

Ancient Irrigation Systems of Sri Lanka

By

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Type Ancient Irrigation Systems in Sri Lanka

- Wewa systems(Reservoir systems)
- Amuna systems (Annicut Irrigation schemes)
- Ulpatha Systems (Sprinkler Irrigation Schemes)
- Animal Systems
- Forest Systems
- Landscape systems

Living Irrigation Systems of Sri Lanka

- Wewa systems(Reservoir systems)
- Amuna systems (Annicut Irrigation schemes)
- Ulpatha Systems (Sprinkler Irrigation Schemes)

Wewa Systems (Reservoir systems)

Two Categories of Wewa Systems

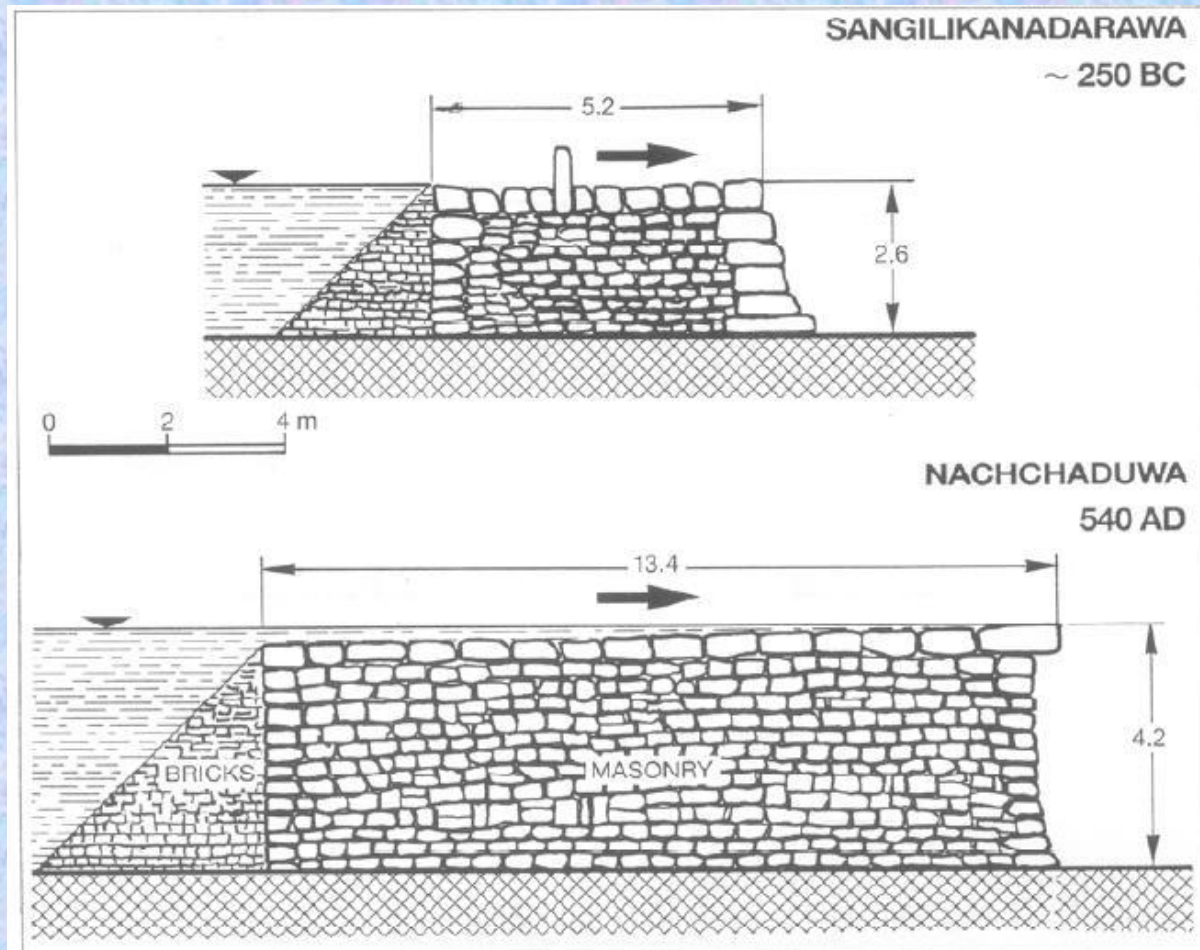
- Large Scale Stand Alone Reservoirs
- Small Scale Cascade systems

