



Map Atlas

In support of the Funding Proposal submitted to the Green Climate Fund (GCF) by Sri Lanka on “Strengthening Climate Resilience for Subsistence Farmers and Agricultural Plantation Communities Residing in the Vulnerable River Basins, Watershed Areas and Downstream of the Knuckles Mountain Range Catchment of Sri Lanka”

IUCN Sri Lanka Country Office
December 2018

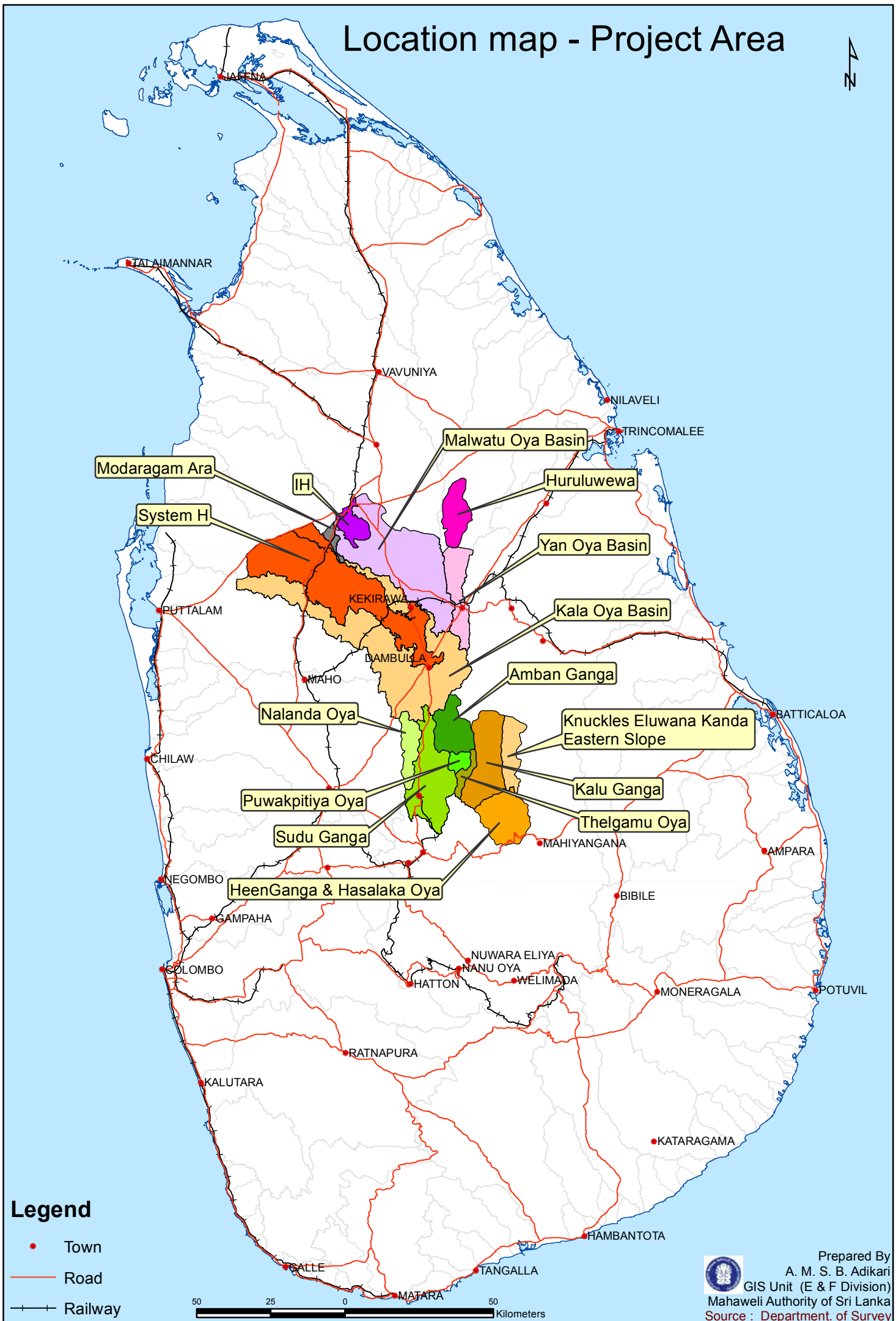
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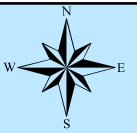
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Location map - Project Area

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


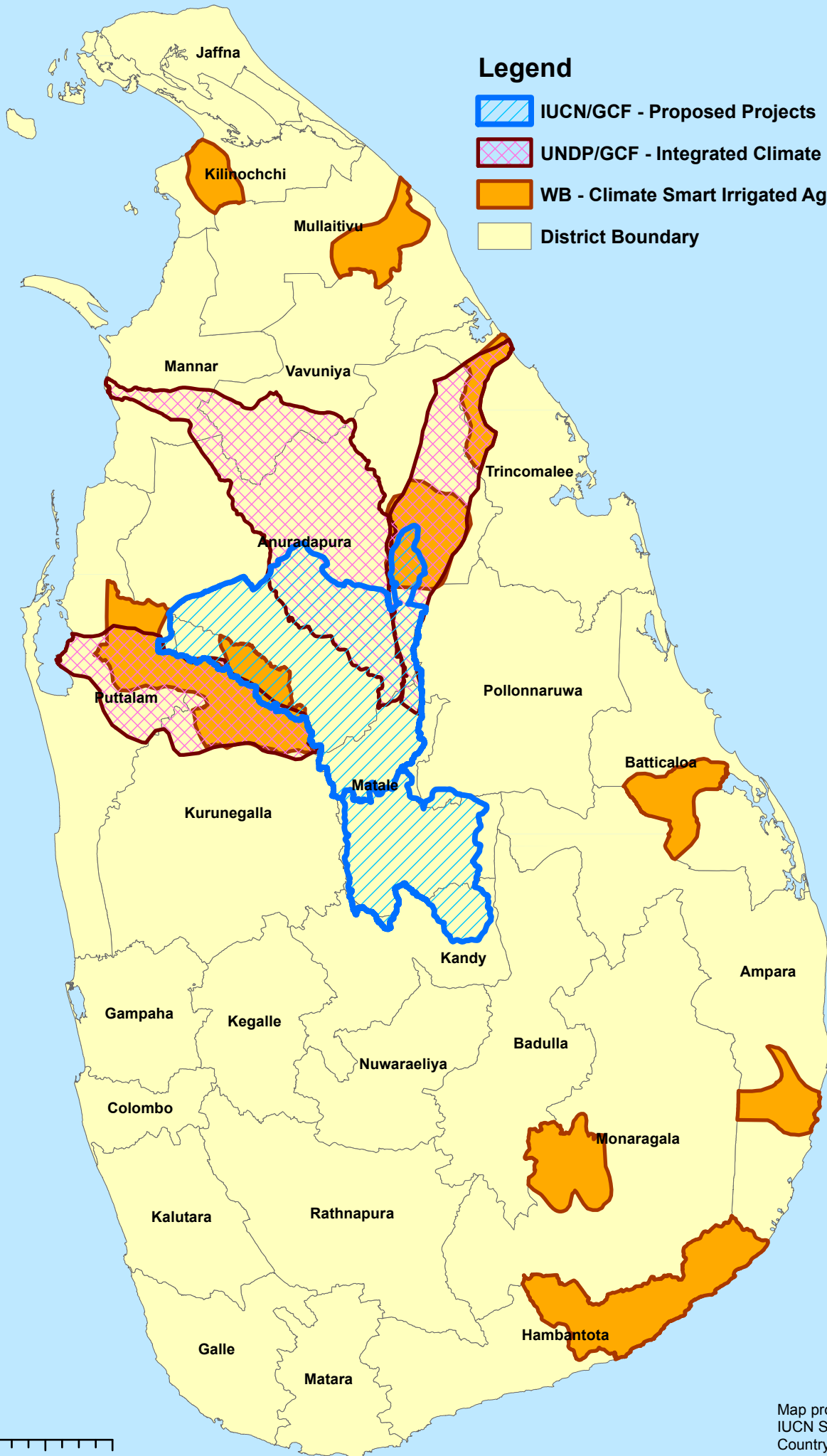
Complementary Projects



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Legend

-  IUCN/GCF - Proposed Projects
-  UNDP/GCF - Integrated Climate Resilient Project
-  WB - Climate Smart Irrigated Agriculture Project
-  District Boundary

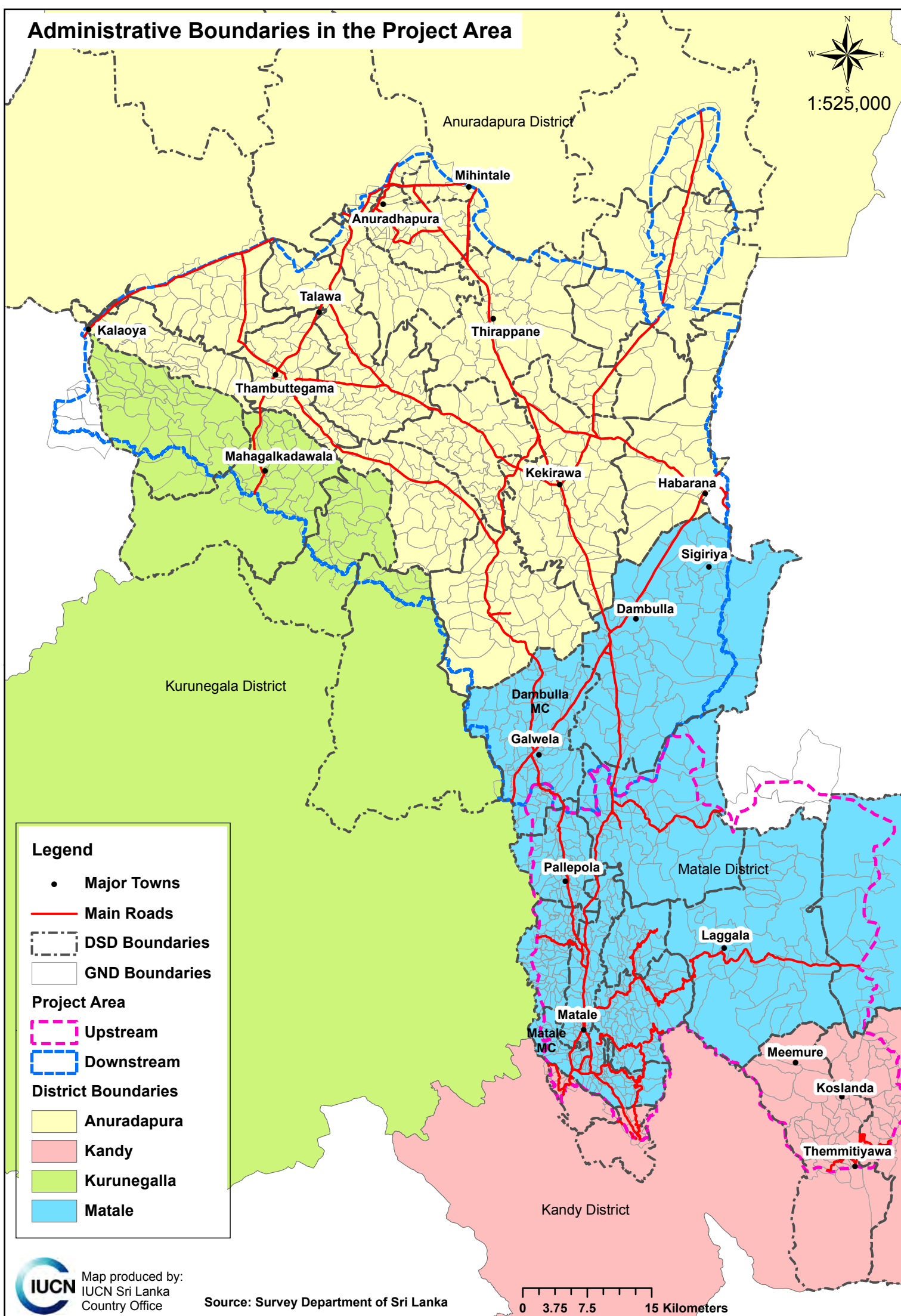


0 10 20 40 Kilometers

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Administrative Boundaries in the Project Area



Legend

- Major Towns
- Main Roads
- - - DSD Boundaries
- GND Boundaries

Project Area

- - - Upstream
- - - Downstream

District Boundaries

- Anuradapura
- Kandy
- Kurunegalla
- Matale

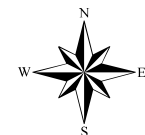


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Source: Survey Department of Sri Lanka

0 3.75 7.5 15 Kilometers

Sub-basins, Meteorological stations and elevation map in upstream and downstream areas



1:525,000



- Meteorological Stations
- Subwatershed Boundaries
- Water Bodies

Elevation(m)

- 20
- 20 - 500
- 500 - 750
- 750 - 1000
- 1000 - 1250
- 1250 - 1500
- 1500 - 1570
- 1570 - 2000

0 3.5 7 14 Kilometers

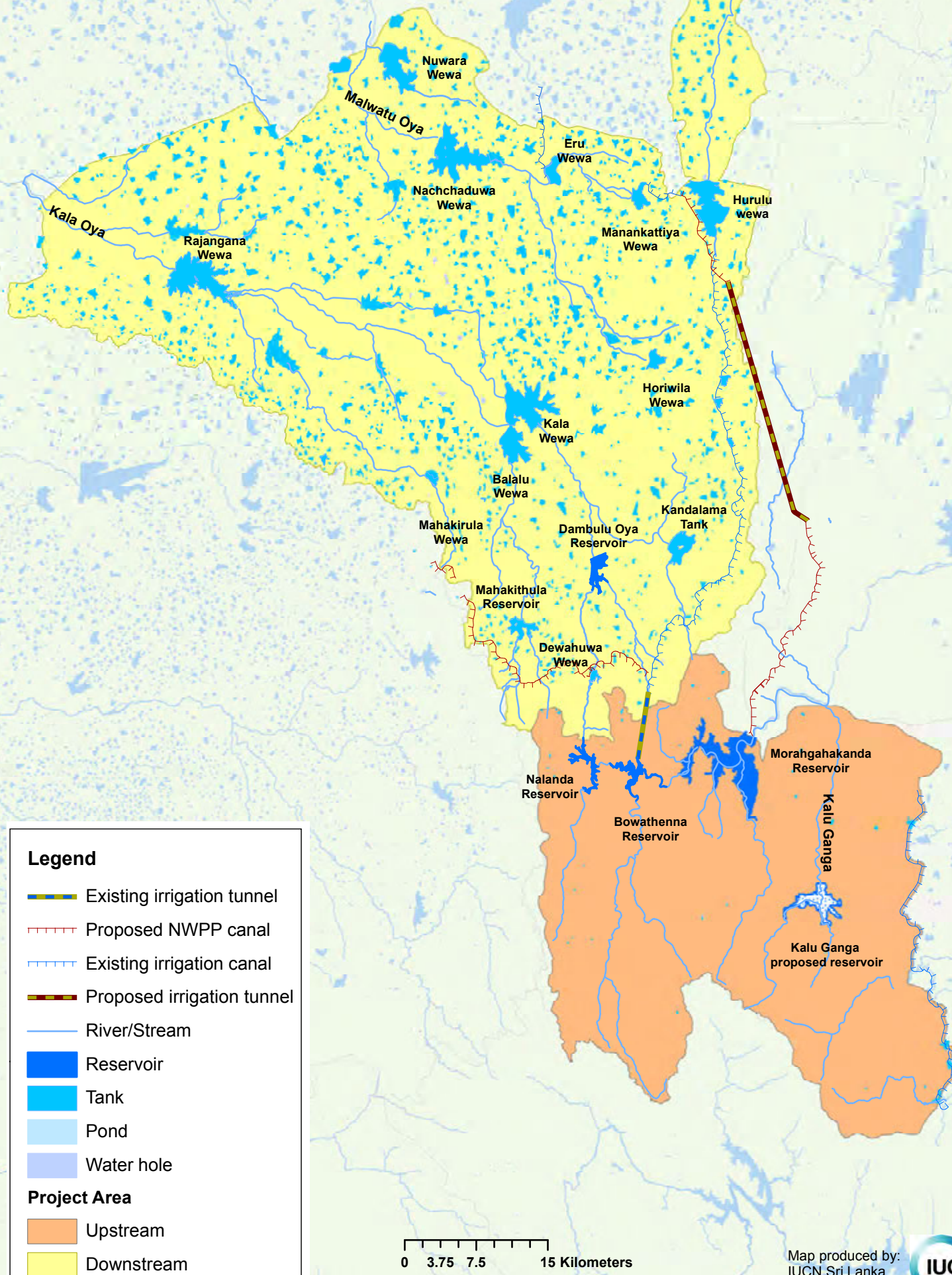
Source: Department of Agrarian Development
Survey Department of Sri Lanka

