Lalan Rubbers (Pvt) Ltd.

HIGH CONSERVATION VALUE FOREST ASSESMENT

In the 15 Estates Managed by Lalan Agri Division

AMENDMENT III

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Contents

1. Introduction

The FME consists of 15 sub FMUs consisting total extent of 8,733.76 Ha of land managed by the company which encompasses 7,518.98 Ha of to FSC™ (FSC- C101709) certified extent. Majority of the planted extent consist of Rubber and the rest of the land is planted with coconut, Oil Palm, Tea, Forestry and Cinnamon. The extent under conservation forest is 874.91 ha. This area is under conservation and not disturbed by management activities.

High Conservation Value (HCV) is a biological, ecological, social or cultural value of outstanding significance or critical importance at the local, national, regional or global scale.

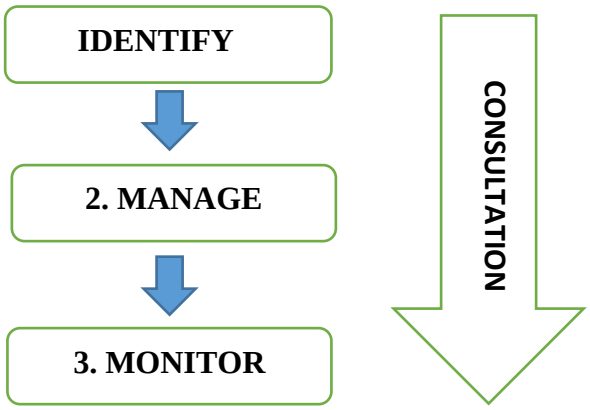
In order to comply with Principle 9 of the FSC Interim National Standard, we need to identify the type of the HCVs, determine an appropriate management system (to maintain or enhance the value) and agree on a long term monitoring mechanism.

This report discuss the method of identification of High Conservation Values (HCV) located inside each sub Forest Management Unit (FMU) which has been conducted with the intentions of strengthening the environmental protection as a responsible business entity in addition to the aforesaid requirements.

2. Methodology

The three steps followed in identification of HCV are as follows.

Figure: 1



1. The first step in identification of HCVs has been undertaken using the Proforest toolkit – Edition 01 (2003) through precautionary approach. The classification of six types of HCVs given in the toolkit is appended below with a short description against each type.

HCV 1 Globally, regionally or nationally significant concentrations of biodiversity values

- HCV1.1 Protected Areas
- HCV1.2 Threatened and endangered species
- HCV1.3 Endemic species
- HCV1.4 Critical temporal use

HCV 2 Globally, regionally or nationally significant large landscape level forests

HCV 3. Forest areas that are in or contain rare, threatened or endangered ecosystems

HCV 2 & 3 is not present in our sub FMUs.

HCV 4. Forest areas that provide basic services of nature in critical situations

- HCV4.1 Forests critical to water catchments
- HCV4.2 Forests critical to erosion control
- HCV4.3 Forests providing barriers to destructive fire

HCV 5. Forest areas fundamental to meeting basic needs of local communities

HCV 6. Forest areas critical to local communities' traditional cultural identity

The identification of HCV type 01 was undertaken by the Head of the faculty of crop science of University of Peradeniya, Sri Lanka. In addition to the university, we have also made use of the knowledge of local stakeholders for the same identification on HCV 1. In order to identify the floral species measurements were taken from thirteen (13) permanent sampling plots (each with 20 m x 20 m land area) representing all estates and "Cinchona Block". Measurement of faunal species was done by conducting random field observations from all 13 divisions separately

Visual encounter survey method was used in preparing this checklist and thirteen (13) lines transects (100m×2m) and thirteen plot sampling (20m□20m) were used. Surveys were conducted in both day and night. The avifaunal data were collected by using a standard binocular, and also by calls / songs.