Large Scale Reservoirs

Features of a large scale reservoir

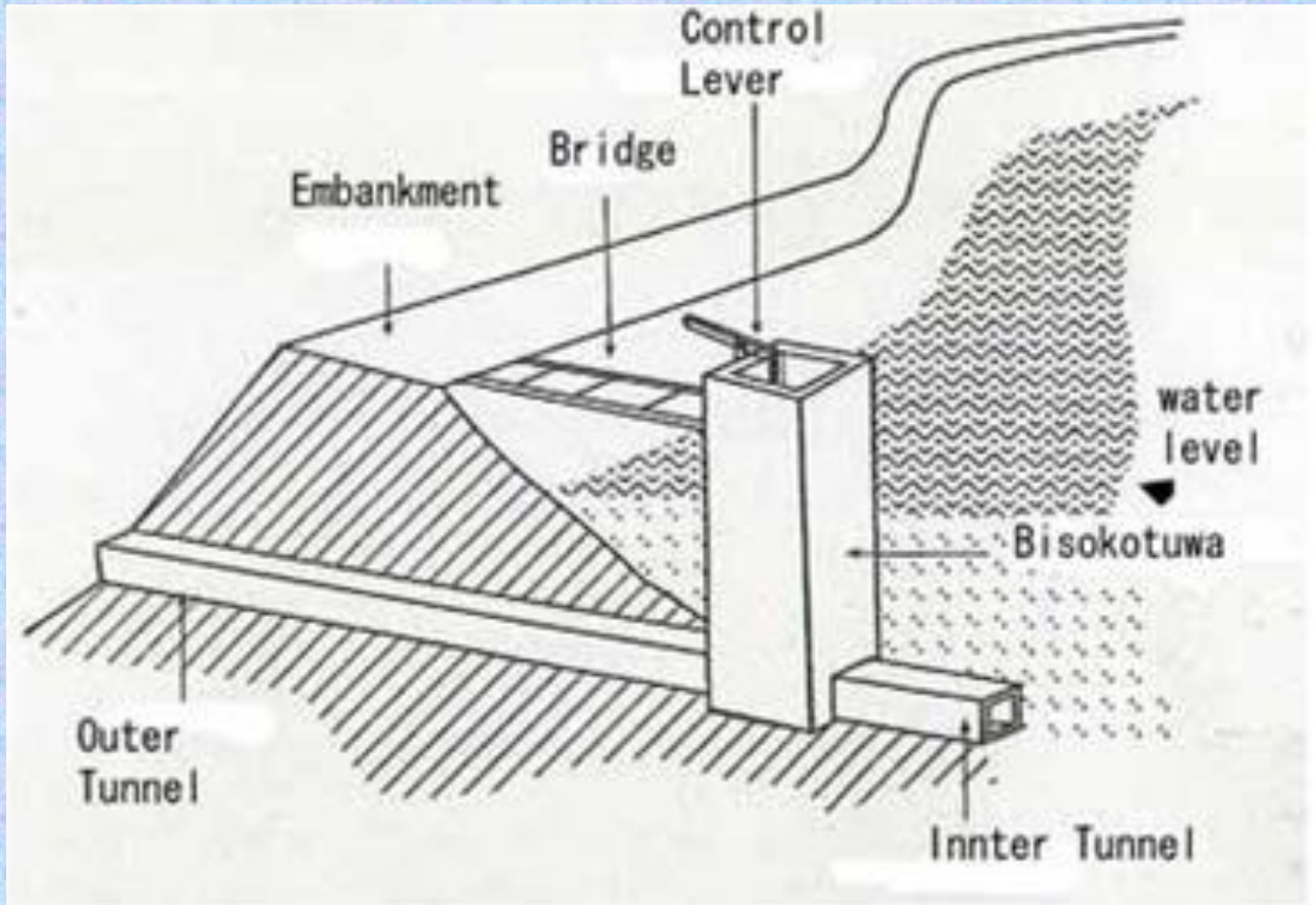
- Elongated Earth bunds
- Spillways comprise of Kalingulas
- Sluices comprise of outlet tunnel, inner tunnel and Bissokotuwa
- Vast Catchment which comprise of ground water Replenishing and runoff controlling tanks