Map produced by:
IUCN Sri Lanka
Country Office

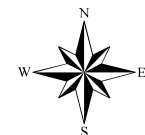


Water resources and water infrastructure in the project area

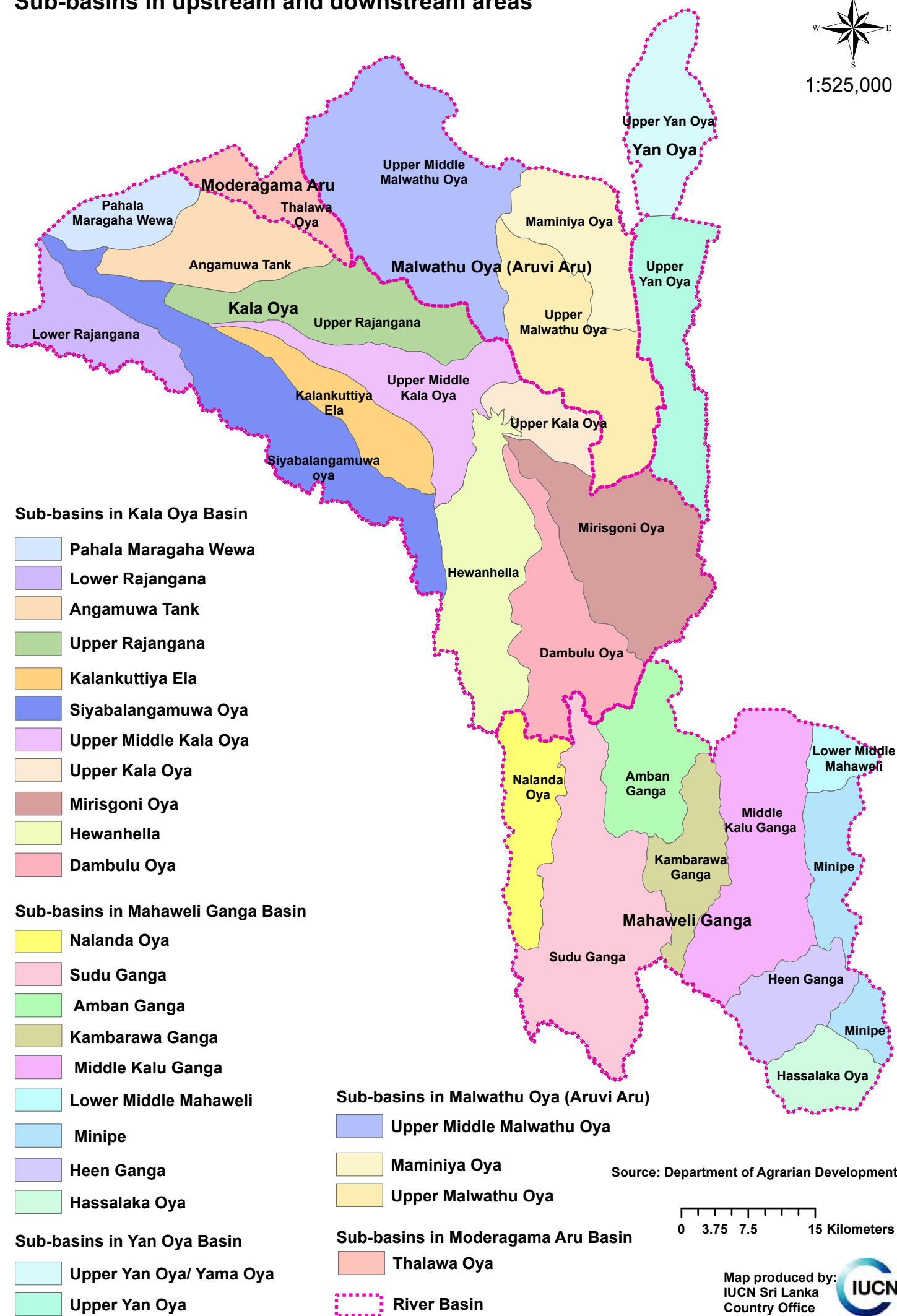
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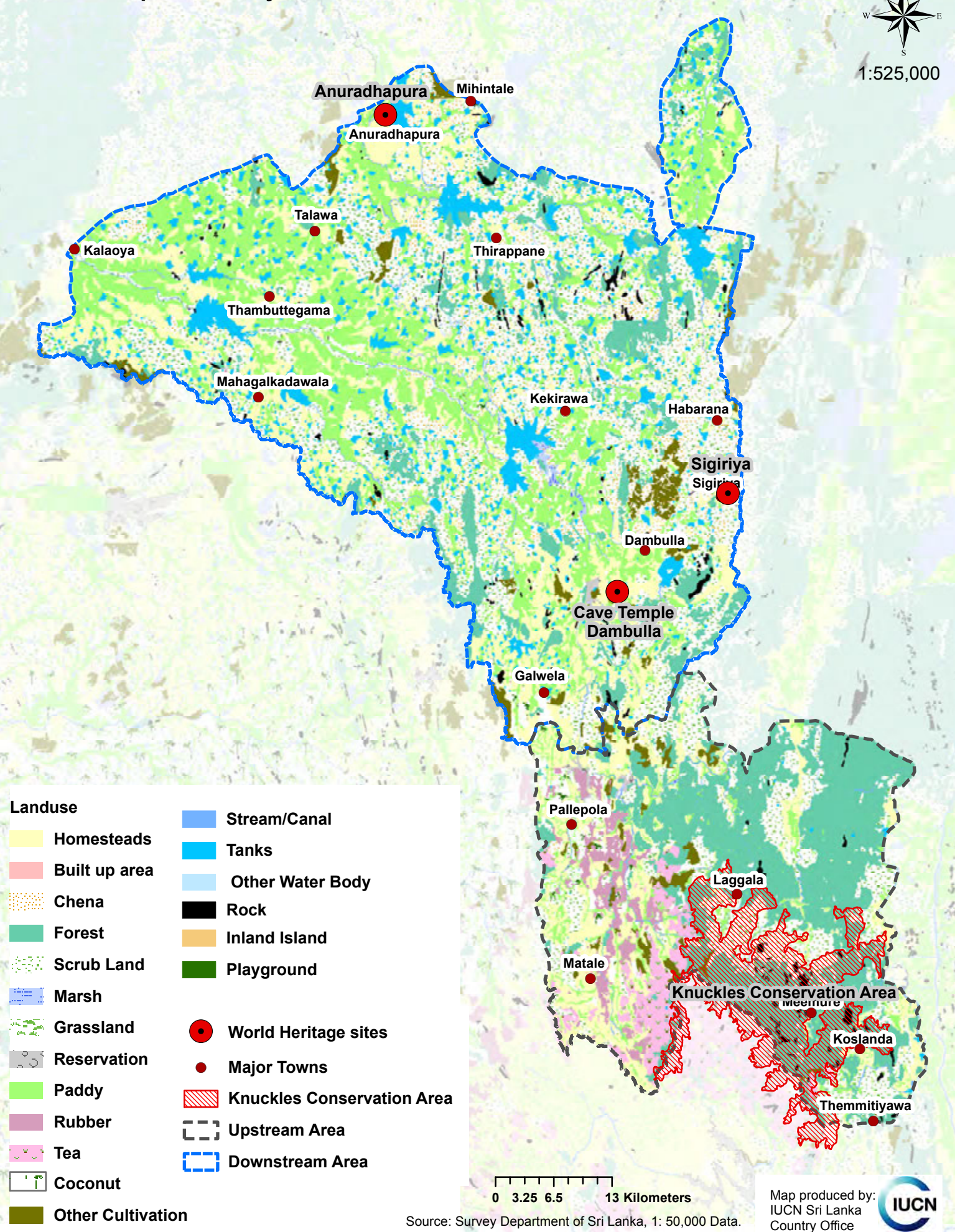
Sub-basins in upstream and downstream areas



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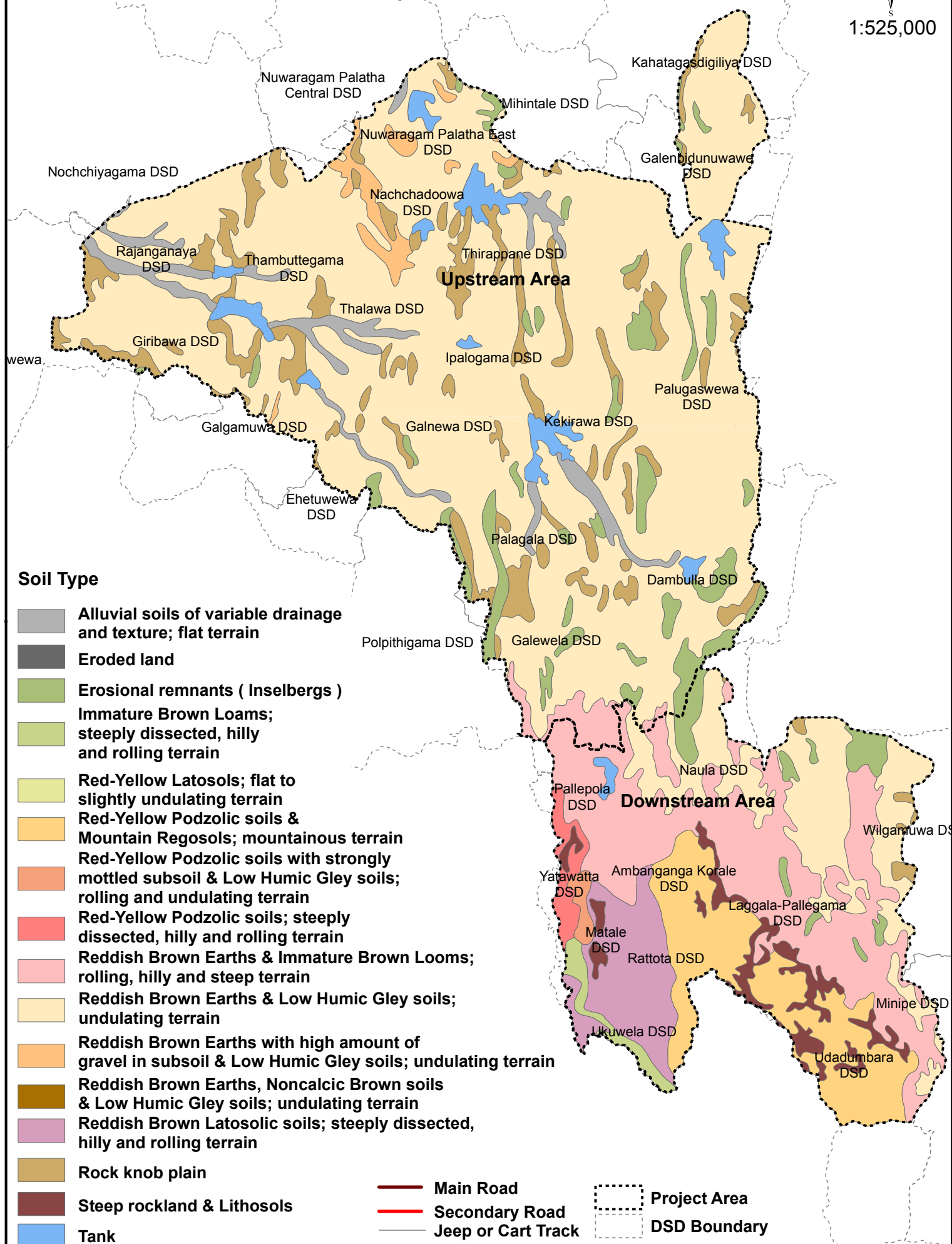


Landuse Map in the Project Area

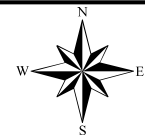


Soils and Distribution within the project area

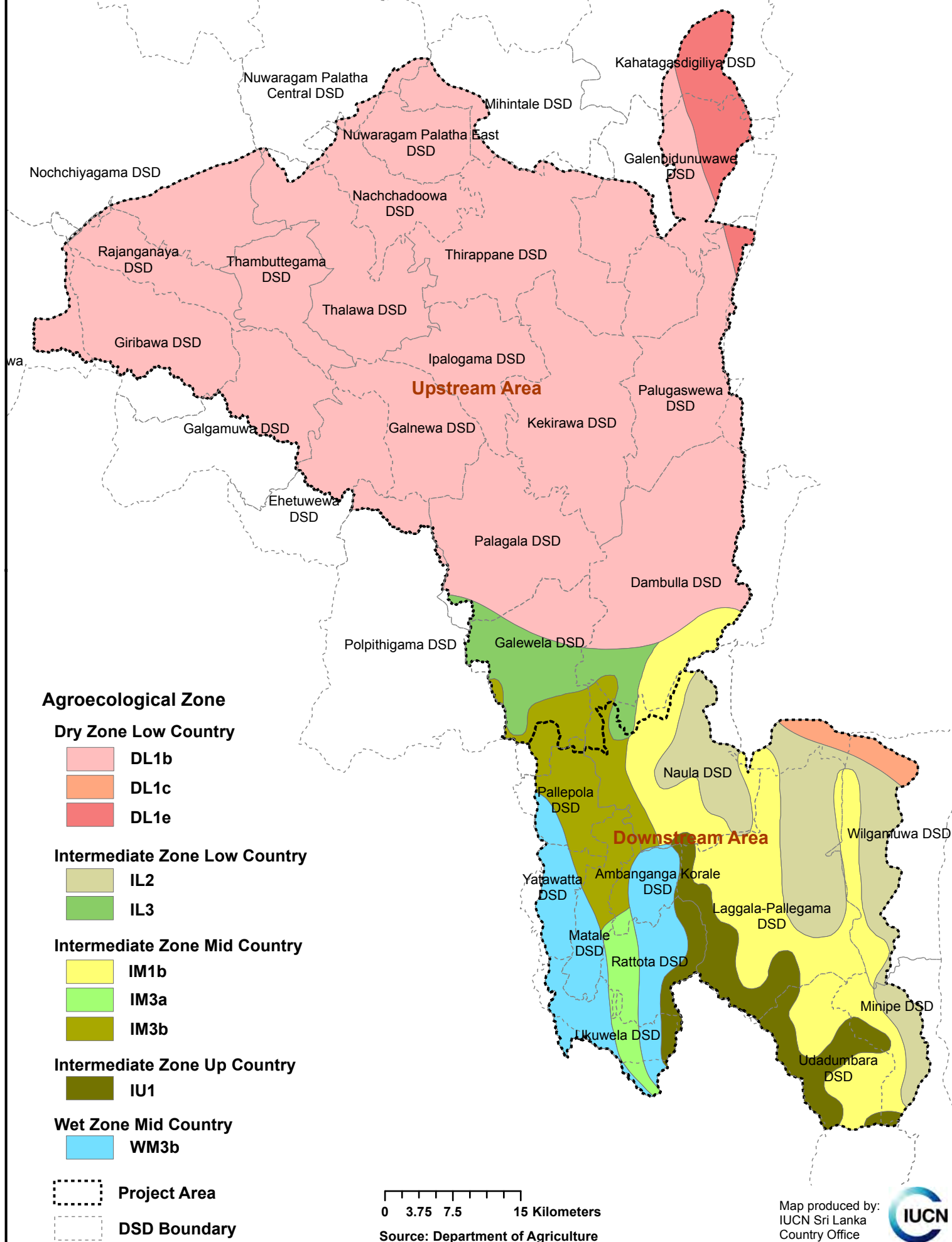
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Agro Ecological Regions within the Project Area



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Protected Areas



Mihintale Sanctuary
Anuradhapura Sanctuary

Anuradhapura

Lunu Oya F.R.