Mammal fauna were documented through direct observations and indirect methods (e.g.: foot prints, dung). Amphibian and Reptile (Herpetofauna) data were collected by using evidence of road kills, killed specimens by villagers and by searching under logs, stones and boulders. Several nocturnal field visits were also made in walking through the study area. Some small butterflies were captured using a butterfly net and closely observed using a clear glass bottle. Different fish types in water bodies (flowing through respective divisions in the estate) were also captured by using a net (2m×2m trawling net) and closely observed using a small glass tank.

All the data collected were tabulated and analyses were carried out using standard analytical procedures identified for ecological studies. Identification of conservation status was done using The National Red List 2020 Sri Lanka. (Refer High Conservation Value Forest Assessment of Lalan Rubbers Pvt. Ltd)

Identification of HCV type 4, 5 and 6 is done through stakeholder consultations conducted in each estate. The stakeholder committees were appointed on the basis of "Five Forces" usually spoken in Sri Lankan society which consists of Buddhist monks / religious leaders, native physicians, teachers, farmers and laborers who live in the same locality and are thorough with

the knowledge of the estate and its historical background which consists of its eco systems that encompasses of plants, animals, micro-organisms and non-living elements such as air, sunlight, soil, rocks, minerals, water and precipitation. In addition to the composition of five forces as explained above, representatives from the neighboring villages, the environmental officer, few members of the estate field staff, field watcher and few senior citizens residing in the estate too have been included in the committees as furnished below.

The composition of stake holder committees:

1. Grama niladhari (The officer appointed by the government who take care of a particular village area for the purpose of administration)
2. Forest officer
3. Religious leaders representing different religions
4. Native doctor
5. School teacher/ principle
6. Farmer (Including dairy/goat/ poultry)
7. Environmental officer – DS office
8. Representatives from adjacent villages
9. Front line Supervisor of the estate employees, Field staff and Field Watchers
10. Senior citizens with leadership qualities of the estate/division

Management and Monitoring is done with the consultation of stakeholders. (Please refer table 02.

3. Identified high conservation values

Reference No.	HCV type	Group	Estate	Division	Name of the HCV	Special remarks	Approximate Extent (Ha)
MO/HCV-1.2/01	HCV 1.2	Mahaoya	Woodend	Nugahena	Nugahena Forest	High bio diversity and presence of red list species	2.09
MW/HCV – 1.2/01	HCV 1.2	Miyanawita	Miyanawita	Kosgahakande	Kosgahakande forest	High bio diversity and presence of red list species	251.22
MW/HCV – 1.2/02	HCV 1.2	Miyanawita	Dabar	Dabar	A rare dragonfly species	A rare dragonfly species found during the Biodiversity assessment conducted in 2021 July near a small forest patch adjacent to a stream.	0.01
PTK/HCV-1.2/01	HCV 1.2	Pitiakanda	Muwankande	Upper	Cinchona Forest	Only Cinchona forest in the region	5.00
SAP/HCV-1.2/02	HCV 1.2	Sapumalkanda	Sapumalkanda	Sapumalkande upper	Rusty spotted cat	Observed in the tea field close to the Group office. Considered as rare and endangered species.	7
MO/HCV-1.2/02	HCV 1.2	Mahaoya	Woodend	Woodend	Weli muwa.	Close to 2008 RP. Considered as rare and endangered species. Habitat identification is ongoing.	10
MO/HCV-1.2/03	HCV 1.2	Mahaoya	Densworth	Densworth	Rusty spotted cat	Considered as rare and endangered species.	20
SAP/HCV-1.2/03	HCV 1.2	Sapumalkanda	Reucastle	Reucastle	Rusty Spotted cat: 1998 field	Considered as rare and endangered species.	15
SAP/HCV-1.2/04	HCV 1.2	Sapumalkanda	Reucastle	Digala Lower	Spotted deer: 1990 field adjacent to the jungle	Considered as rare and endangered species. Rare species to the region.	6
SAP/HCV-1.2/05	HCV 1.2	Sapumalkanda	Reucastle	Nahalma	Bulath Hapaya	Endangered and Endemic species. Stream bordering 1990 field	
UBG/HCV-1.2/01	HCV 1.2	Udabage	Eila	Eila	Cave providing habitat many species	Located near 2019 and 2006 Rubber fields. Identified as a HCV during the Biodiversity assessment carried out in 2021/22	1
MO/HCV4.1/1	HCV 4.1	Mahaoya	Mahaoya	Mahaoya	Water catchment - forest patch near 1997	Water spouts that more than 100 families are depending on for drinking water.	0.5
MO/HCV4.1/2	HCV 4.1	Mahaoya	Densworth	Densworth	Catchment areas: Watershed – 1971	Only source of water spouts in the mountains. Most workers and villagers are depending for drinking water here.	20
PTK/HCV4.1/1	HCV 4.1	Pitiakanda	Muwankande	Upper	Catchment areas: Cinchona Block	Only Cinchona plantation in the region. Main water source for estate population of 18 families.	5
PTK/HCV4.1/2	HCV 4.1	Pitiakanda	Nottinghill	Nottinghill	Catchment areas: 1998 & 1999 fields	Catchment areas for water wells that is used to get drinking water by 16 families.	0.12