Ancient spillways (Gal wana and Kalingula)



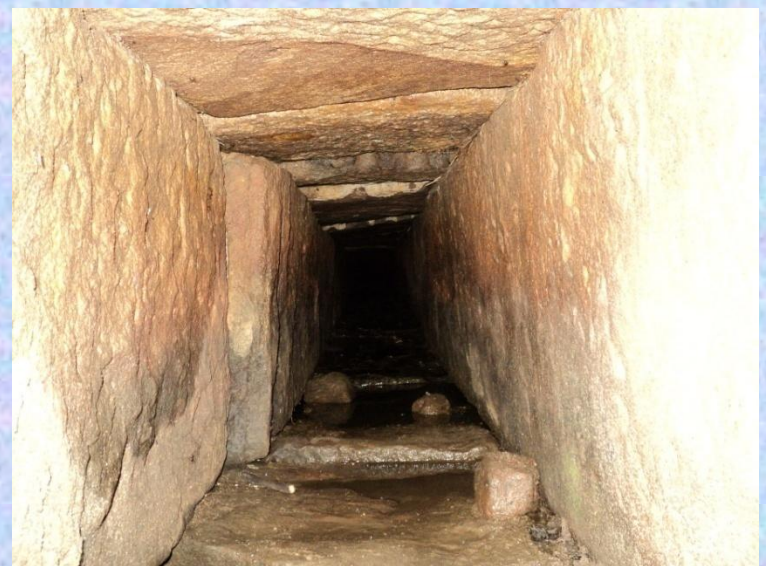
Source : " Ancient Ceylon", H. Parker, 1910"