Alutabendawewa P.R.

Yoda Ela F.R.

Ritigala Strict nature reserve

Tabbowa Sanctuary

Likolawewa F.R.

Sigiriya Sanctuary

Sigiriya

Inamaluwa F.R.

Block 3 Nature reserve

Kahalla-Pallekele Sanctuary

Pelwehera F.R.

Cave Temple Dambulla

Block 4 Nature reserve

Wasgamuwa National Park

Pallekele F.R.

Elagomuwa P.R.

Legend

- World Heritage Sites
- Knuckles Conservation Area
- Reservoir
- Tank
- National Park
- Nature Reserve
- Sanctuary
- Strict Nature Reserve
- Existing Forest Reserve
- Existing irrigation canal
- River/Stream
- Proposed Reservoir
- Project Area**
 - Upstream
 - Downstream

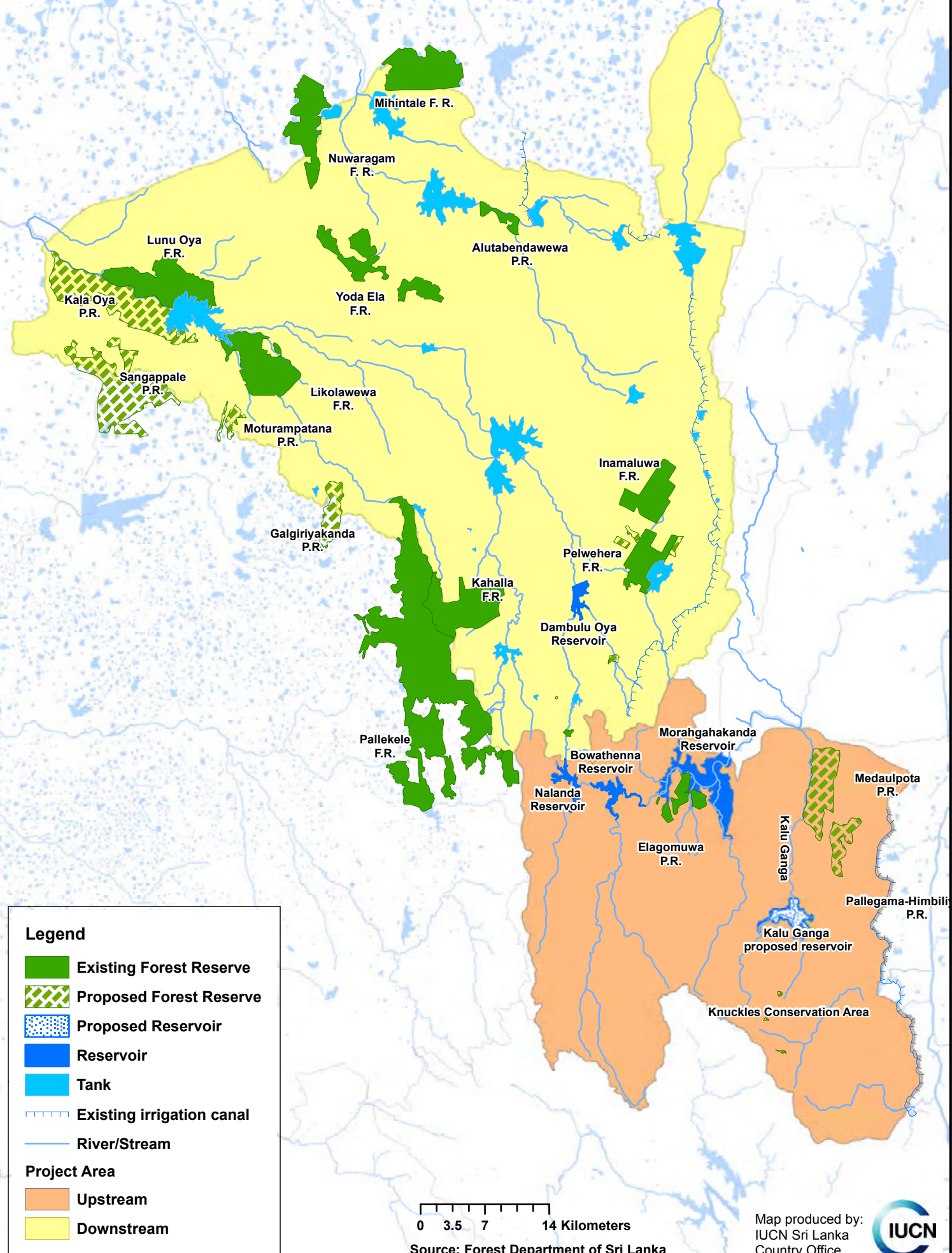
0 3.75 7.5 15 Kilometers

Source: Department of Wildlife Conservation

Map produced by:
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Country Office

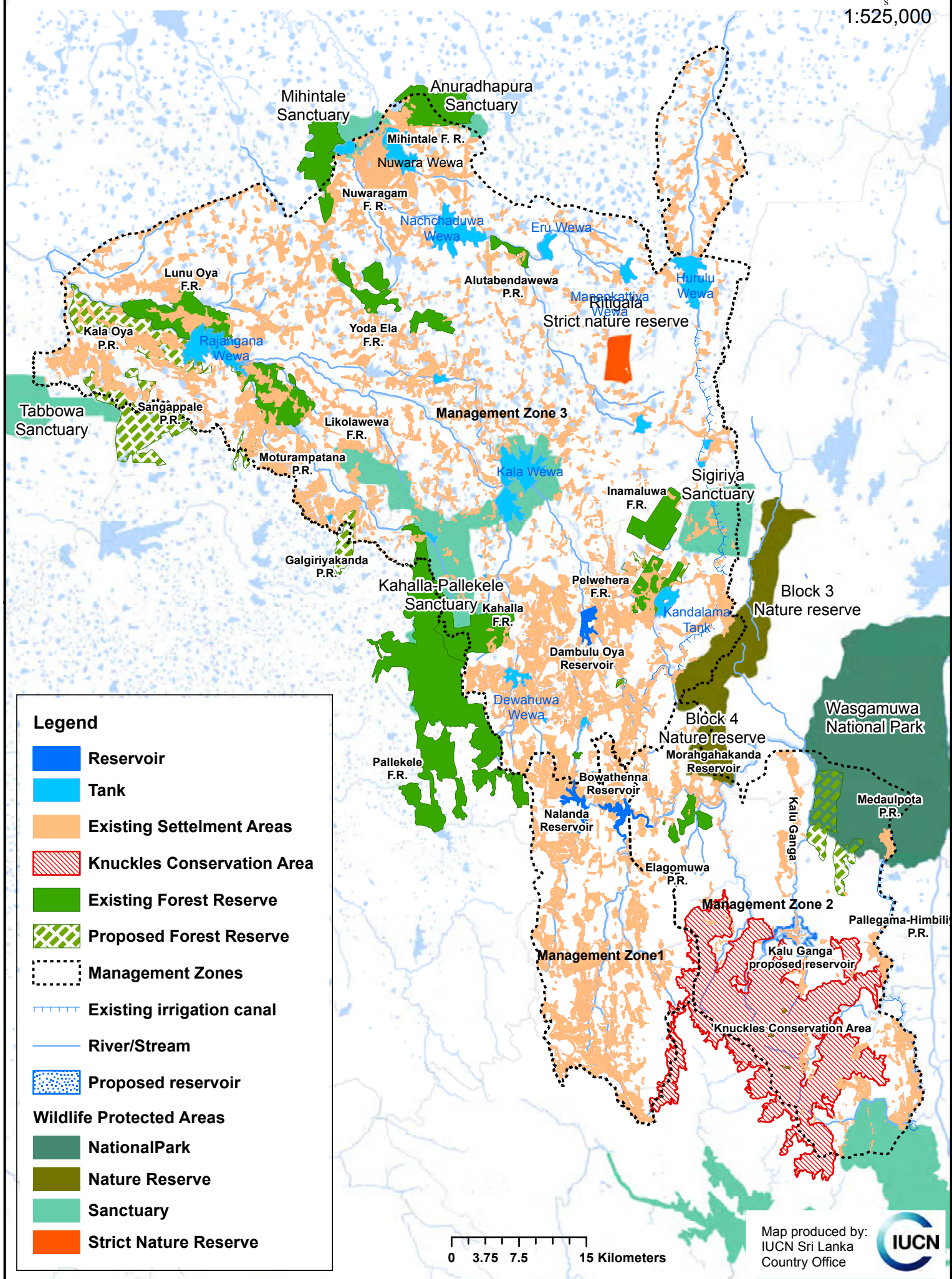


Existing Forest Reserves and Proposed Forest Reserves

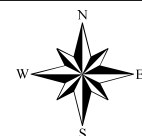


Existing Protected Areas, Proposed Protected Areas and Settlement Areas

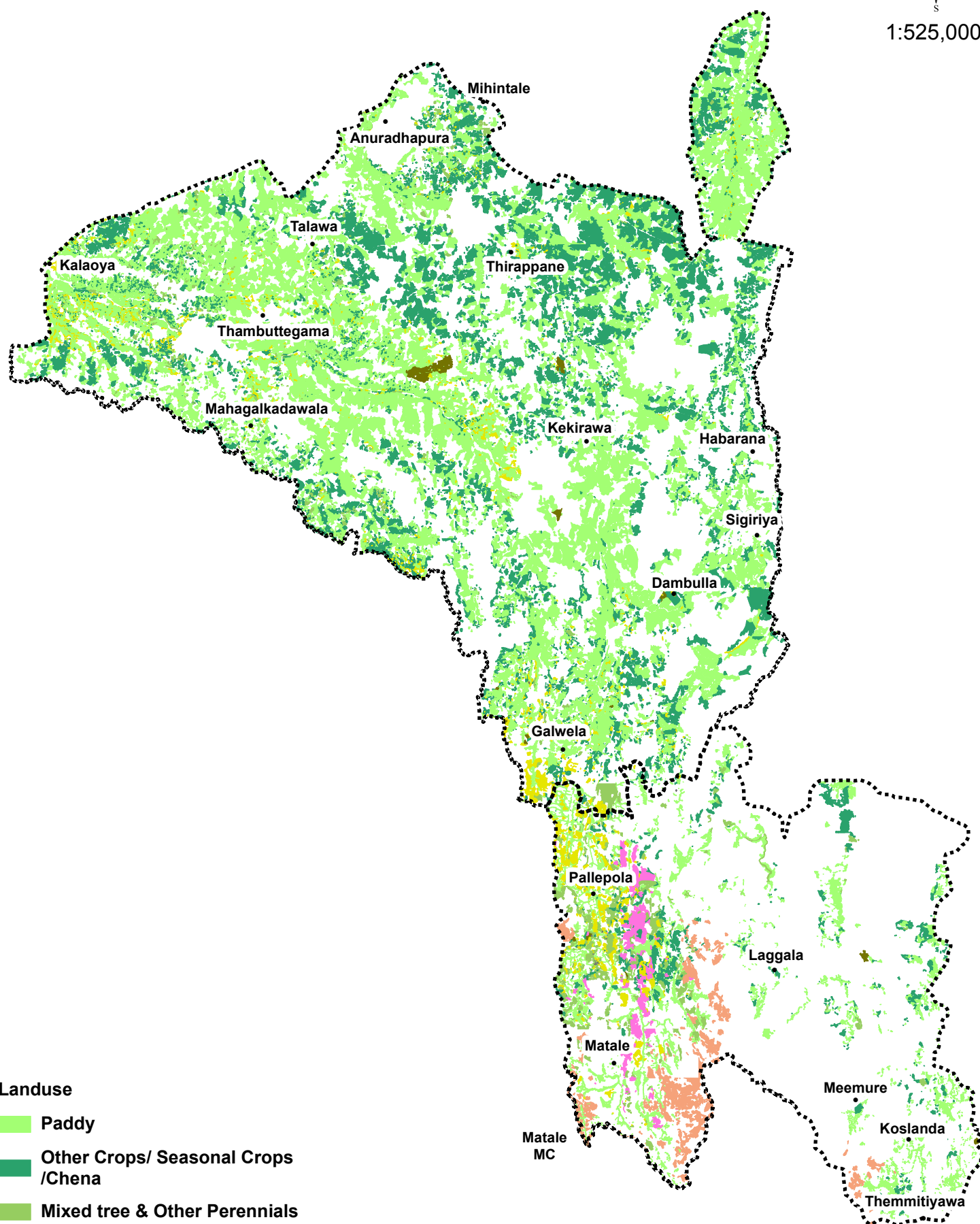
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Agricultural Areas in the Project Area



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Landuse

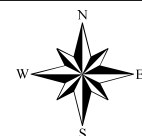
- Paddy
- Other Crops/ Seasonal Crops /Chena
- Mixed tree & Other Perennials
- Agricultural Farms
- Live Stock Farms
- Tea
- Coconut
- Rubber