Reference No.	HCV type	Group	Estate	Division	Name of the HCV	Special remarks	Approximate Extent (Ha)
PTK/HCV4.1/3	HCV 4.1	Pitiakanda	Pitiakanda	Pilessa	Catchment areas: 1986 field	Provide drinking water to 20 families	0.5
PTK/HCV4.1/4	HCV 4.1	Pitiakanda	Keppitigala	Malambe	Catchment areas: 2011 field	15 families in Malambe village use this source of drinking water	0.2
PTK/HCV4.1/5	HCV 4.1	Pitiakanda	Keppitigala	Galagama	Catchment areas: 2014 field	Ambagaha yata wala – Provide drinking water to Niyangama villagers and residents of Galagama division	0.25
SAP/HCV4.1/1	HCV 4.1	Sapumalkanda	Reucastle	Reucastle	Catchment area: 2005 field	Provide drinking water for about 60 families.	0.1
SAP/HCV4.1/2	HCV 4.1	Sapumalkanda	Reucastle	Reucastle	Catchment area: 1995 field	Provide drinking water to 23 families.	0.1
SAP/HCV4.1/3	HCV 4.1	Sapumalkanda	Reucastle	Digala lower	Catchment area: 2007 cinnamon planted area	Provide drinking water for 32 families	0.5
MO/HCV4.2/1	HCV 4.2	Mahaoya	Densworth	Densworth	2014 landslide area	Identified as a potential HCV and National Building Research Organization officials visited. The report is pending.	0.25
MO/HCV4.2/1	HCV 4.2	Mahaoya	Mahaoya	Mahaoya	2010 landslide area	Positively identified by officials of NBRO as a sensitive area and conservation work has commenced as per their advices.	0.25
SAP/HCV4.2/1	HCV 4.2	Sapumalkanda	Reucastle	Reucastle	1989 Landslide area (F.No 1986)	Positively identified by officials of NBRO as a sensitive area and conservation work has already commenced in 6 ha. as per their advices.	6
MO/HCV4.2/3	HCV 4.2	Mahaoya	Mahaoya	Glassel	1983 landslide area	Positively identified by officials of NBRO as a sensitive area and conservation work has commenced as per their advices.	0.25
UBG/HCV4.2/1	HCV 4.2	Udabage	Eila	Avington	1979 Landslide	Positively identified by officials of NBRO as a sensitive area and conservation work has commenced as per their advices.	0.75.
UBG/HCV4.2/2	HCV 4.2	Udabage	Eila	Eila	1989 Landslide	Positively identified by officials of NBRO as a sensitive area and conservation work has commenced as per their advices.	0.5
UBG/HCV 4.2/3	HCV 4.2	Udabage	Udapola	Yatapola	2006 landslide	Identified as a HCV during the geology assessment carried out in 2018	0.5
SAP/HCV4.2/2	HCV 4.2	Sapumalkanda	Illuktenne	Udahenkanda	1987 Landslide	Positively identified by officials of NBRO as a sensitive area and conservation work has commenced as per their advices	1
MW/HCV4.2/1	HCV 4.2	Miyanawita	Miyanawita	Asamanakande	2016 landslide	Positively identified by a geologist attached to NBRO as an HCV area	0.5