The sluices of Large Reservoirs

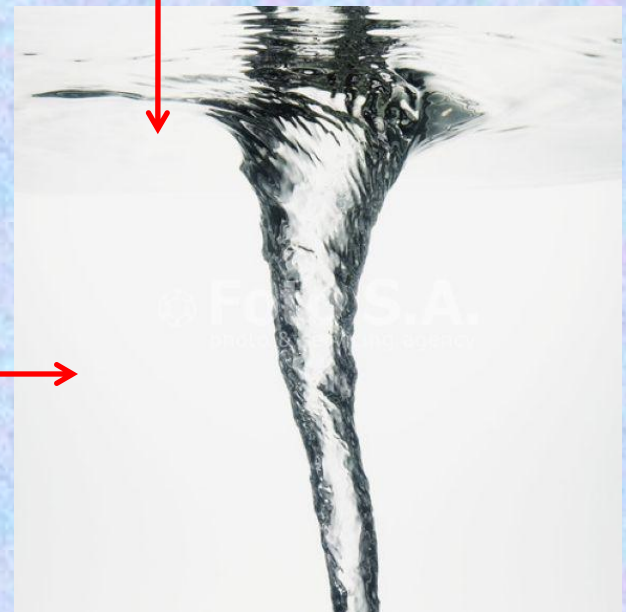
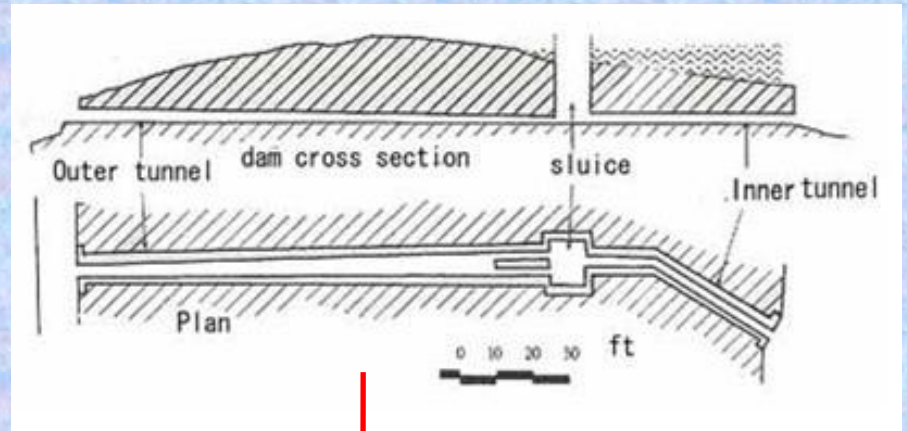
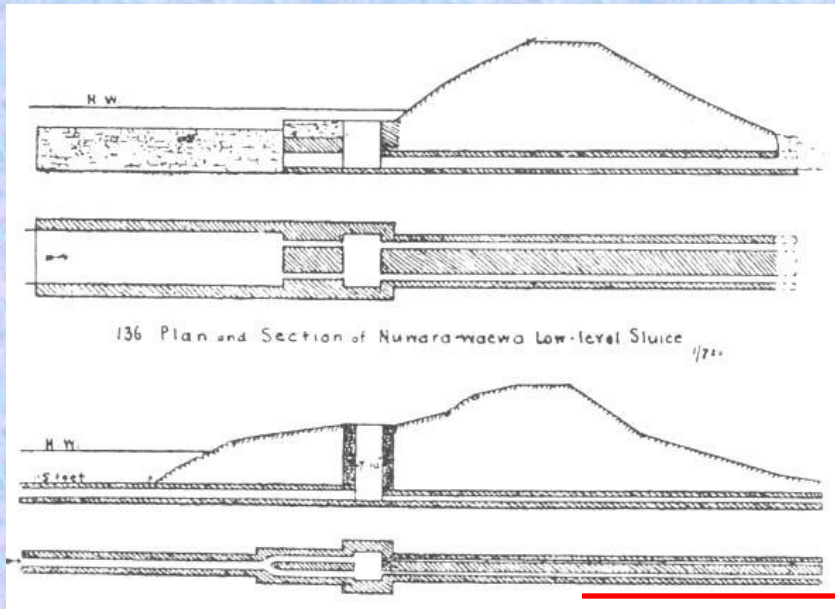


Source : " Wewa, U.B. Awesadahamy, 2003"