0 3.75 7.5 15 Kilometers

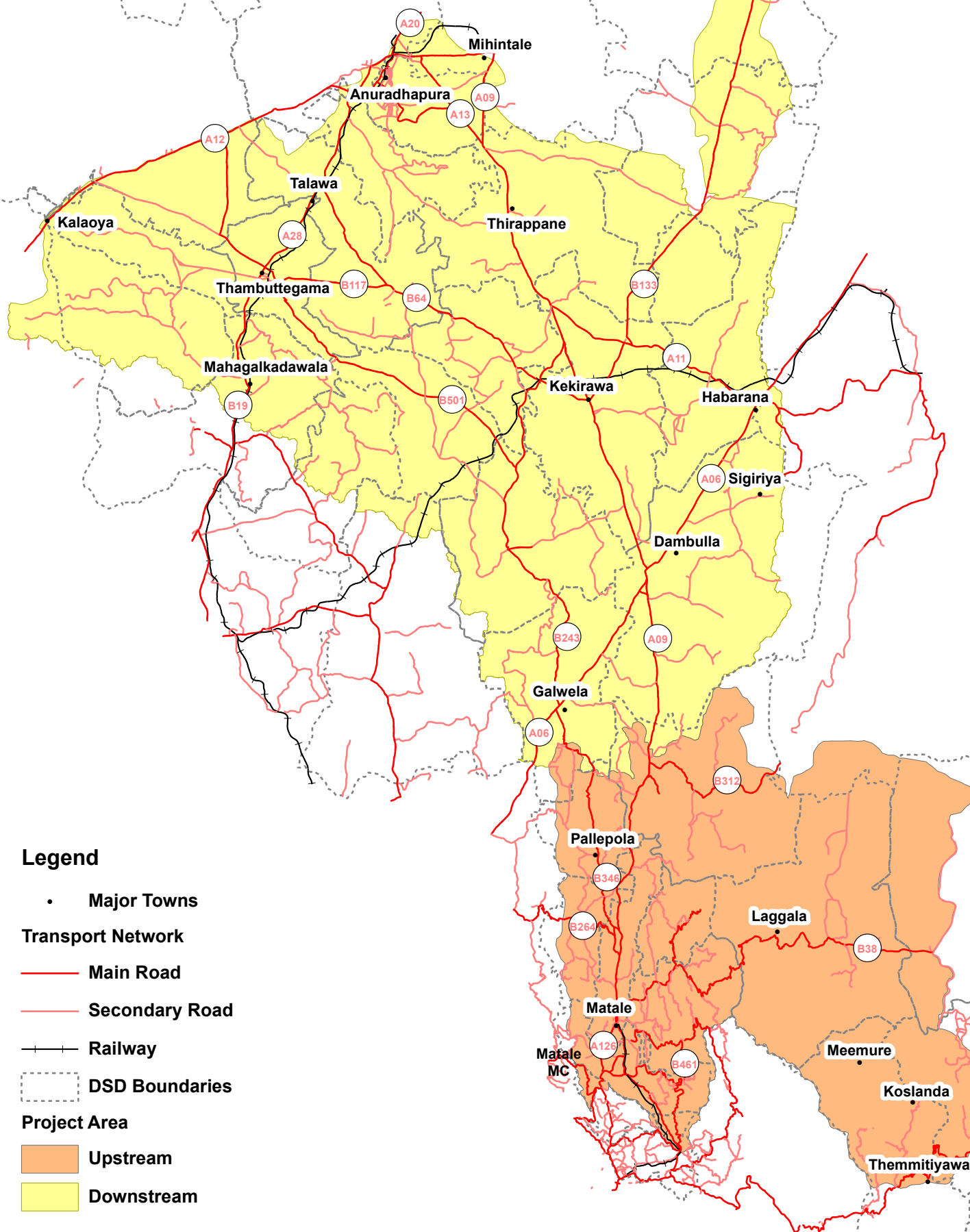
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Road Network in the Project Area



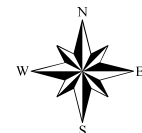
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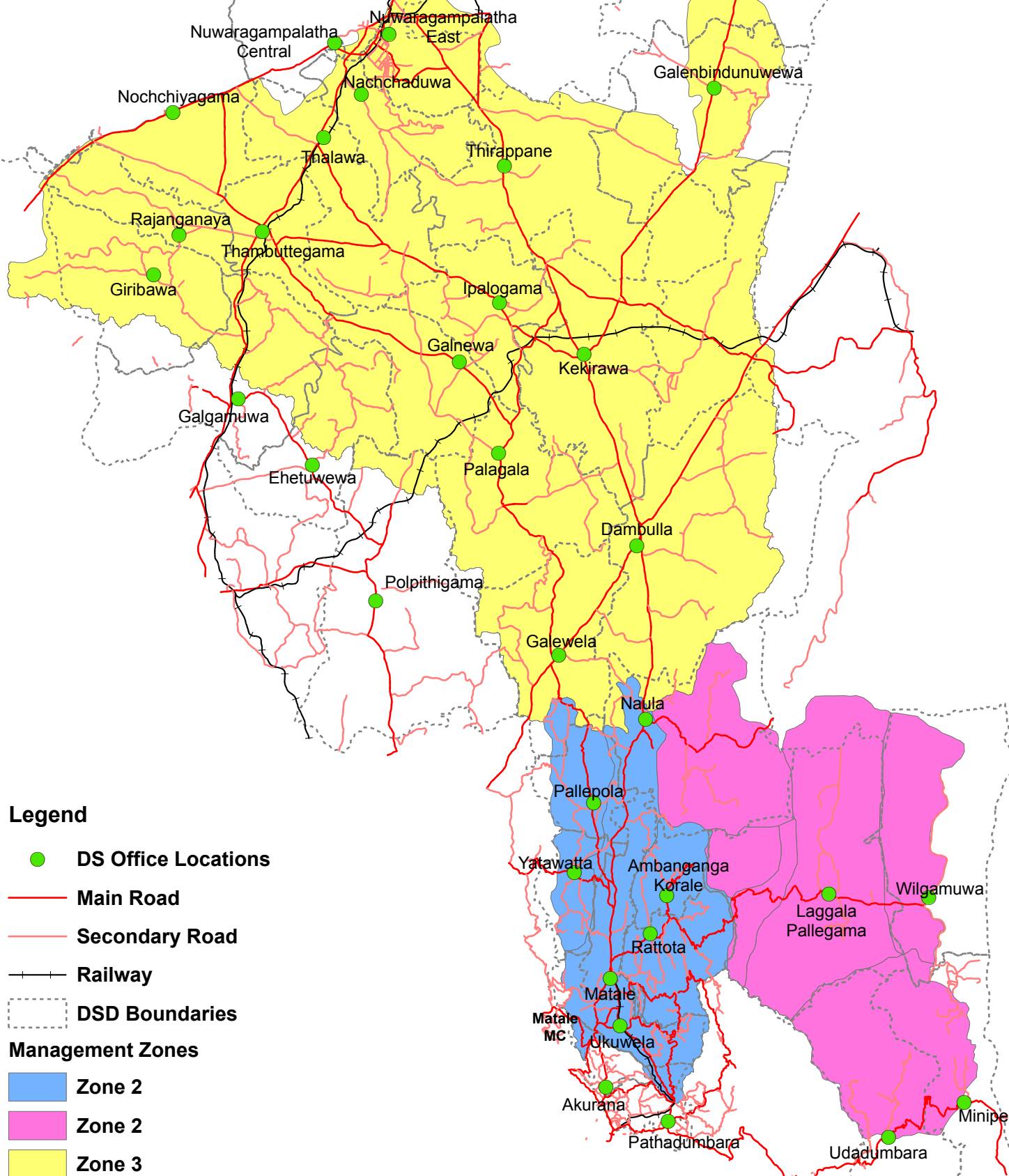
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0 3.75 7.5 15 Kilometers

Upstream and Downstream Management Areas



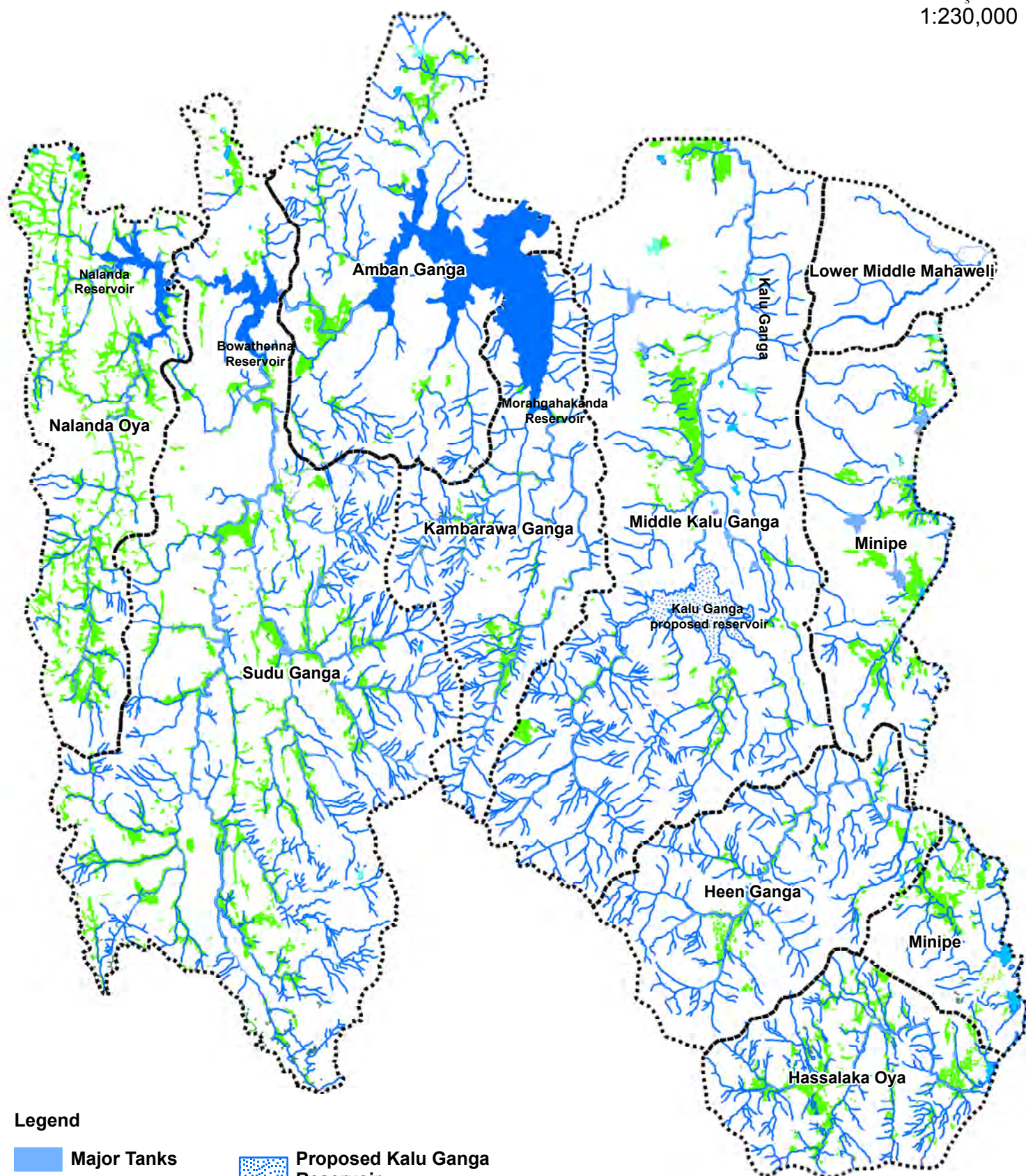
1:538,825



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IUCN Sri Lanka
Country Office

0 3.75 7.5 15 Kilometers

Upstream Paddy and Water Bodies



Legend

- | | |
|-------------------|-------------------------------|
| Major Tanks | Proposed Kalu Ganga Reservoir |
| Minor Tanks | Reservoir |
| River/Streams | Abandoned Paddy |
| Irrigation Canals | Paddy |
| Lakes | Sub Watershed Boundaries |
| Natural Ponds | |
| Water Hole | |
| Abandoned Tanks | |

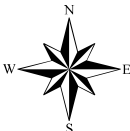
0 1.5 3 6 Kilometers

Source: Land Use Policy Planning Division

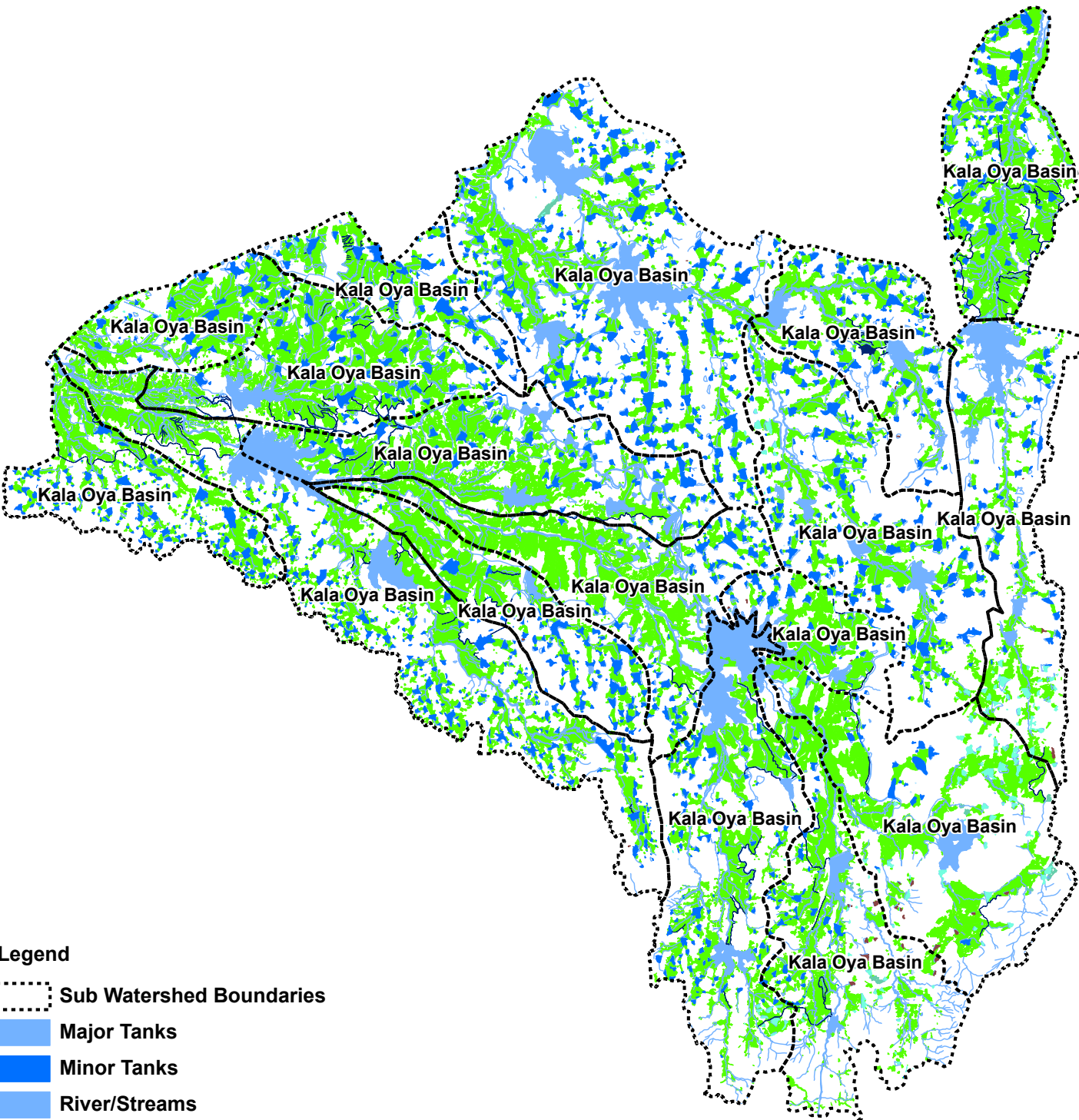
Map produced by:
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Downstream Paddy and Water Bodies



1:430,000



Legend

- Sub Watershed Boundaries
- Major Tanks
- Minor Tanks
- River/Streams
- Irrigation Canals
- Lakes
- Natural Ponds
- Water Hole
- Abandoned Tanks
- Abandoned Paddy
- Paddy