PTK/HCV4.3/1	HCV 4.3	Pitiakanda	Keppitigala	Galagama	2014 / 06 rubber field C1 coconut fields	Susceptible for wildfires during droughts	1

Reference No.	HCV type	Group	Estate	Division	Name of the HCV	Special remarks	Approximate Extent (Ha)
MO/HCV5/1	HCV 5	Mahaoya	Mahaoya	Mahaoya	2013 RP Natural Spring	More than 30 families use the spout for drinking and bathing purposes.	0.1
MO/HCV5/2	HCV 5	Mahaoya	Mahaoya	Glassel Division	1983 RP Natural Spring	Only water source for 20 worker families and rare medicinal herbs	0.1
MO/HCV5/3	HCV 5	Mahaoya	Mahaoya	Glassel Division	Natural Spring in forest patch in 1990	Only water source for 150 worker families and rare medicinal herbs	0.1
MO/HCV5/4	HCV 5	Mahaoya	Mahaoya	Ernan Division	2000RP Natural Spring	Only water source for 12 worker families	0.1
MO/HCV5/6	HCV 5	Mahaoya	Woodend	Yogama	Natural Spring 2008 RP field	200 families use water for drinking	0.1
UBG/HCV5/1	HCV 5	Udabage	Udabage	Udabage upper	2004RP	Water source for 50 families	0.5
UBG/HCV5/4	HCV 5	Udabage	Udabage	Middle	1990 RP	Water source for 60 families	0.1
UBG/HCV5/5	HCV 5	Udabage	Udapola	Udapola	1989	Water source for 100 families	0.1
UBG/HCV5/6	HCV 5	Udabage	Udapola	Udapola	Paladeniya cinnamon	Water source for 10 families	0.1
UBG/HCV5/7	HCV 5	Udabage	Udapola	Yatapola	1987 – Spring 01	Water source for 60 families	0.1
UBG/HCV5/8	HCV 5	Udabage	Udapola	Yatapola	1987 – Spring 02	Water source for 20 families and Miyanawita school	0.1
UBG/HCV5/9	HCV 5	Udabage	Udapola	Yatapola	2000 RP	Water source for 15 families in Yatapola housing scheme	0.1
UBG/HCV5/10	HCV 5	Udabage	Udapola	Yatapola	Between 2000 & 2012	Water source for 8 families	0.1
UBG/HCV5/11	HCV 5	Udabage	Udapola	Yatapola	Between 2000 & 1999	Water source for 7 families	0.1
UBG/HCV5/12	HCV 5	Udabage	Udapola	Yatapola	1997	Water source for 10 families	0.1
UBG/HCV5/13	HCV 5	Udabage	Udapola	Mawattanna	1998	Water source for 6 families	0.1
UBG/HCV5/14	HCV 5	Udabage	Udapola	Mawattanna	1999	Water source for 75 families	0.1
UBG/HCV5/15	HCV 5	Udabage	Udapola	Mawattanna	2006	Water source for 15 families	0.1
UBG/HCV5/16	HCV 5	Udabage	Udapola	Mawattanna	2008	Water source for 10famillies	0.1
UBG/HCV5/17	HCV 5	Udabage	Udapola	Mawattanna	2010	Water source for 4 families	0.1
UBG/HCV5/18				Mawattanna	2011	Water source for 70 families	0.1
UBG/HCV5/19	HCV 5	Udabage	Udapola	Manikkanda	2007	Water source for 15 families and school	0.1
UBG/HCV5/20	HCV 5	Udabage	Eila	Eila	2006 Ice peella	Water source for 40 families and medicinal plants	0.1
UBG/HCV5/21	HCV 5	Udabage	Eila	Eila	1989	Water source for 10 families	0.1