Existing sluice at Maha Elagamuwa

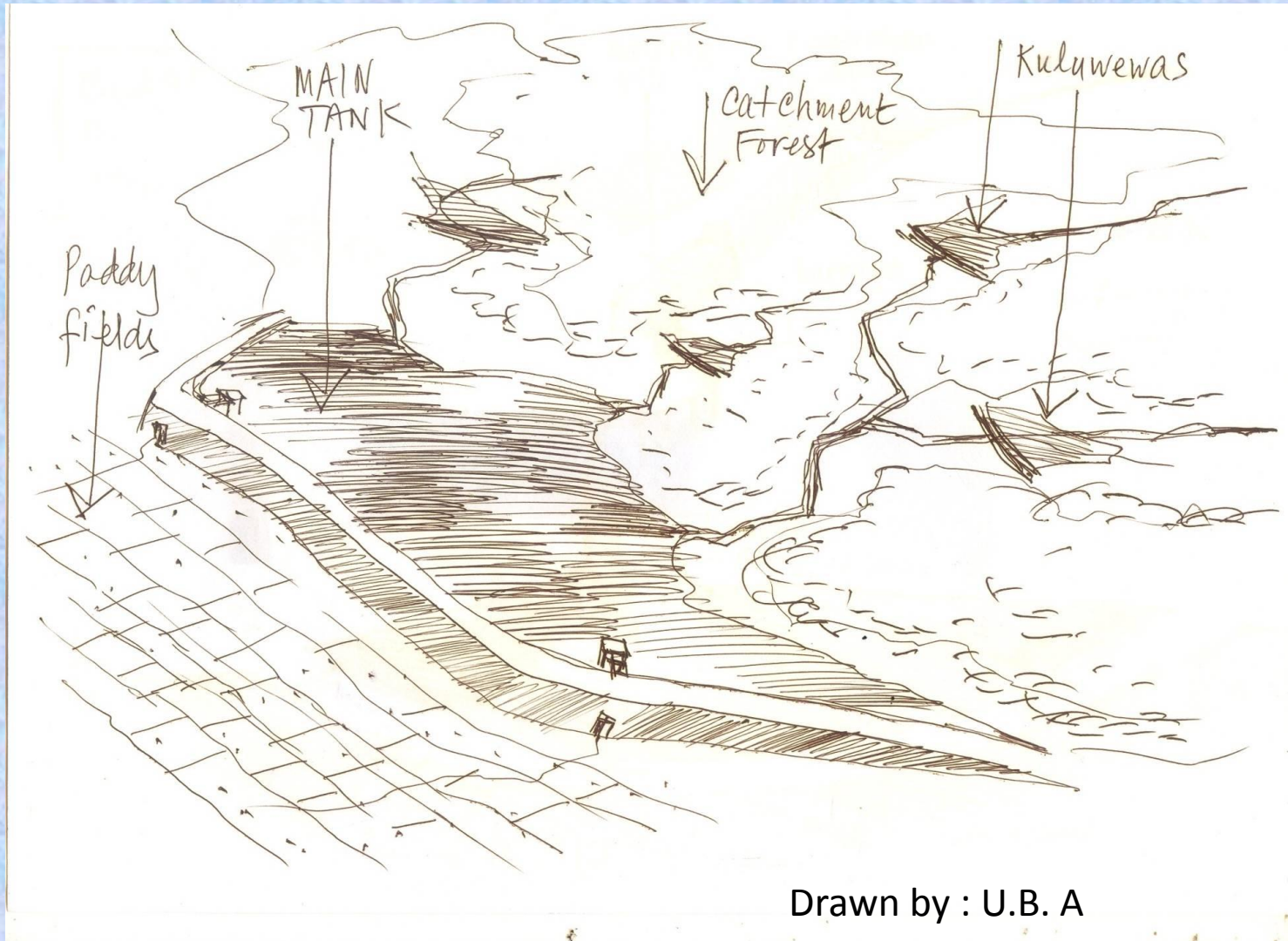


The sluices of Large Reservoirs



Source : " Ancient Ceylon", H. Parker, 1910"

Ground water replenishing Tanks(Kulu Wewa)