0 3 6 12 Kilometers

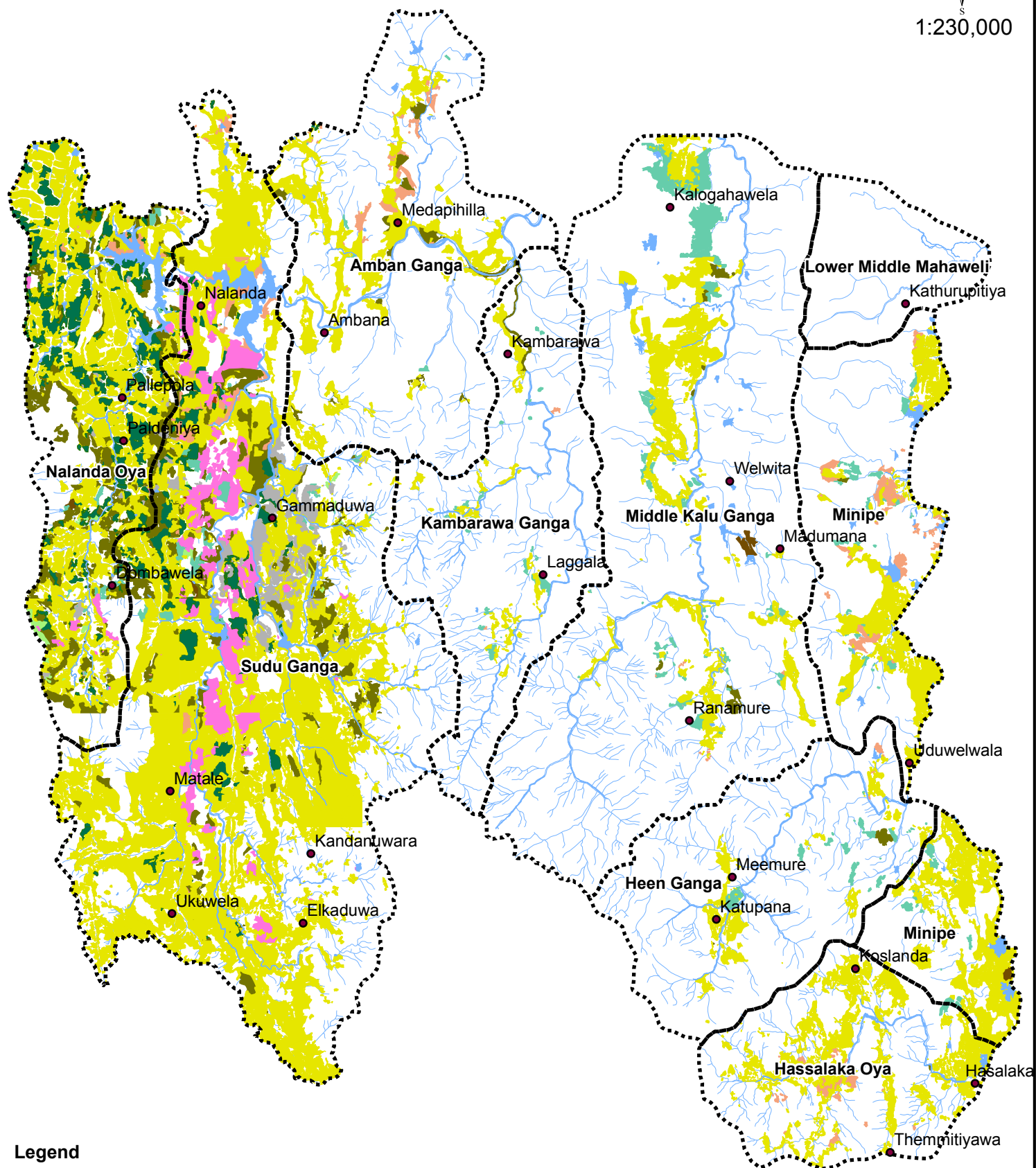
Source: Land Use Policy Planning Division

Map produced by:
IUCN Sri Lanka
Country Office



Other Crops - Upstream Area

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1:230,000



Legend

- | | |
|--------------------------|--------------------------------|
| Sub Watershed Boundaries | Homesteads/ Home Garden |
| Water Bodies | Mango |
| Agricultural Farms | Pepper |
| Banana | Rubber |
| Cashew | Seasonal Crops |
| Cinnamon | Sparsely used Croplands /Chena |
| Coconut | Mixed tree & Other Perennials |

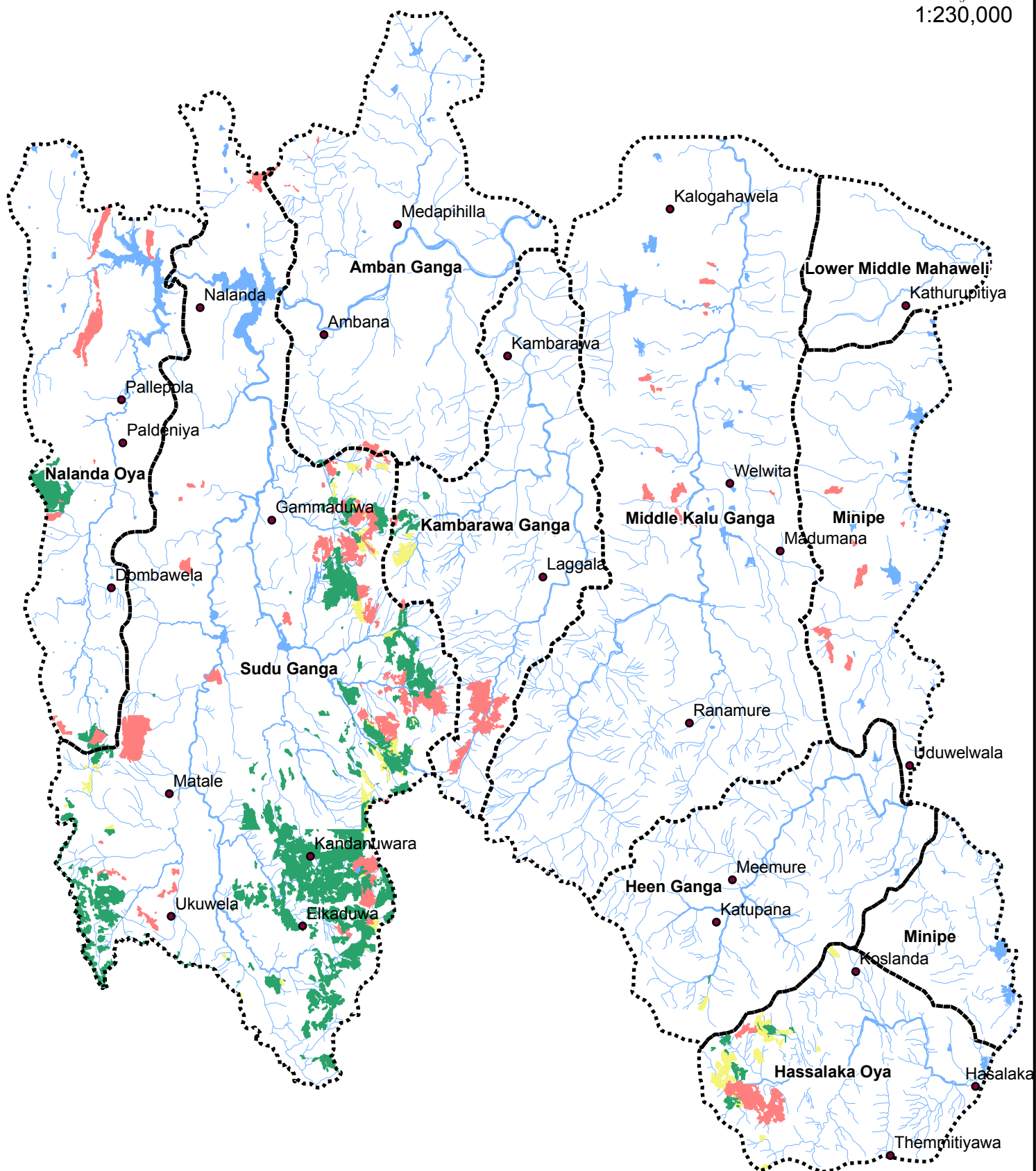
0 1.5 3 6 Kilometers

Source: Land Use Policy Planning Division

Map produced by:
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Country Office



Tea and Forest Plantations - Upstream Area



Legend

- Tea
- Abandoned Tea
- Forest Plantation
- Water Bodies
- Sub Watershed Boundaries

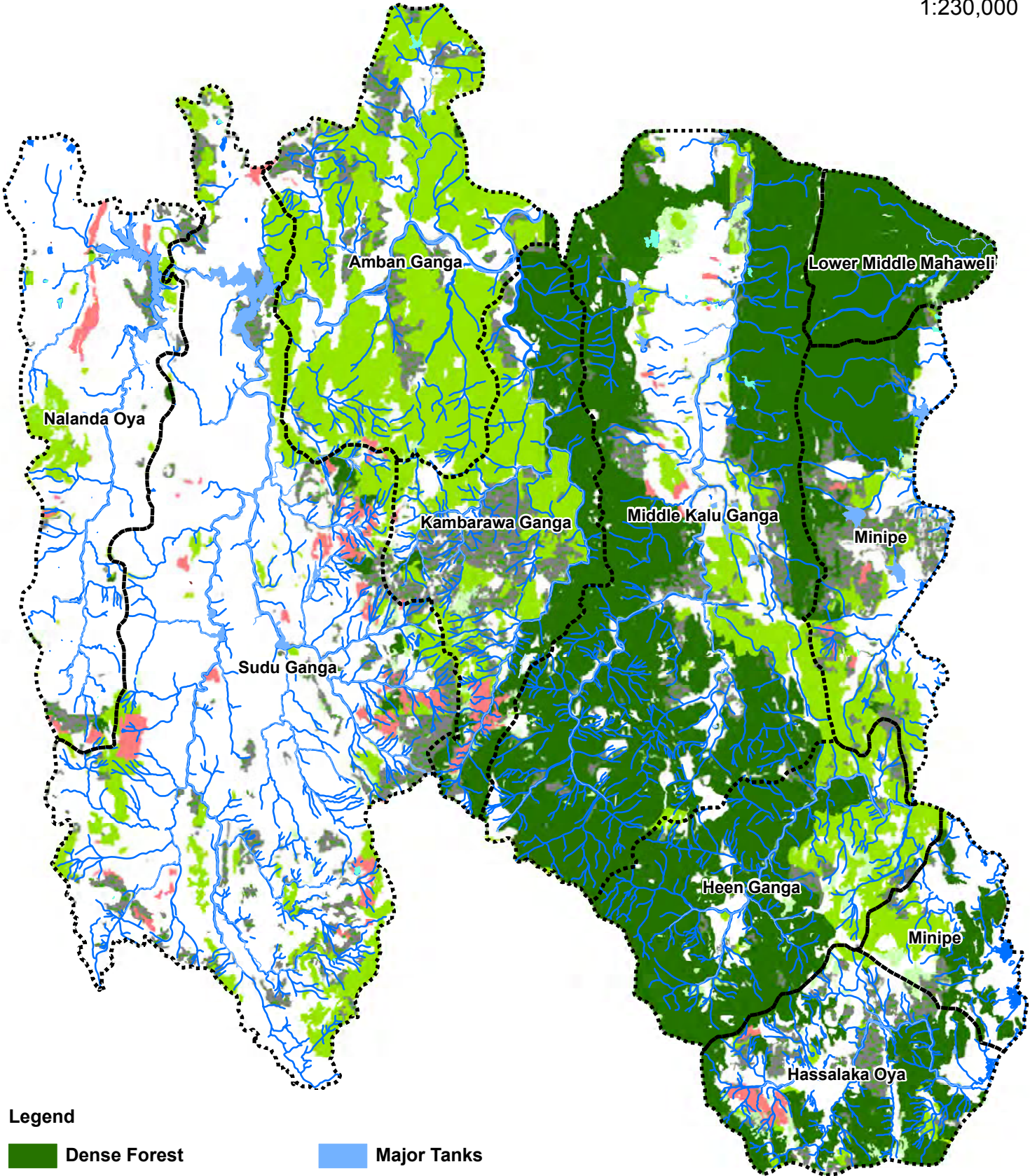
0 1.5 3 6 Kilometers

Source: Land Use Policy Planning Division

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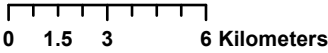


Upstream Forests, Scrubs, Grassland and Forest Plantations



Legend

- | | |
|--------------------------|-------------------|
| Dense Forest | Major Tanks |
| Forest Plantation | Minor Tanks |
| Open Forest | River/Streams |
| Scrub Land | Irrigation Canals |
| Grass Land | Lakes |
| Sub Watershed Boundaries | Natural Ponds |
| | Water Hole |
| | Abandoned Tanks |

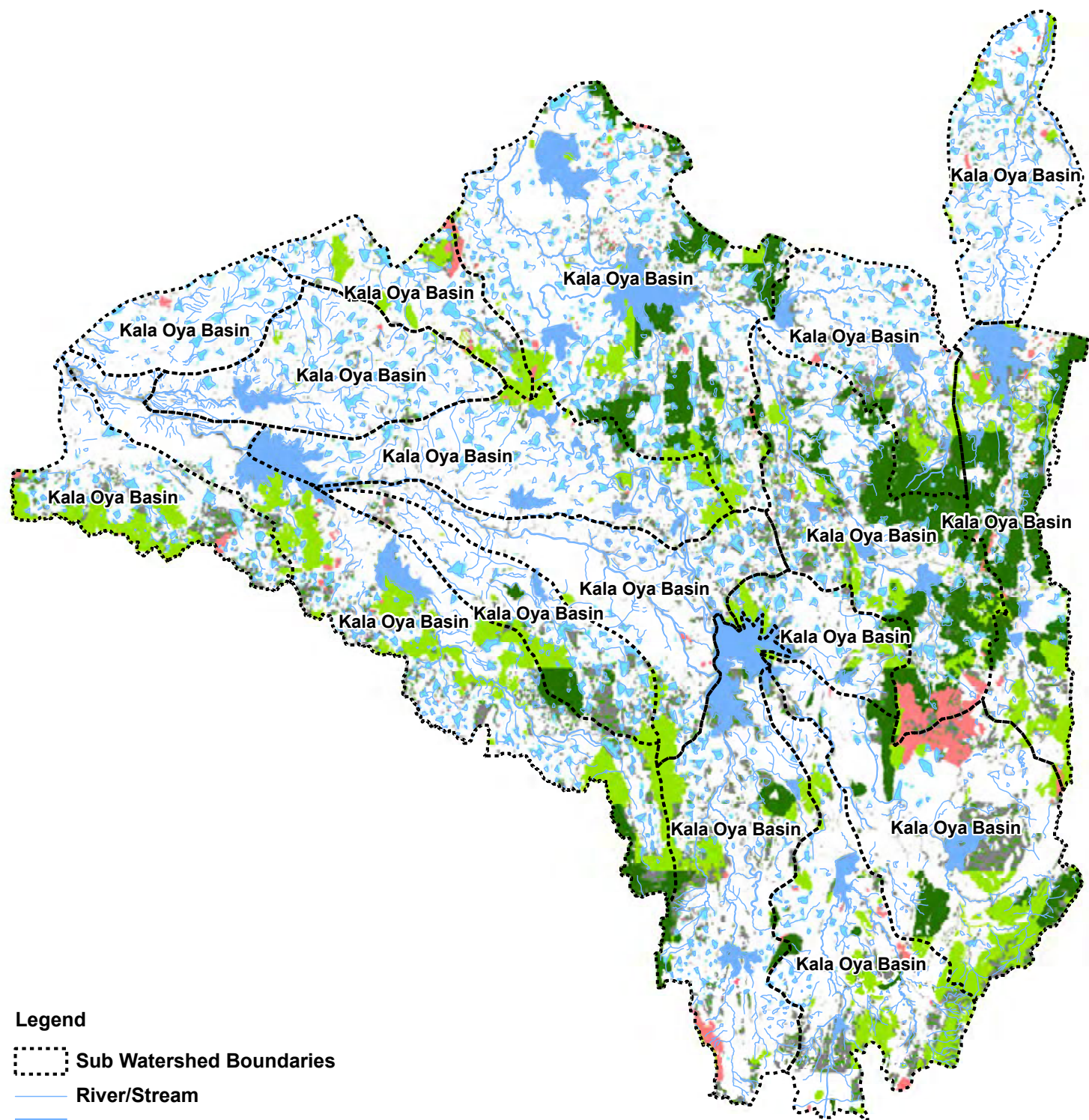


Source: Land Use Policy Planning Division

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Downstream Forests, Scrub Grassland and Forest Plantations



