

Community based climate solution An adaptation measure

Based on a case study in dry zone village, Puttalam district, Sri Lanka

'South Asia Webinar: Achievements of Eco - Village Development in South Asia
Bangladesh, Sri Lanka, India and Nepal

Dialogue with Partners and Stakeholders
Implementation, Database, Training Material
17 October 2022

Solution and the Case Study Developed by

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Presented by

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South Asia Partnership Sri Lanka

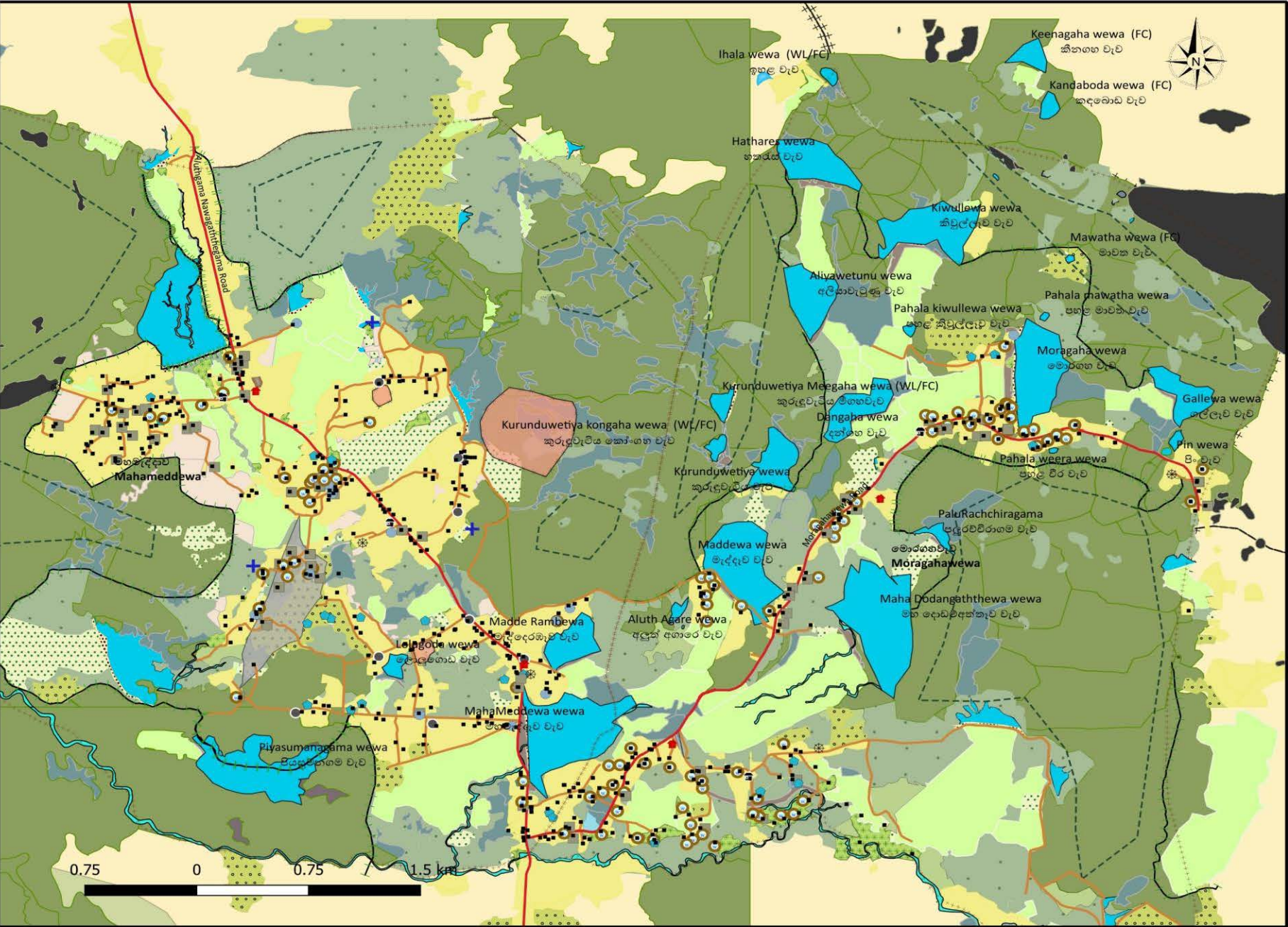


Background Information

- **Category-** Agriculture
- **Solution/ Prototype category-** Community based adaptation to climate change / Poverty /hazards
- **Proposed Solution-** Budded orange cultivation in the community gardens and Chena at the adjacent to the forest reserve
- **Lesson learned from** – Climate Smart Agriculture Development Program- Climate Resilient Integrated Water Management Project – CRIWMP
- **Prototype developed by** – Hemantha Abeywardena- Agriculture Social Mobilization Specialist – CRIWMP, SAPSRI
- **Presented by-** Sasika Konara- Technical Advisor, Program Design & Management , Former Project Manger – CRIWMP (2017-2020)