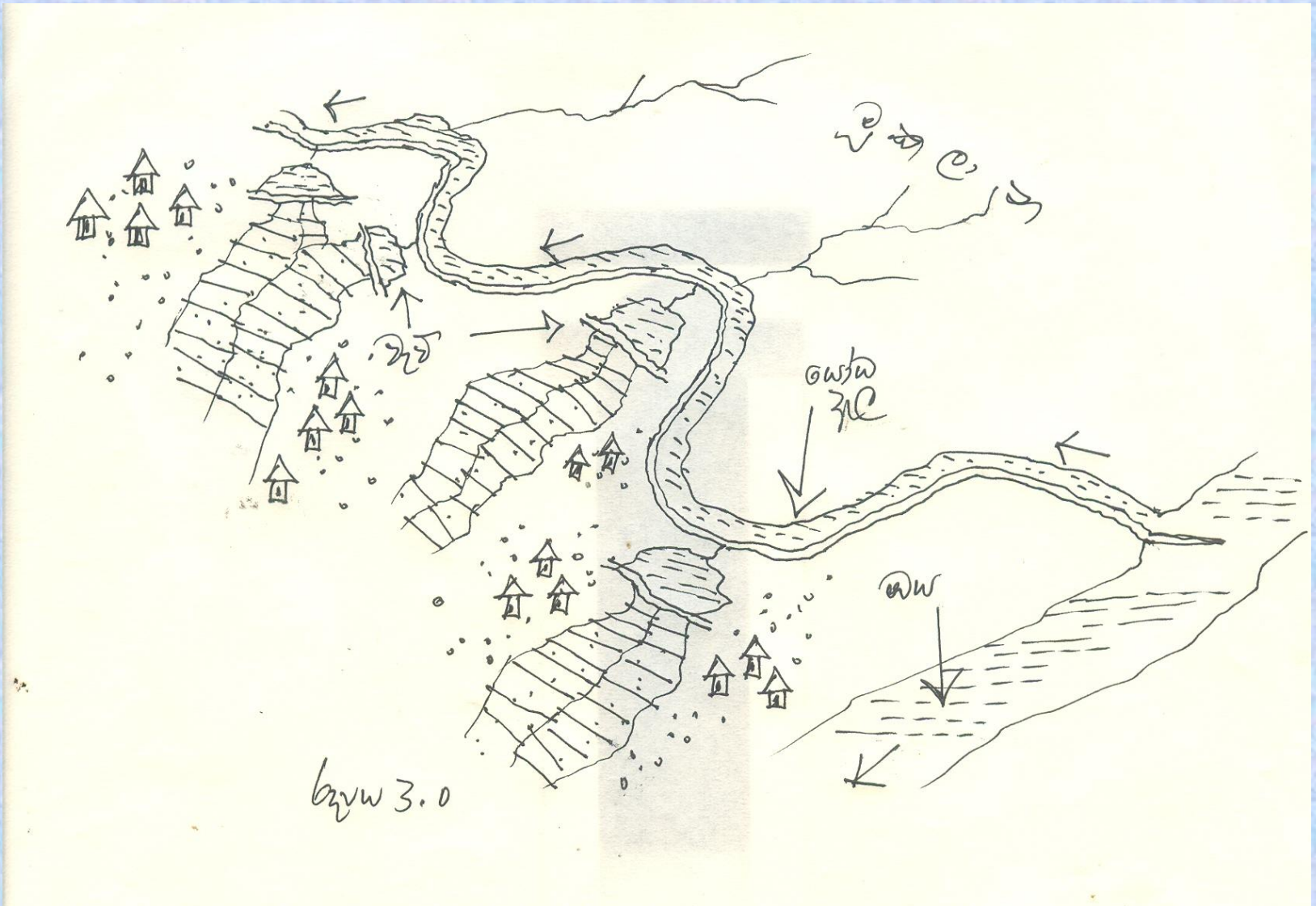
Drawn by : U.B. A

Small Scale Cascade Systems

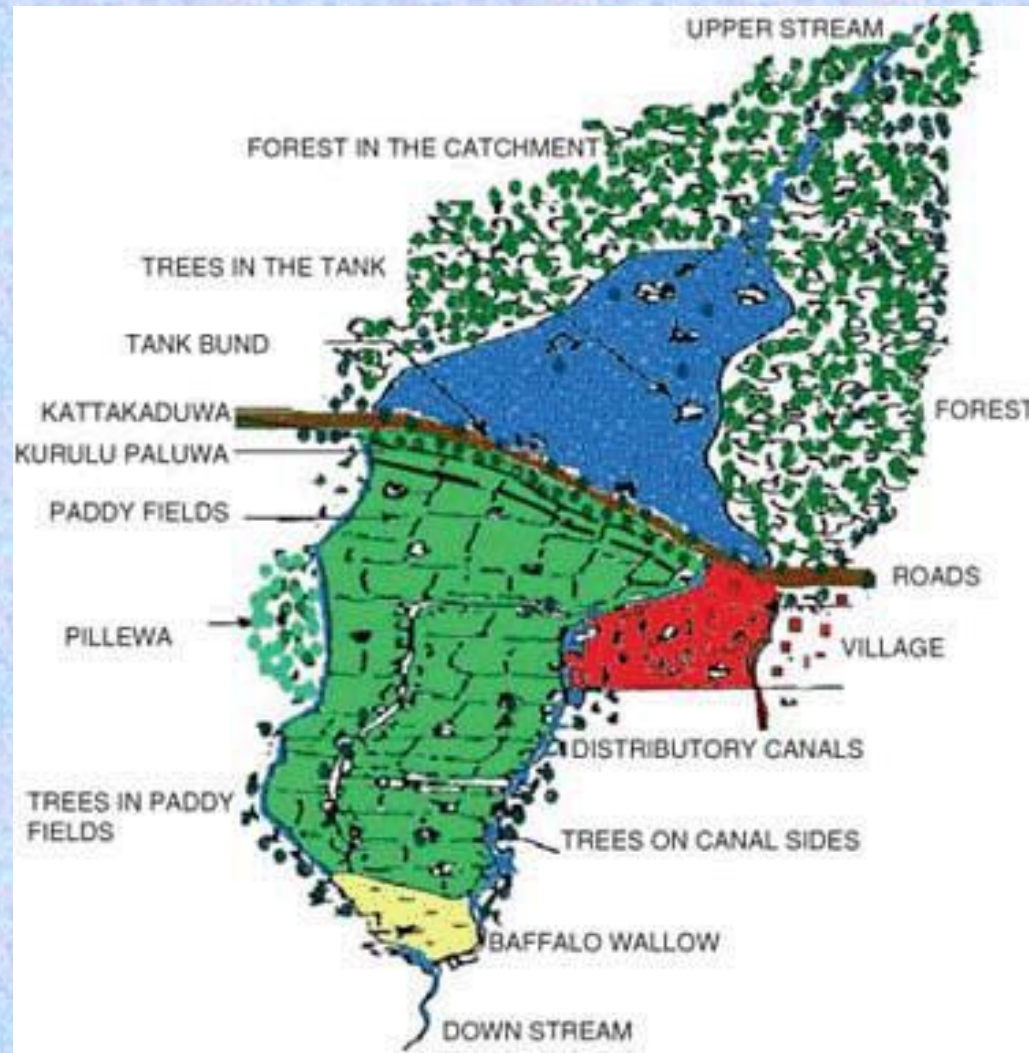
Definition

- **Connected series of tanks organized within micro (or meso) catchments of the dry zone landscape, storing, conveying and utilizing water from an ephemeral rivulet” (Madduma Bandara, 1985, Panabokke, 2002)**