Legend

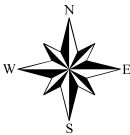
- Sub Watershed Boundaries
- River/Stream
- Major Tanks
- Minor Tanks
- Dense Forest
- Forest Plantation
- Open Forest
- Scrub Land
- Grass Land



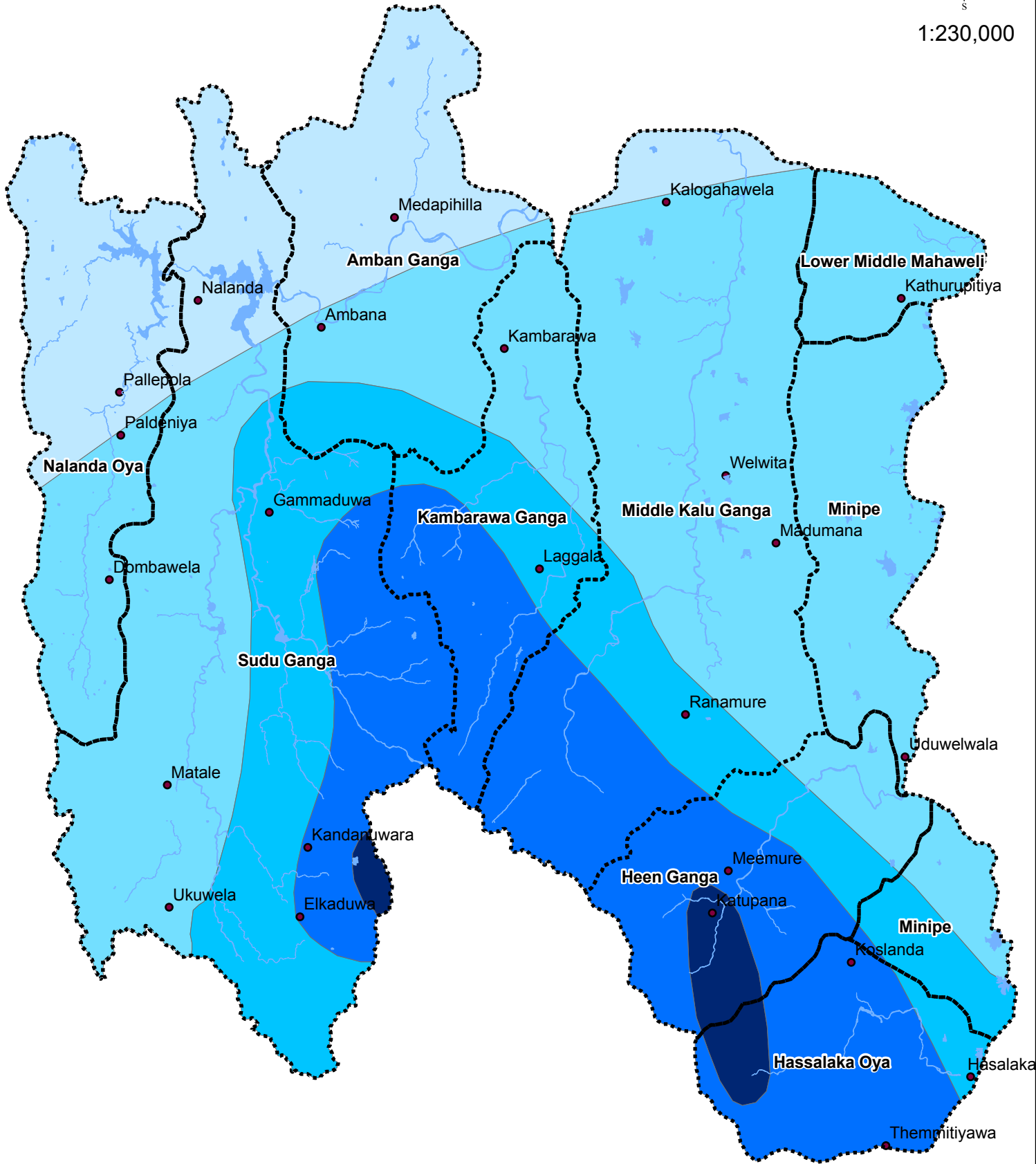
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Rainfall pattern in the Upstream Area



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Rainfall (mm)

- 1500-2000
- 2000-2500
- 2500-3000
- 3000-4000
- 4000-5000

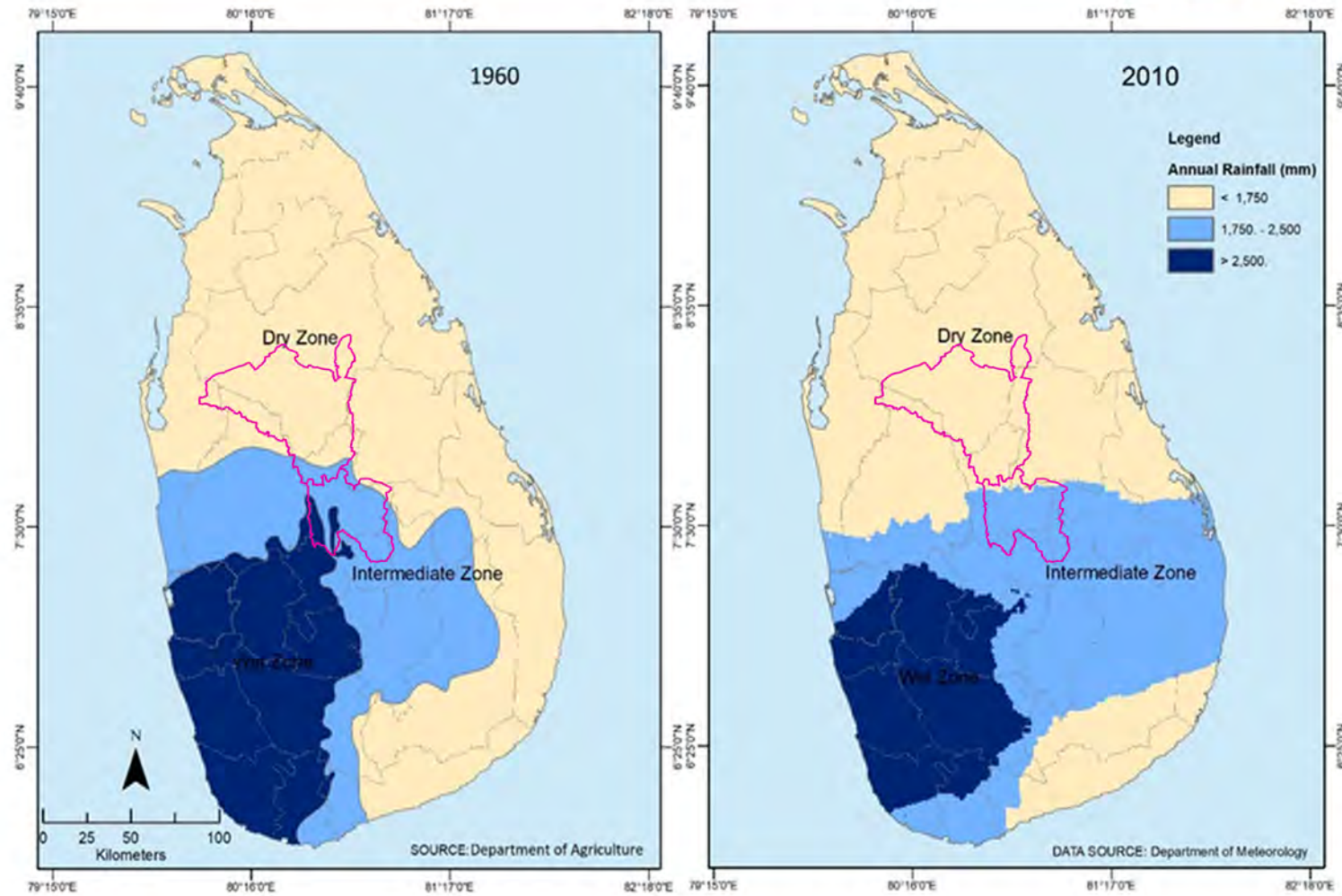
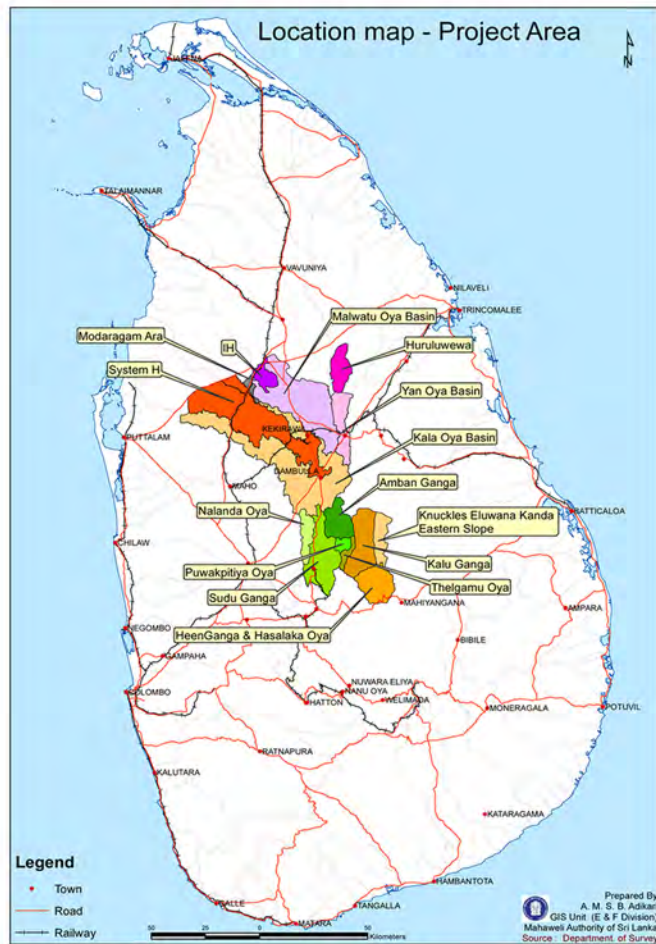
- Sub Watershed Boundaries
- Water Bodies

