

GEF project on Healthy Landscapes: Managing agricultural landscapes in socio-ecologically sensitive areas to promote food security, well-being and ecosystem health in Sri Lanka
Inception Workshop 20th September 2019

Introduction

The project on Healthy Landscapes: Managing agricultural landscapes in socio-ecologically sensitive areas to promote food security, well-being and ecosystem health in Sri Lanka is a GEF/UNE funded project under the Ministry of Mahaweli Development and Environment which is planned to be implemented from 2019 to 2021.

The Main Objective of this project is to realize health and environmental co-benefits of the village Tank cascade systems through managing the agricultural landscapes better to promote food security, wellbeing of People, ecosystem health and maintaining biodiversity better.

Sri Lanka possesses a very unique ancient man made irrigation system which sustained for centuries and serves the multiple functions for the society. The main feature of the ancient irrigation systems of Sri Lanka were intricate networks of small to very large reservoirs (wewa or tanks) connected through a series of feeder canals which brought water for year long rice cultivation in the dry zone. These irrigation systems with large number of interconnected reservoirs are believed to have evolved since the third century BC. These ancient irrigation systems still function as a crucial element in supplying water for agriculture in the dry zone of Sri Lanka, and they constitute one of the richest sources of wetland biodiversity in the country. It is believed that there are about 30,000 tanks that have been constructed in a land area of about 40,000 KM² of the dry zone.

The integrity and functioning of cascade landscapes in recent years has been degraded significantly with major impacts on biodiversity and ecosystem service provision. A number of drivers and threats have undermined the mixed, heterogeneous landscapes that the cascade system represent. Poor understanding on the function of this complex landscape has led to ignorance and inadvertent destruction of the ancient VTCS during recent large-scale development projects, and as a result of the spread of commercial opportunities and changes in agricultural technologies in the dry zone. Degradation of floral and faunal communities, loss of fertile lands, destruction of village ecosystems and increased severity of droughts are among the most distinct features that have affected cascade landscapes of Sri Lanka. One of the most heavily affected elements has been the areas of traditional knowledge on the conservation and sustainable utilization of biodiversity, especially agrobiodiversity, which has seen the rapid erosion and loss of many traditional varieties. Recent climate change scenarios have further fueled the situation with extreme events seriously challenging the system.

Among the many ecological and environmental challenges facing Sri Lanka today, none are more critical than the deterioration and degradation of cascade wetland landscapes in the dry zone of the country and the decline in the globally important biodiversity and multiple ecosystem services and co-benefits these landscapes provide.

This Healthy Landscapes project will seek to showcase management strategies for strengthening the restoration and sustainable management of selected Village Tank Cascade Systems (VTCSs) in cascade landscapes for the enhanced provision of ecosystem services and protection of biodiversity. The project plans to develop and validate a model VTCS management system that can be used for scaling up to other cascade landscapes in the country.

The project will deliver global environmental and socio-economic benefits through a package of measures – practices, policies, knowledge management and awareness - that ensure future land use and production sector practices and decisions do not compromise biodiversity and ecosystem

functions and recognise the importance of biodiversity, agriculture and health linkages. Measures will include scaling up methods and tools to mobilize agro-biodiversity at the cascade, farm and community level, knowledge management partnerships, capacity building, cross sectoral policies and planning and enhanced awareness and understanding of biodiversity, agriculture and health linkages so as to better manage future risks and safeguard ecosystem functioning while ensuring that social costs, including health impacts, associated with new measures and strategies do not outweigh potential benefits.

The complete project proposal was developed under the Global Environmental Facility's Project Preparatory Grant through UNEP and involving many local and international experts. The project to be implemented for three years from 2019 to 2021.

Inception Meeting

A half a day inception meeting to kick off the Healthy Landscapes Project organized on 20th September 2019 at the National Agriculture Information and Communication Center (NAICC) Gannoruwa, Peradeniya, Sri Lanka. The objective of this meeting was to sensitize the all stakeholder institution on the project objectives and expected outcomes. It was also aimed to obtain the support of all relevant stakeholder for the successful implementation.

The meeting was attended by senior officials of Ministry of Mahaweli Development and Environment as well as ministry of Agriculture. All stakeholder institutions identified during the project preparatory stage were invited and presented at senior level. Representatives from UNEP, Bioversity International and SACEP were also participated. List of participants are given in Annex 1.

The meeting began with a short opening session where many dignitaries from both ministries, Ministry of Mahaweli Development and Environment as well as Ministry of Agriculture delivered their opening statements. Both the ministries commended the proposed project and pledged their fullest support in implementation.