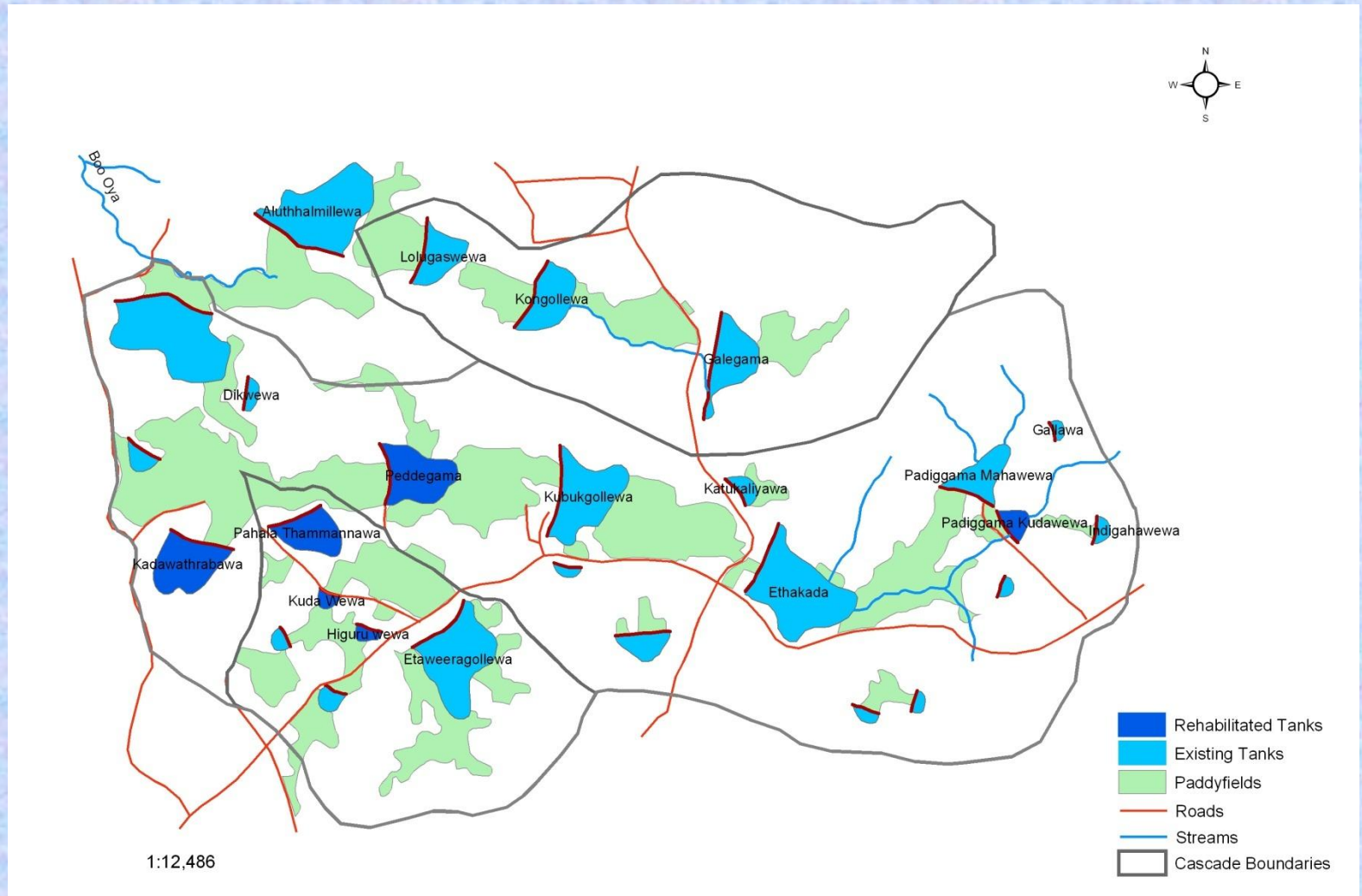
Features of Cascade Systems



Features of a village tank



Pahala Helmillewa Cascades



GIAHS in Sri Lanka

- [Project Algorithm](#)
- [Selection Criteria](#)
- Core Team Members
 - Prof. C.M. Madduma Bandara- Emiratus Professor
 - Dr Uditha Rathnayake – Hydrologist & GIS expert
 - Dr. Sudarma Yatigamma – Tank microbiology Expert
 - Archi. U.B. Ausadahamy – Irrigation Conceptualist
 - Eng. G.N. Paravithana- Irrigation Engineer
 - Mr. Senerath Yatigamma – Traditional Agricultural Expert
 - Eng. Nihal Rupasinghe – Team Leader (Chairman –CECB)