0 1.5 3 6 Kilometers
Source: Department of Meteorology

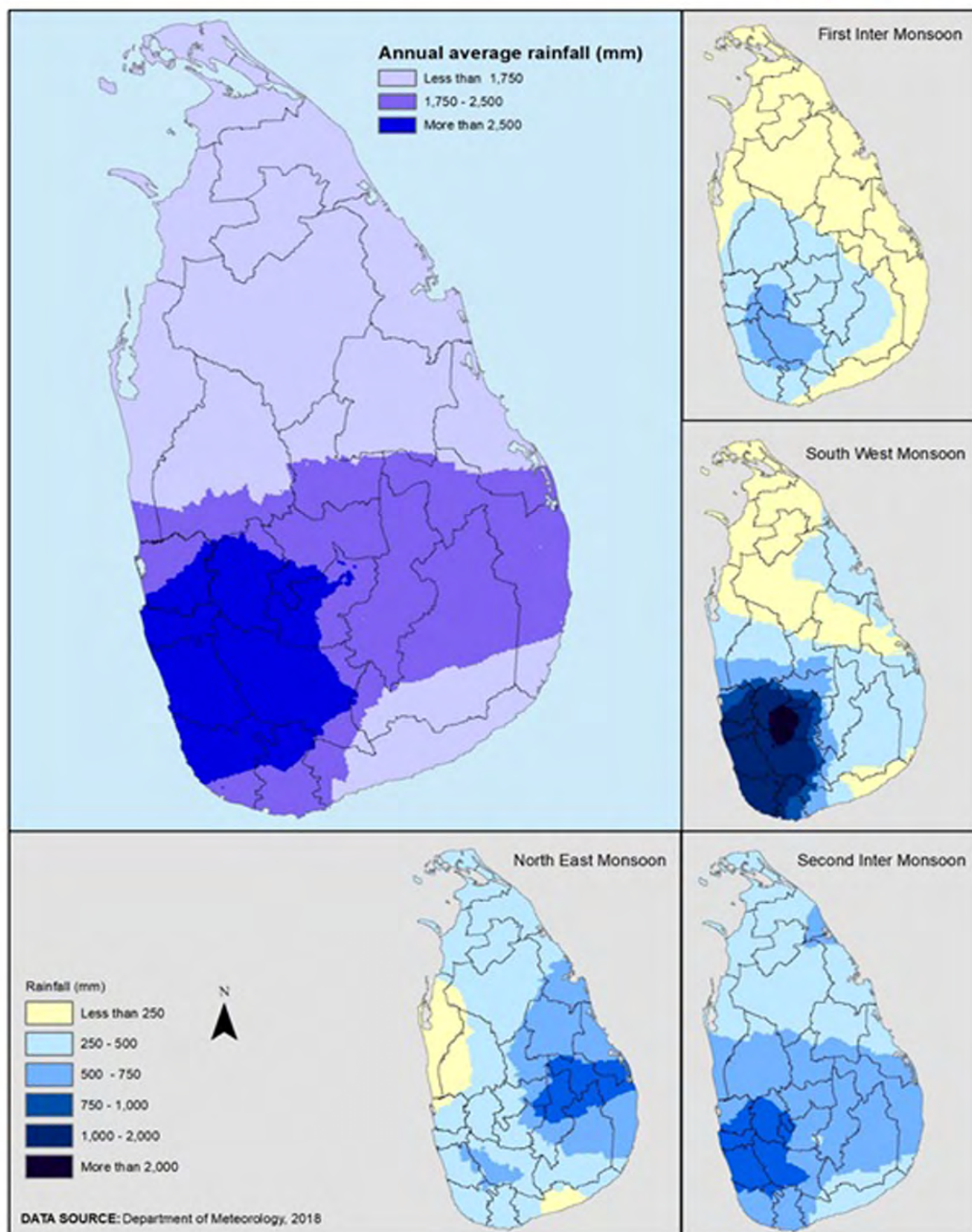
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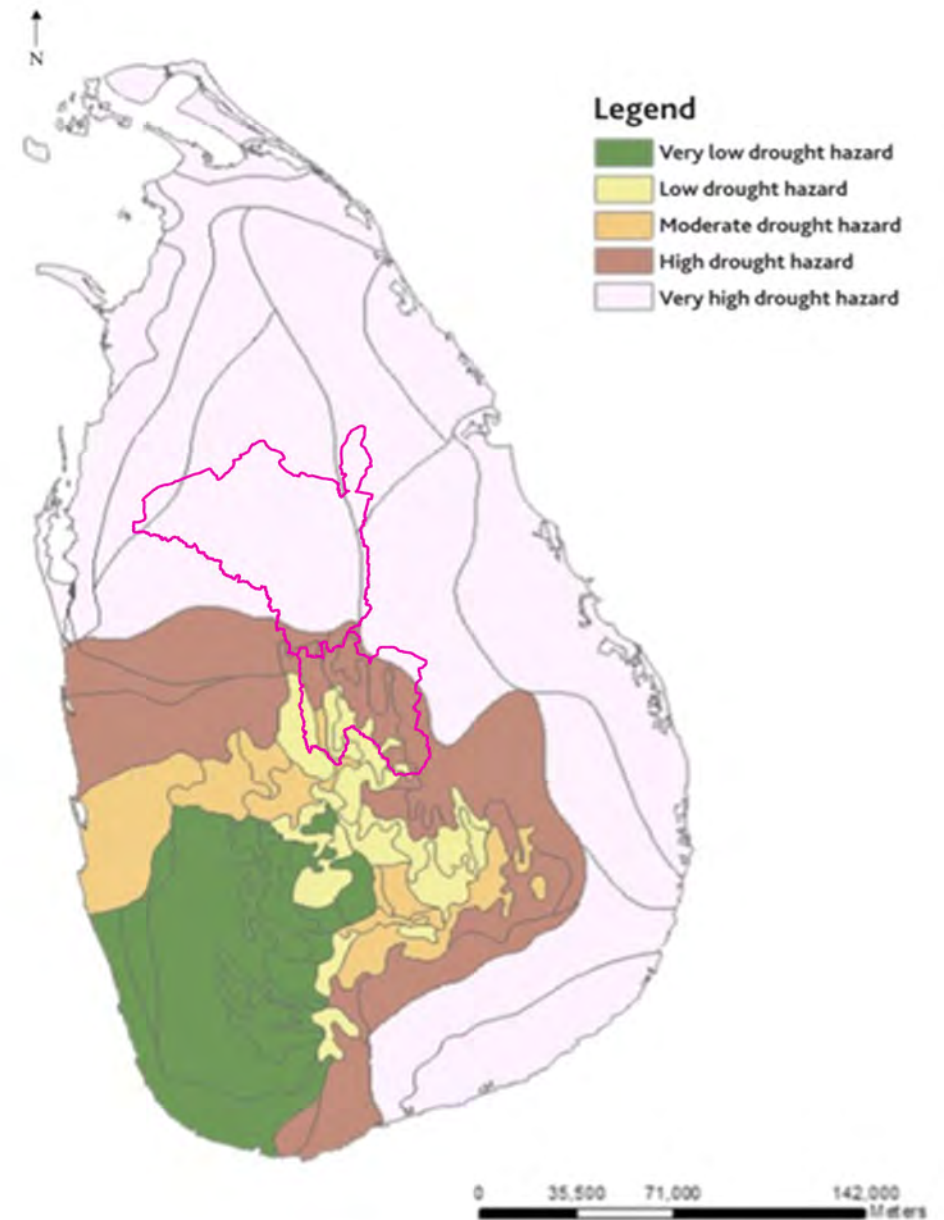
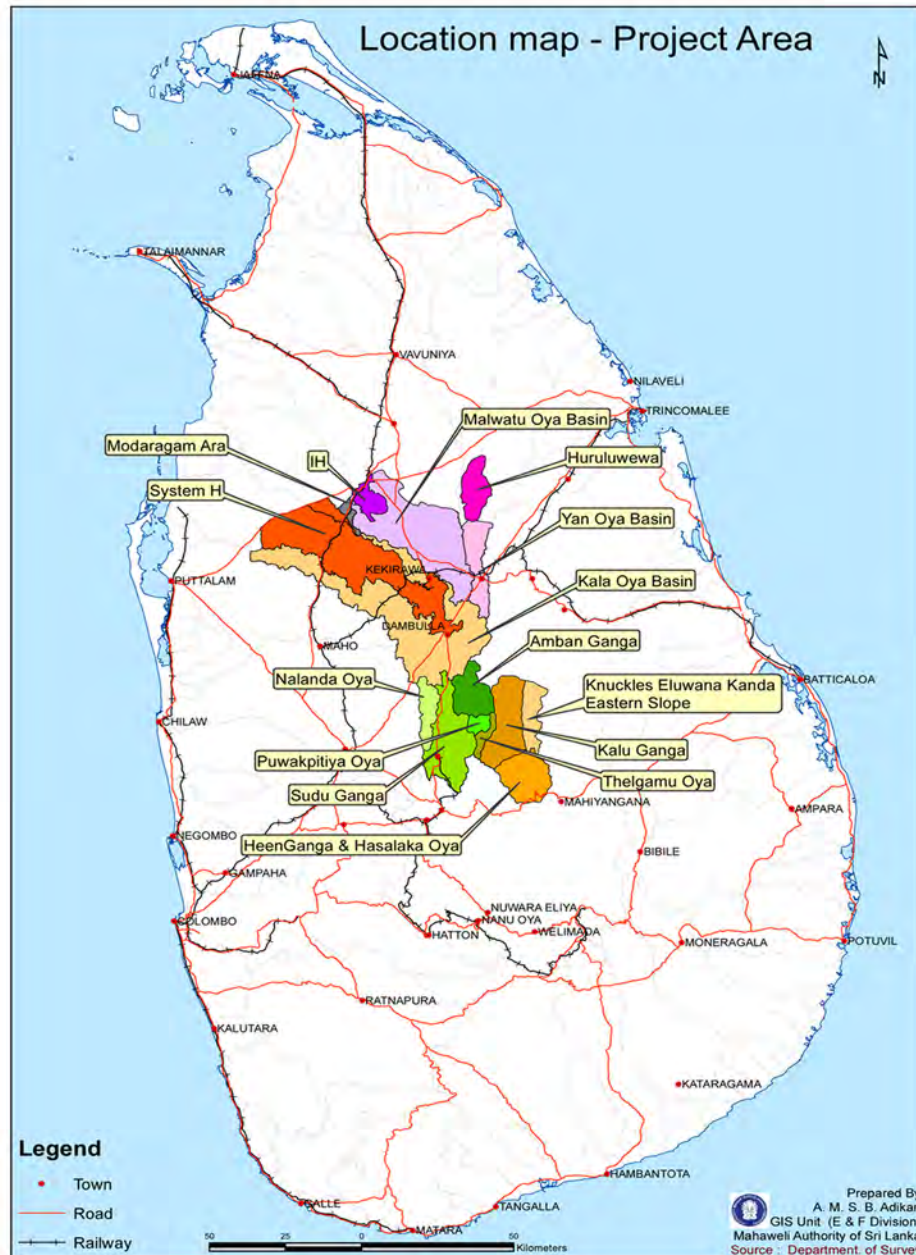
Shifting of Climatic Zones



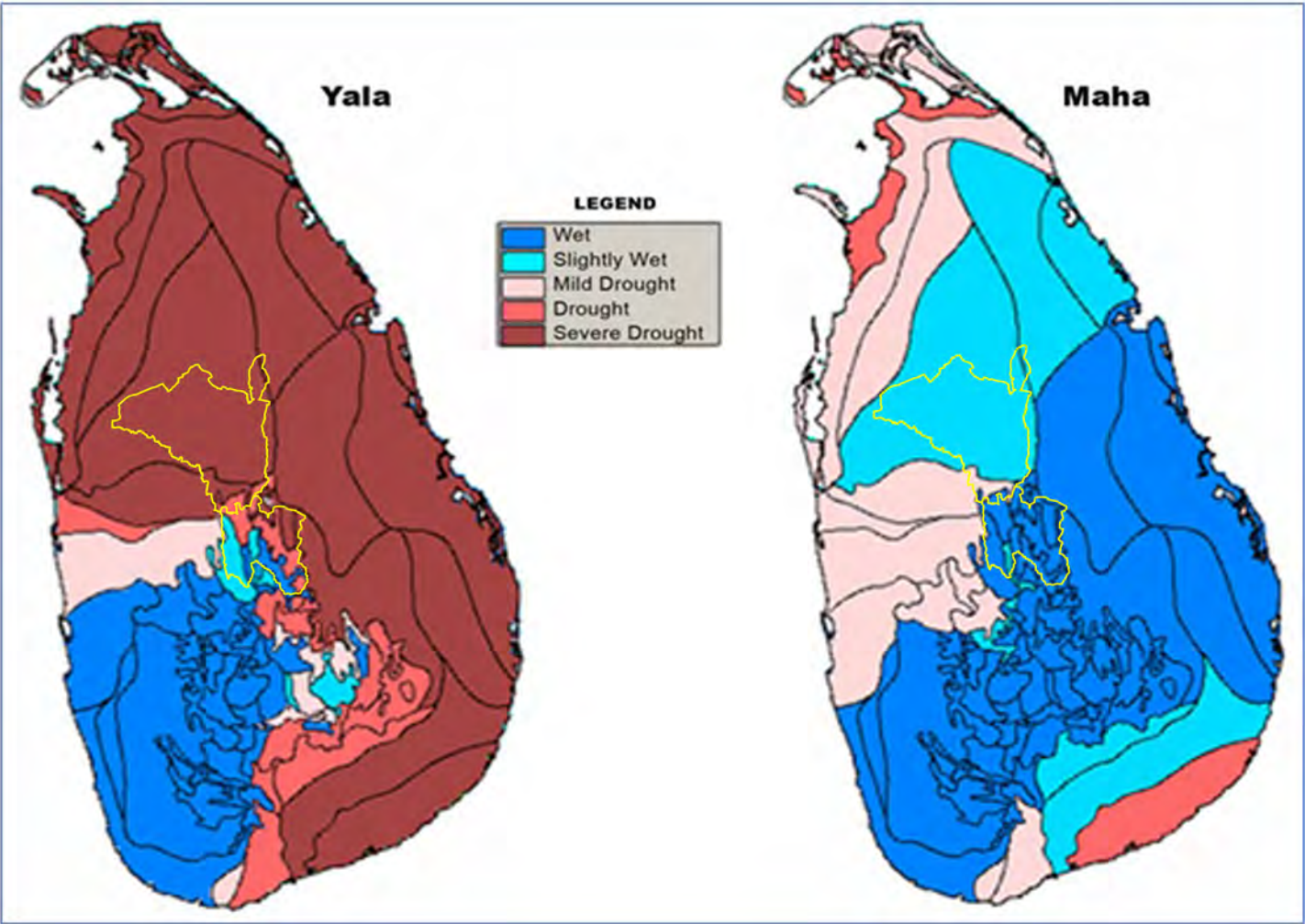
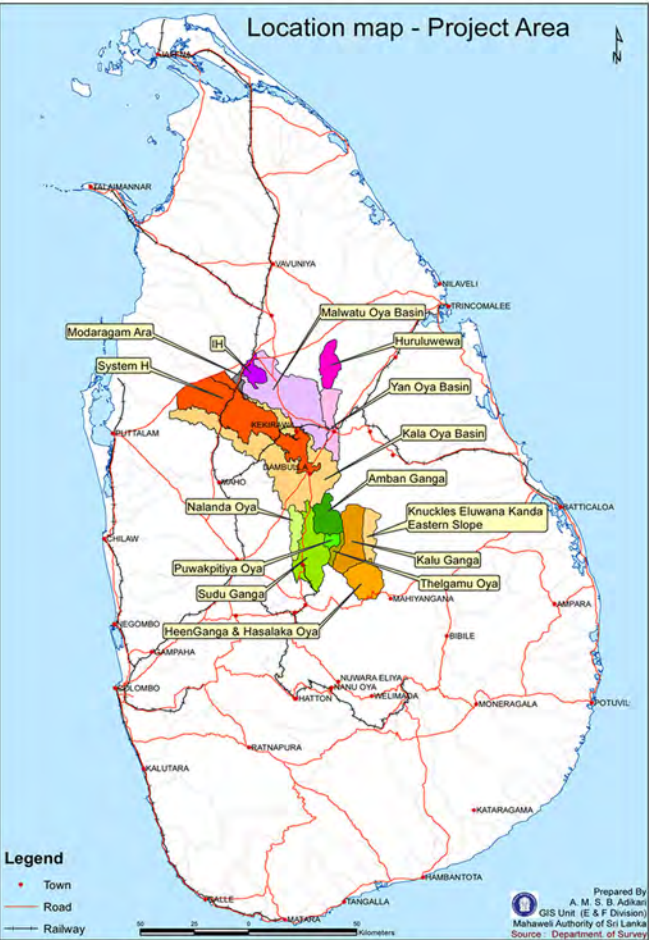
Sri Lanka: Average Rainfall (1981 - 2010)