A workbook titled Healthy landscapes: Managing agricultural landscapes in socio-ecologically sensitive areas to promote food security, well-being and ecosystem health in Sri Lanka prepared by the Land Resources Division of the Ministry of Mahaweli Development & Environment based on project document was given to all participants. (Annex 2)

Dr. P.B. Dharmasena, an expert, introduced the project conceptual review. There, he explained the main components of the tank cascade system and their different functions. Although the main purpose of the tank cascade system was to provide water for irrigation purposes, the tank cascade system included tanks that had other purposes too. The purposes of the other tank types are connected in different ways to provide a good and constant supply of water to the village tank. The proper functioning of the village tank is therefore dependent on the condition of all the other types of tanks that are found in the tank cascade system. The ecosystem services and support to biodiversity varies considerably between each type of tank.

- Kulu Wewa (Forest tank): constructed in the upper catchment of the village in order to provide water for wild animals, filter debris and silt, and capture the rainwater that will enter into the village tank through seepage. By providing water for wild animals, these forest tanks reduce the likelihood of these animals coming into the village to look for water and damaging crops.
- Kayan Wewa: built where the upper catchment has been cleared or degraded. It is used to trap sediment and controls salinity.
- Olagam Wewa: lies close to the village, but is not associated with a permanent settlement or cultivation. It is used as a source of water for seasonal cultivation.

- Goda wala (Water hole): constructed for the trapping and deposition of silt, to avoid siltation and sedimentation of the main village tank.
- Ihala Wewa (Storage tank): constructed for the storage of water, and is associated with paddy cultivation and other community activities.

He further stated that one fact which is quite clear, is that not all these smaller or micro tanks were for purposes of irrigating paddy. Instead they served a number of other multiple uses including augmentation of the ground water table in order to keep the domestic well water supply at a minimum level during the protracted dry seasons and also acted as silt trapping tanks (kulu wewa) during the rainy season.

There is now an increasing awareness of the multiple functions and importance of the diverse benefits of the presently functioning small tank or village irrigation systems. It is also now well recognised that since these small tanks constitute a very important part of the rural landscapes and its ecosystems, there is a strong rationale for ensuring the sustainability of these village tank settlements for economic, social and environmental reasons.

Dr. Danny Hunter, an expert from Bioersivity International took over and went through the project framework. There, he explained project components, objectives and outputs; project results framework; institutional arrangement; project work-plan; and co-financing.

During the group work session, all participants were requested to divided themselves into four groups and assigned to review project components by each group. Following task were given to all groups;

- Go to the workbook component assigned to the group
- Identify most appropriate activities and sub activities for the 1st year implementation
- Identify appropriate time period for implantation of the above activity/s and marked/highlight in the sheet
- Identify capable/expertise/responsible institutes to carry out the identified activities and indicated in relevant Box

All four groups came up with the results of their discussion and summery is given as follows:

Group 1 - Component 01: Implementation of biodiversity based options that improve sustainable landscape management in socio-ecological sensitive areas.

1.1.1. Collect existing baseline information.

Collect additional information needed.

BD, SLM socioeconomic, cultural, marketing, infrastructure, health etc.

Q1 & Q2

Project M. U. / National universities and departments.

1.1.2. P.M.U. with biodiversity int.

Training data collectors. (Awareness workshop)

Q1

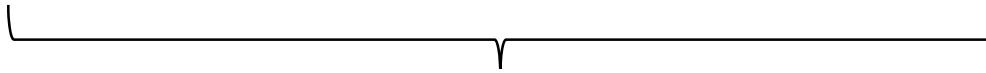
Detail workshop on tool kit.

Q2

1.1.3. Detail training of participatory system mapping and planning.

Relevant expert identified by P.M.U.

1.2.1. Develop training materials / awareness by NRMC and other relevant institutions.



Formation of multi-disciplinary working group
with relevant working agencies.

Group 2 - Component 02: Strengthened institutions, policies and integrated landscape planning of village tank cascade systems (VTCS) in socio-ecological sensitive areas.

1. Stakeholders identification.
2. Review the cross sectorial policies/existing policies.
3. Identify the key experts and trainers and awareness raising and training material by PMU.
4. Identify the linkages of align with the national policies and situational analysis.
5. Capacity need assessment.
6. Create awareness among key stakeholders, institutions, communities.
7. Identify the policy gaps.
8. Component 02 activities need to be prioritized.
9. Draft guideline (VTCS) development in first year (sharing best practices among stakeholders).
10. Proper MRV system with PPP.

Group 3 - Component 03: Knowledge management, partnerships and capacity building for better sustainable integrated landscape management in support of improved ecosystem services and ecohealth outcomes.

- 3.1.1. Stakeholder consultation scoping. (1st year)
Q: Community participation should be added. (to whom – Public community)
- 3.1.2. Time period should be shifted to 1st year – 2nd year. (add to technical institutes)
- 3.1.4. Time period should be shifted to 1st year.
- 3.3.3. 2nd year only.
- 3.3.5. 3rd year only.
- 3.4.2. Changed to 3.4.1.
- 3.4.1. Changed to 3.4.2.
- 3.4.1. Identification of stakeholder and establishment of partnerships.