The Climate Resilient Integrated Water Management Project implemented since 2017 has strengthened the resilience of smallholder farmers, in the dry zone and enhanced their livelihoods through improved water management of Sri Lanka with the technical assistance of United Nation Development Program (UNDP). SAPRSI is one of the implementing partners of this project which is responsible for the Social Mobilization activities in the Puttalam district

Location
Specifics



Area Details

Province : North Western
District : Puttalam
DS : Nawagaththegama
GN : Mahameddawa
Moragahawewa

Legend

Land Use

- Open Forest
- Forest Clear
- Forest Plantation
- Scrubland
- Grassland
- Paddy
- Abandoned paddy
- Chena
- Coconut
- Crops
- Marsh
- Canal
- Kattakaduwa
- Bund
- Land Feature
- Open Area
- Rock
- Barren Land
- Homestead
- PlayGround
- Unutilized Land
- Reservation

Hazardous Areas

- Elephant Attack
- Flood

Water Resources

- Agro well
- Cement Tank
- Pathaha
- Well
- Anicut
- Hand Pump

Public Places

- Common Hall
- Education
- Temple

Roads

- Elephant Fence
- Main Road
- Minor Road

Climate Resilient Integrated Water
Management Project

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Context and Problem Analysis

- The dry zone villages in Sri Lanka **suffers extensively due to the persistent drought conditions**. The main livelihood of the people is farming paddy and highland crops using both tank and rainwater. However due to the impacts of Climate change, the rains pattern has been changed
- The wild elephants intruding the village in search of food and water as the grassland and water holes in their natural habitat are dried up due to droughts is a serious threat affecting the people. This Human –elephant conflict has become an inevitable daily phenomenon.
- Given the risk of elephant attacks on humans coupled with the scarcity of water, farmers are compelled to **abandon their agricultural livelihood activities**.
- Due to the threat posed by the wild elephants, **farmers are discouraged to cultivate perennial crops such as coconut and mango, which gives them year around income**.
- The absence of perennial crops results in a limited vegetation cover. The cultivating short-term and rain-fed seasonal crops practiced by farmers as an alternative livelihood means is not a sustainable livelihood option.



Context and Problem Analysis

- Nawagattegama Divisional Secretariat of Puttalam District is a high elephant infested area
- Most of the year has dry environmental conditions.
- Farmers in these areas have used grafted(budding) local orange to the wood apple plant that grows naturally in their fields. This practice was there within the community (nearly 15 years back)
- Due to lack of proper maintenance, pest and disease control, this orange cultivation has faces various problems
- A common problem seen here is the initial wilting of branches followed by the death of the entire orange tree



Context and Problem Analysis

- Apart from that, other diseases and pest damage are also observed
- Lack of intervention of technical institutions for the budded orange cultivation

Because

- Wood apple plant is not included among the receivers' plants recommended by the research officers for a successful harvest of oranges with quality.
- Although technically not recommended, farmers have found answers to their existing problems (poverty) through wood apple grafted orange cultivation.
- Farmers have resorted to this crop due to its resistance to low water and drought
- It has also been identified as the best solution to the threat of elephants in the wild due to the lack of appetite of wild elephants for plants of the genus Limes.



