014 Yala Season
- October 2015 – February 2016: managing reservoirs for reducing flood events – savings of USD 41 Million





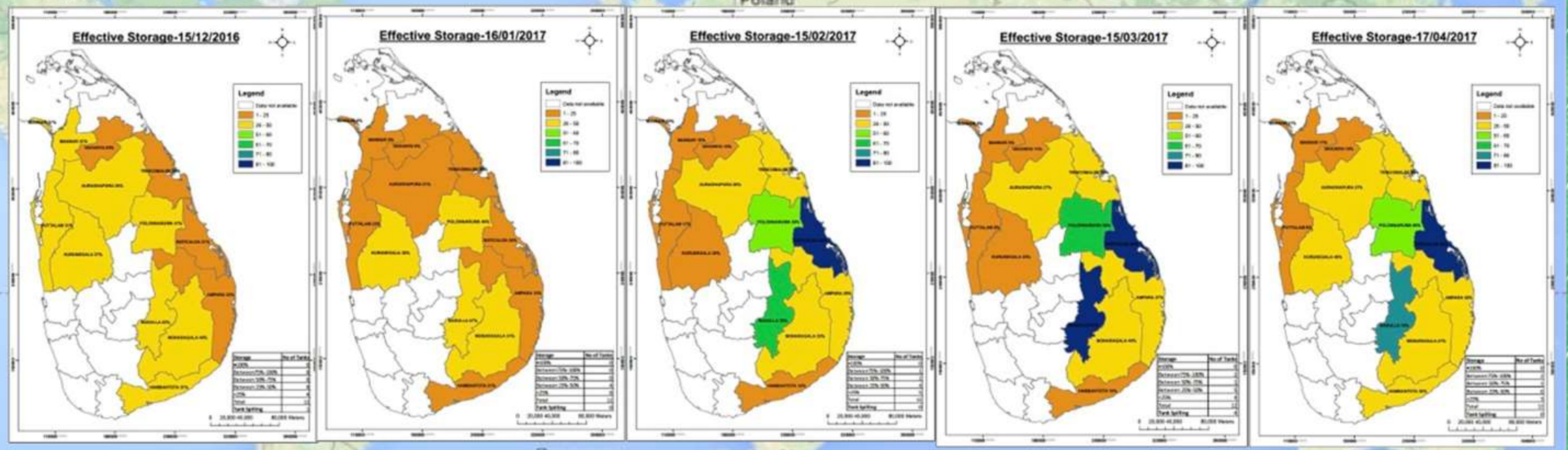
Institutional decision for regulating the release of water in reservoirs for reducing probability of flooding, guided by information of potential for above normal rainfall for October 2015 – February 2016

REPORT FROM DOI IN EARLY 2016: A SINGLE INFORMED DECISION SAVED THE SRI LANKAN GOVERNMENT ABOUT USD 41 MILLION

INFORMED RESOURCES AND RISKS MANAGEMENT:

Reducing impacts of extreme climate events: 2016-2017 drought

✦**October 2016-mid-May 2017: extreme water deficit in many areas in Sri Lanka, resulting to widespread drought**



Data reported by Department of Irrigation, Sri Lanka
15th Monsoon Forum, Colombo

INFORMED RESOURCES AND RISKS MANAGEMENT:

Reducing impacts of extreme climate events: 2016-2017 drought

- Based on analysis of available water in reservoirs and tanks, and forecast from DOM, DOA and DOI issued advisories to farmers for:
  - reduction of land preparation period for optimizing benefits from intermittent rainfall for crop planting
  - limiting cultivation extent to what can be supported by available water, considering higher probability of below normal rainfall for *Maha* cultivation season
  - cultivation of short-duration, drought-resistant varieties
  - foregoing cultivation in water-critical areas
  - utilization of tank storages for crop growth only, and not for replanting

Losses in farmer investments were significantly reduced; reports on crop casualties were not as high as in other major drought events

SCIENCE

INSTITUTIONS

SOCIETIES