Group - Component 04: Project implementation based on results based management and application of project lessons learned in future operations facilitated.

- 4.1. MMDE - already completed steering committee.
- 4.2. MMDE - steering committee.
- 4.3. From MMDE to biodiversity —————>UNEP
Evaluation by third party.
Index should be developed.
Baseline survey.

The half a day programme was concluded with the brief wrap-up of Dr. Danny Hunter which included outcome of the workshop, key recommendations and next steps.

List of Participants

Name	Designation	Institution
Mr.W.D.S.C.Weliwaththa	Additional Secretary	MMDE
Mrs. R.H.M.P Abekoon	Director	Biodiversity
Mr.P.Mudalige	DG planning	
M.P.Madushani	Intern Student	land Resource
S.A.M.T.U.Senevirathna	Intern Student	land Resource
Anura Jayathilake	Consultant	
Wathsala Tharrangamage	DO	IR
N.D.Wickckramarachchi	Deputy Director	Land Resource
Nalini Kohowala	Ass. Director	EP&E
Neelaka Abeyrathna	Media	
Chathura Kalana	Media	
Kasun Athukorala	DO	land Resource
Gamini Gamage	Consultant	MMR&D
Ruwan Weerasooriya	Additional Secretary	CCS
M.D.Malkanathi	DO	land Resource
K.H.D.M.Karunarathna	DO	land Resource
Rasika Weerasinghe	MA	land Resource
K.K.D.K.Gunarathna	DO	land Resource
Himali de Costa	Ass. Director	land Resource
K.Paranawidanage	PA	land Resource
B.A.J.Priyal	R.O	land Resource
W.D.P.I.Warnakulasooriya	PA	land Resource
A.D.L.R.Ruwankumara		BDS
Dr.Ajantha Silva	Additional Secretary	M.O.A
Dr.Gamini Samarasinghe	Director	HORDI
Mrs.Janaki Hettiarachchi	Director	SCPPC
Mr.S.Periyasami	Director	NAICC
Mr.Athula Liyanage	MPL	BALL
Dr.H.kadupitiya	Additional Director	NRMC(DOA)
Dr.A.G.Chandrapala	ADA[R]	NRMC(DOA)
Mr.R.D.Siripala	ADA(D)Com	
Prof.D.K.N.G.Pushpakumara	Senior Professor	University of Peradeniya
Dr.Jeevika Weerahewa	Professor	University of Peradeniya
Prof.E.R.N.Gunawardhane	Professor	University of Peradeniya
Dr.Keminda Herath	Senior Lecturer	Wayamba University of Sri Lanka
Prof.Disna Rathnasekara	Professor	University of Ruhuna
Dr.Shamen Vidanage	Senior Lecturer	University of Kelaniya
Ms.A.N.Kodithuwakku	Lecturer(temp)	University of Rajarata
Mr.W.A.C.Weragoda	CGF	FD

Mr.A.R.N.Munasinghe	DFO-Anuradhapura	FD
Miss.Achala de Silva	Research Officer	BMARJ
Dr.Inoka Suraweera	Consultant Community Physician	Ministry of Health
Dr.P.B.Dharmasena	TL/ISEWP/MASL	ISEWP
Dr.Abas Bazir	DG	SACEP
Dr.H.Manthrithilake	Head	IWMI
Mr.Suranjan Kodithuwakku	CEO	GMSL
Mr.W.G.M.Dayawansa	Director	BACC
Dr.W.M.A.D.B.Wickramasinghe	Consultant	UNDP
Mr.W.K.Rathnadeera	Senior Programme Officer	SACEP
Ms.Ramani Shirantha	Senior Scientist	NARA
Mr.H.P.A.Piyasiri	Administrative Officer	A.G.Office Thirappane
Max Zieren	UN Environment	
Danny Hunter	Bioversity International	
Amila Wijesinghe	Livelihood restoration consultant	Janathakshan
Vernika Ranawaka Arachchi	Deputy Director	NRM
E.S.Wickramasinghe	Assistant Director	NAQDA
Nuwan Perera	PA	UNDP-GEF
T.Batagoda	Chief engineer	Irrigation
M.Kirupamoorthy	DD/Agronomy	LUPPD
Ruwan Nawarathna	Additional District Secretary	Anuradhapura
Lasith Jayathilake	FGS, Colombo	
Jeevani Marasinghe	Principle Scientist	Pesticide Registrar's Office
Harshani Udawatta	AC/Assistant	Aranayake
Leel Randeni		
Nimal Gunawardena		