Interventions

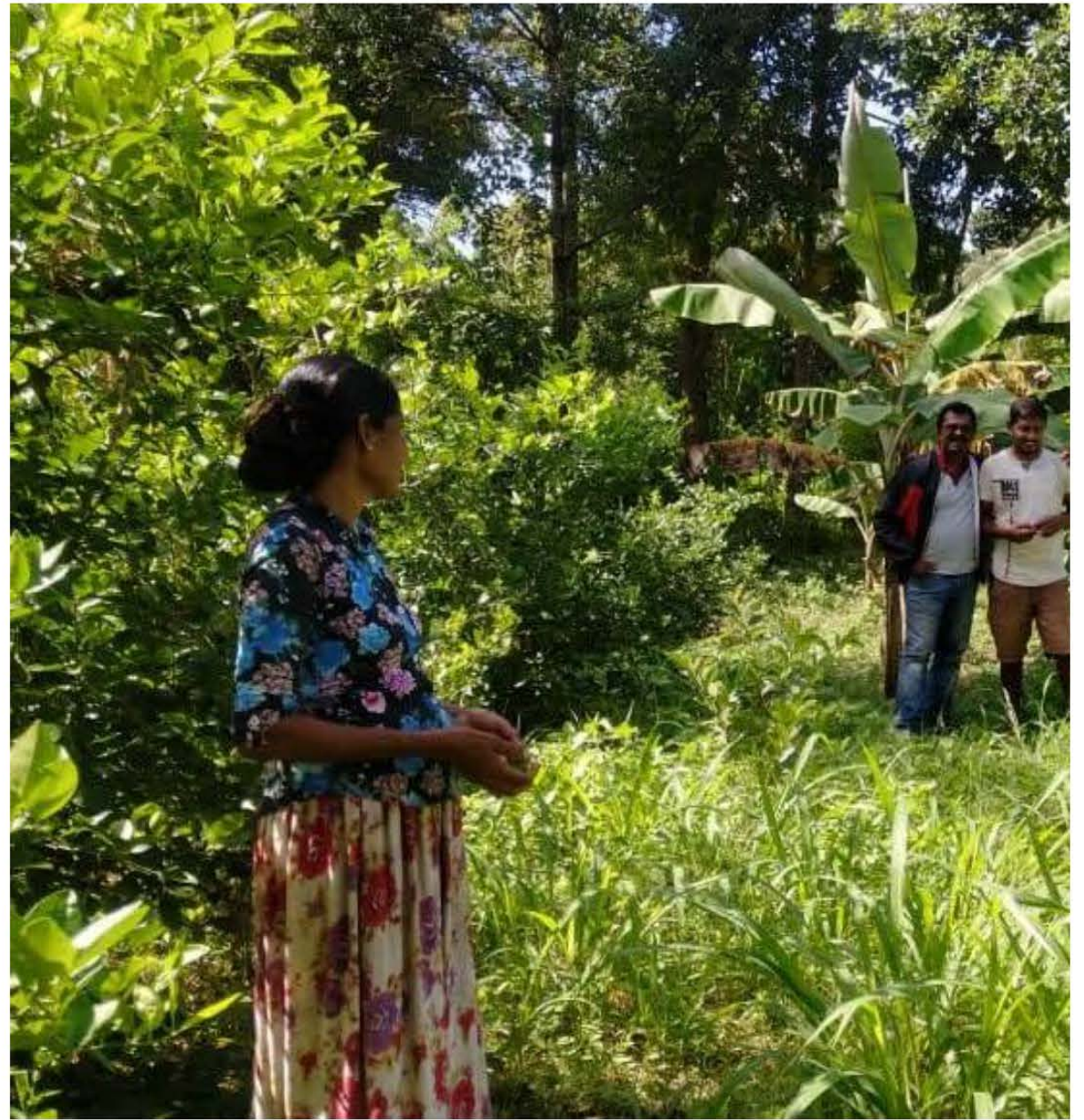
- Through the community consultations, identified the orange cultivation has a huge potential to address the community problems i.e., poverty, drought, human elephant conflicts.
- Plans were made and resources were allocated under the CRIWMP
- Project investments were made
 - Plants
 - Trainings
 - Technical guidance through monitoring
- Sharing the lessons learned
- Replication and upscaling

Initial Stage- Project investments were made



Awareness creation and Cultivation Planning





Hands-on training



Hands-on training





Participatory Monitoring

A photograph of a woman and a young child in an orange grove. The woman, with dark hair and a warm smile, is wearing a black and white striped shirt and a blue and white patterned sarong. She is holding the child, who is also smiling broadly. The child is wearing a grey tank top with a yellow trim and green shorts. They are surrounded by lush green orange trees with many unripe green oranges. The text "Success Stories" is overlaid in the center of the image.

Success Stories



Success stories



Generating Income

- I have cultivated 200 orange in half an acre. After about 03 years, I got the first harvest of oranges. The income was about 30,000.00 rupees. I get at least 100 fruits from 01 plant, From 200 plants I can 20000 oranges. You can get 40000 nuts in two harvest seasons in a year. Even if a fruit is given for 10 rupees, you can earn approximately Rs.400,000.00 rupees in a year.*

***Mrs. Siriyalatha Orange farmer,
Nawagateegama***

Price is determined by the community

- Initially we sold the large size oranges per Rs.10, medium size Rs.8 and small size Rs.5. The price is determined by the local vendors. They harvest the oranges, give us money and take it away. When they need more, they harvest even the smallest oranges. Even it is not viable for us, we used bear it. Now we determine the price per kilo. A kilo of 4-5 big oranges costs Rs. 110-120. A kilo of 6-8 medium size orange costs Rs.80-90. Most of the time we try to sell grown (large) oranges. Because when it is given in kilos, it is more advantageous to us-