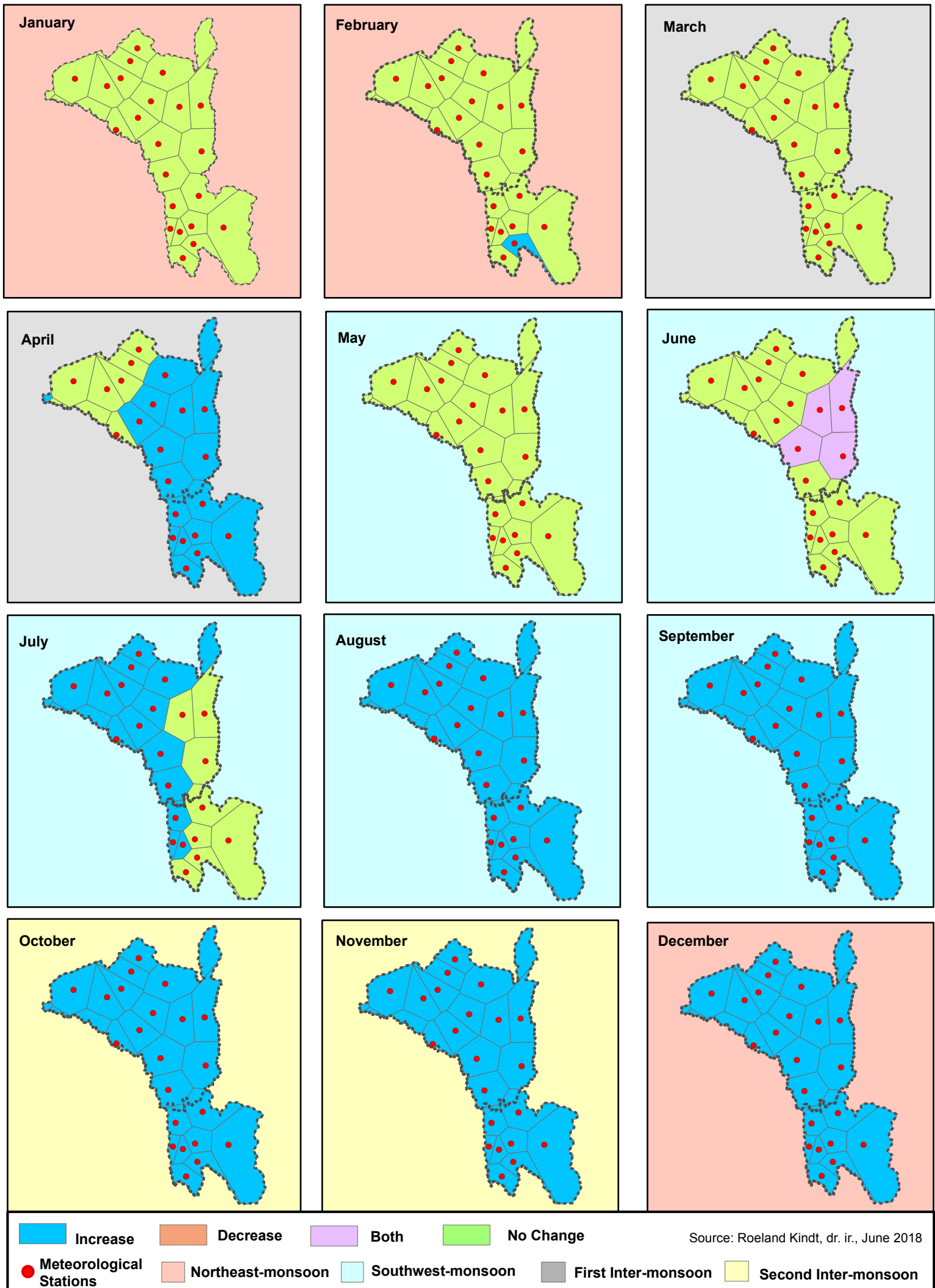
Drought Map



Drought – Seasonal in the Project Area

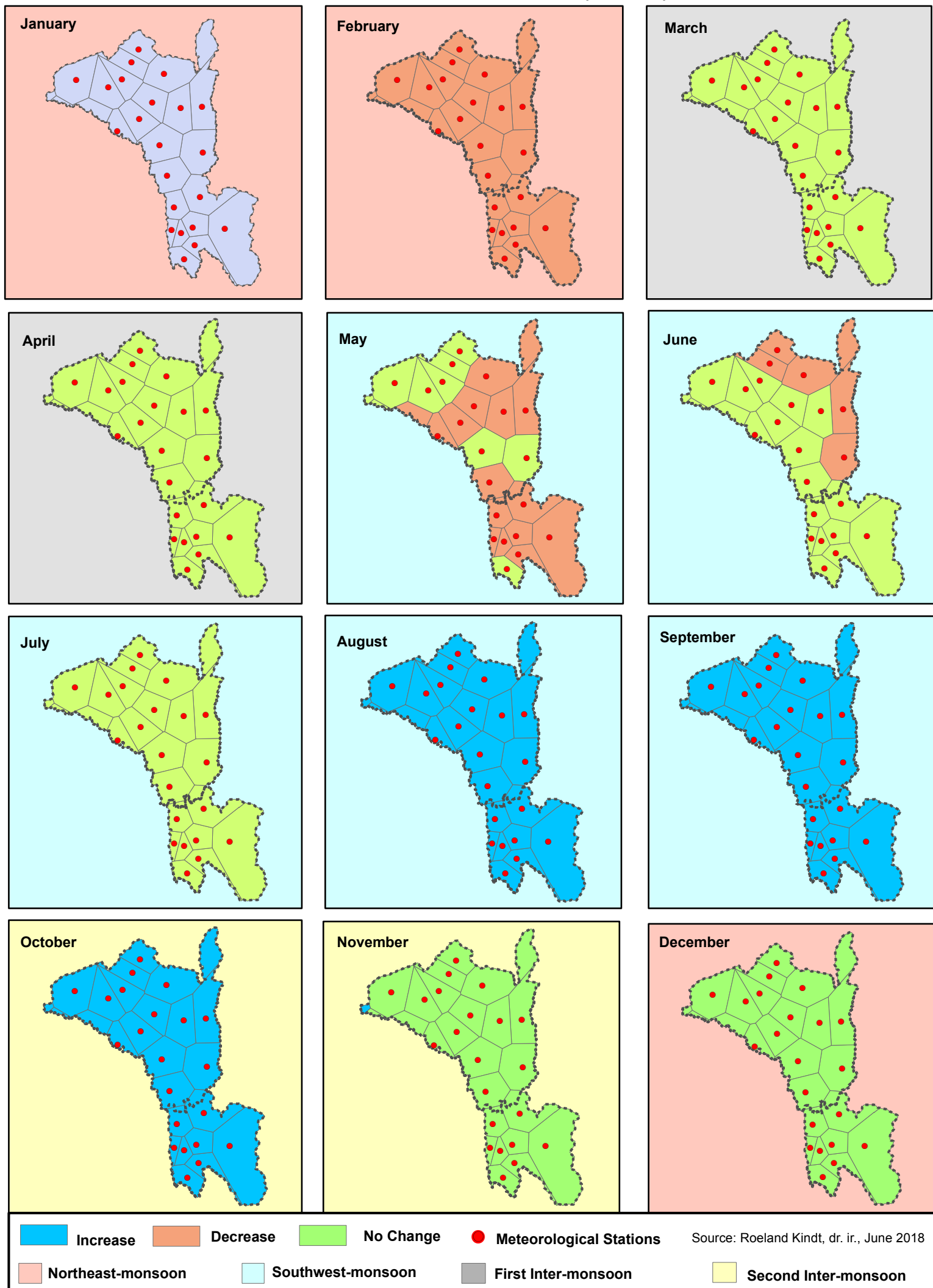


Prediction of precipitation in the project area Loq Emissions Scenario (RCP 2.5)

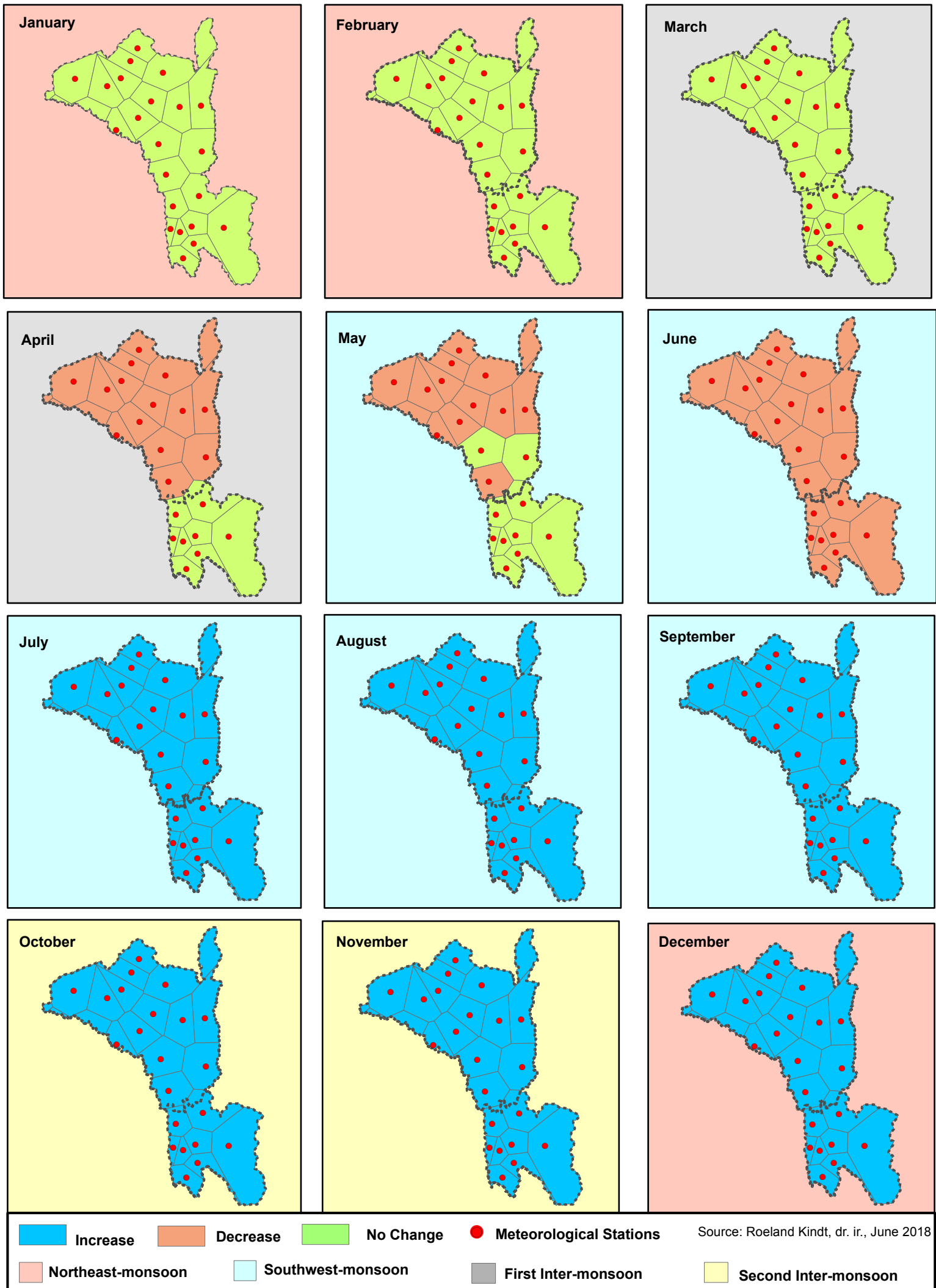


□ Prediction of precipitation in the project area

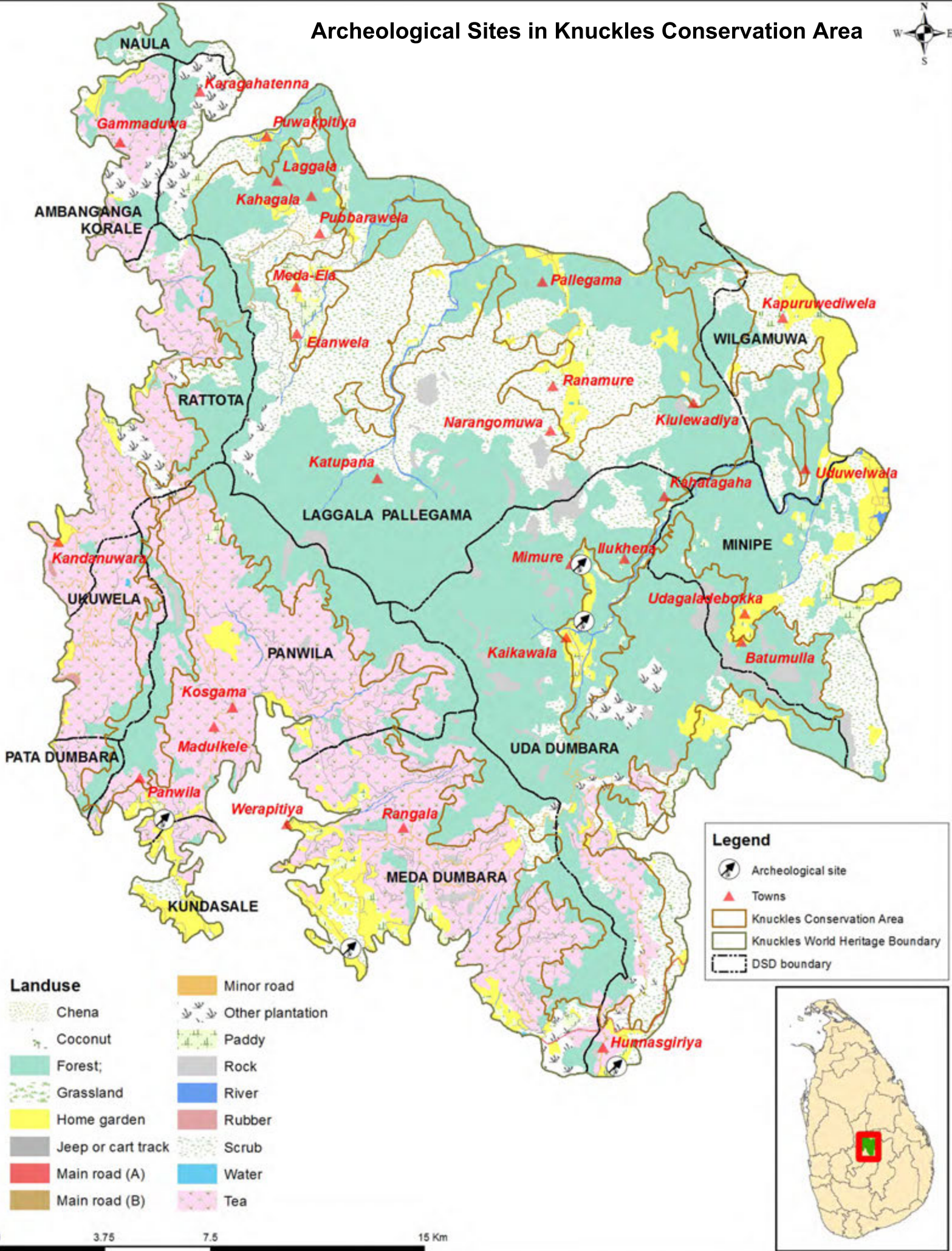
□ Medium Emissions Scenario (RCP 4.5)



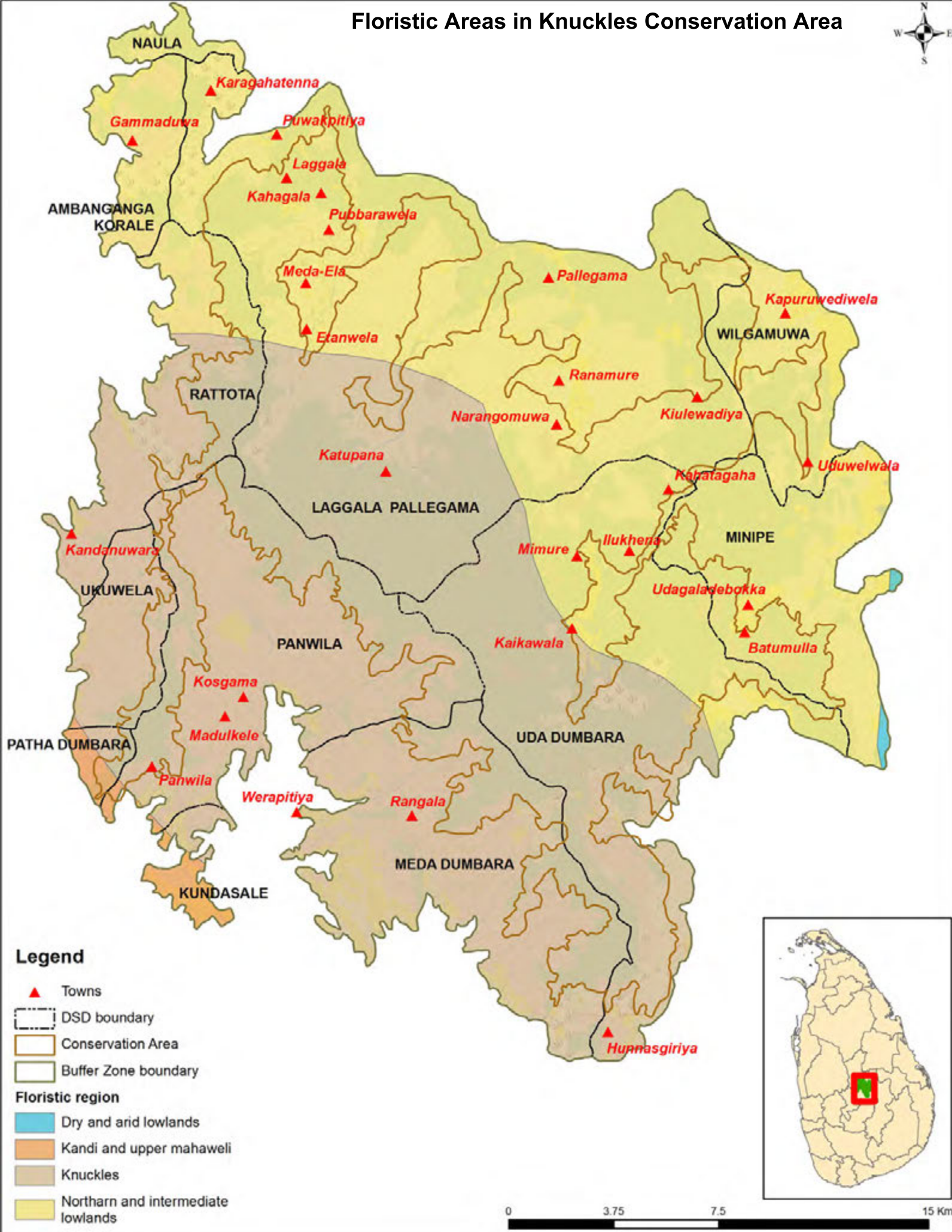
Prediction of precipitation in the project area High Emissions Scenario (RCP 8.5)



Archeological Sites in Knuckles Conservation Area



Floristic Areas in Knuckles Conservation Area



Villages in Knuckles Conservation Area