Mr. Annanda- Orange farmer, Nawagateegama



Price is determined by the community

- In the past, the orange plantation was destroyed by dead branches and eventually the tree. We learned that this disorder can be prevented. For that, regular and appropriate pruning is required.*

Mr. W.D Wickramasingha-
Orange farmer, Nawagateegama



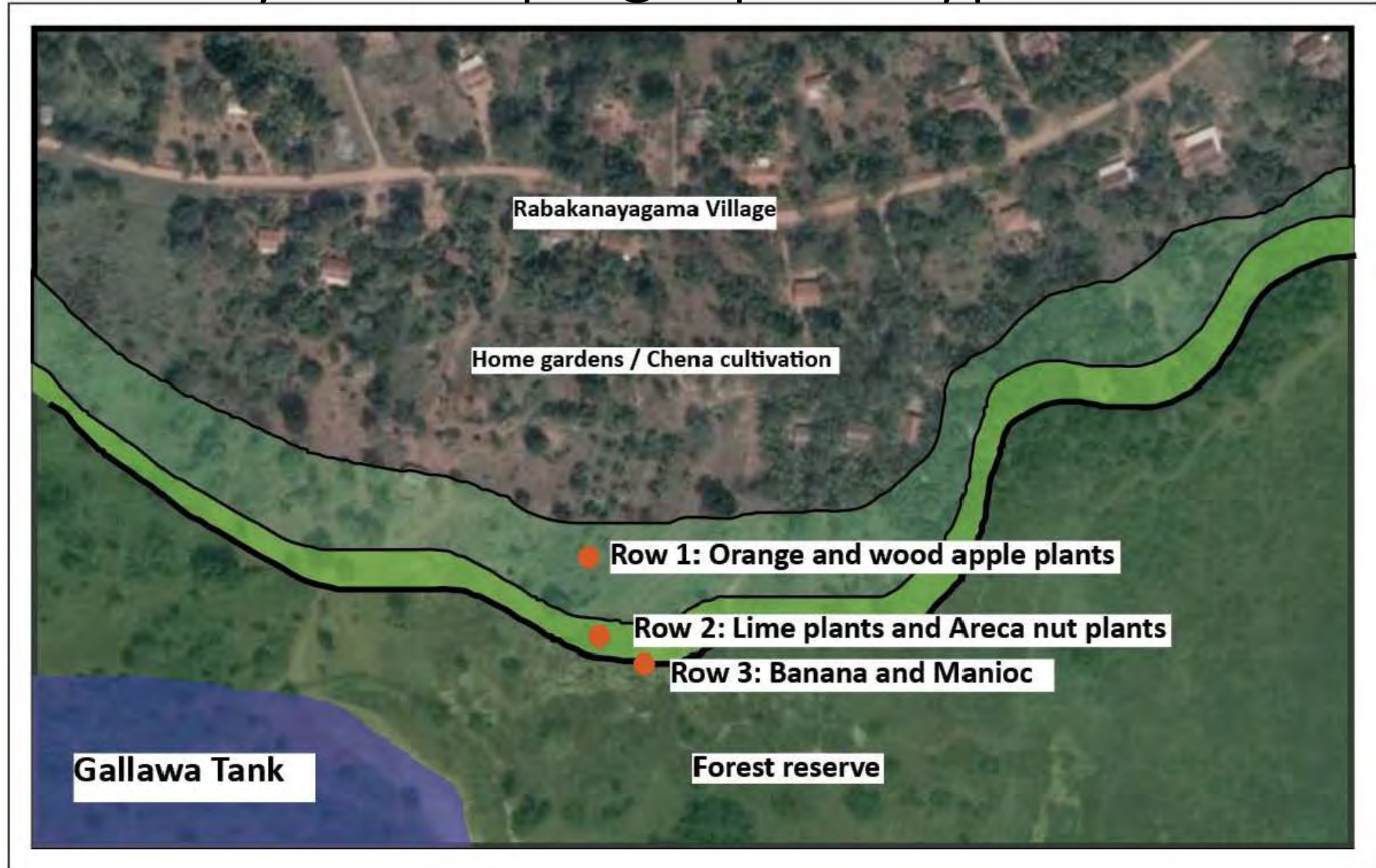
Mix cropping



Experience Sharing



Replication by developing a prototype





Thank you

More information's

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