Reference No.	HCV type	Group	Estate	Division	Name of the HCV	Special remarks	Approximate Extent (Ha)
UBG/HCV5/22	HCV 5	Udabage	Eila	Eila	2015	Water source for 7famillies	0.1
UBG/HCV5/23	HCV 5	Udabage	Avington	Avington	2008	Water source for 16famillies	0.1
UBG/HCV5/24	HCV 5	Udabage	Malhasna	Malhasna	2014	Water source for 10 families	0.1
MO/HCV6/1	HCV 6	Mahaoya	Densworth	Densworth	Paththini amma gala	An ancient religious site that the people worship once a year.	0.01
SAP/HCV6/1	HCV 6	Sapumalkanda	Illuktanna	Udahenkanda	Mutupahana Ella	Waterfall with historic importance	0.1
MO/HCV6/2	HCV 6	Mahaoya	Mahaoya	Mahaoya	Mahamuni kovil	Kovil with special features and located on a rock	0.05
MO/HCV6/3	HCV 6	Mahaoya	Woodend	Yogama	Cave	Archeological value	0.05
UBG/HCV6/1	HCV 6	Udabage	Udabage	Upper	2015 RP Cave	Historical cave with stone carvings	0.01
UBG/HCV6/2	HCV 6	Udabage	Eila	Malhasna	Wanathayya kovil.	Unique nature and situated in thick jungle.	5

Table 01. Identified HCVs

4. Monitoring and Management

HCV	Conservation measures	Monitoring Indicators	Frequency	Responsibility	Action to be taken
HCV 1.2 & 1.3	• Demarcation of 10m buffer zone around the forest in which chemical application or uprooting of trees are not allowed. However, during pest outbreaks which affects the economy, productivity and yields the guidelines of relevant research institute will be followed. • Identification of habitats of rare and endangered species and to record observations. • Create awareness amongst the local community of the presence of such species. • Illegal activities are not allowed inside the HCV and inform the manager about the changes to the HCV and record. • Inform the Manager of the estate when someone observed a new/rare species of flora or fauna • Inform the manager if there are any unusual incident happened in the forest (Growth and removal of invasive species, death of an animal, trees etc.) • Make people aware about protection and conservation of the forest • Gathering inputs from villagers regularly • Conducting Stakeholder consultation twice a year to discuss about new developments or changes	• Illegal/ prohibited activities (Damaging of trees, hunting, trapping, fishing, encroachments, pesticide spraying in the buffer zone etc.) • Observation of new/rare flora • Observation of new/rare fauna in or around the forest • Sudden decrease of flora/fauna population • Growth of invasive species (Alstonia, Para etc) • Unusual incidents (Death of an animal, trees etc.) • Bio-diversity assessment will be undertaken once in five years by team of experts.	Monitoring - By-weekly SHC - half yearly.	Stake holder consultation forum and informal stake holder contacts that consists of employees, field watchers, field staff, governmental officers and villagers around the sub FMU. The overall in charge of the informal stakeholder contacts is the Field Officer.	• Report any illegal activity to the manager immediately. Watcher/ FO/Manager must record the incident take appropriate actions to prevent recurrence • Raise a CAR form • Provide training • Prevent recurrence of incidents of similar nature in future

HCV 4.1	• Demarcation of 10m buffer zone around the forest in which chemical application or uprooting of trees are not allowed • Enrichment planting with bamboo, Kumbuk, trees • Regular consultation with the water committee	• Ensure strict compliance of the conservation measures adopted. • Ensure high quality of water by assessing turbidity once a year • Record significant changes of water availability and the frequency of happening of same during a year.	By-weekly and half yearly as above	FOs, watchers and stakeholders	Report variances to the Manager. He will raise a CAR form and will be seeking expert opinion on the change. He will also facilitate mitigating action.
HCV 4.2	• Create awareness amongst the residents and employees • Conservation measures are to be taken on the advices of the NBRO.	• Observation of cracks, earth movements, also movements of rocks and boulders • Collection of information on sudden eruptions of water spouts • Sudden depletion of water levels of wells etc.	By-weekly and half yearly as above and especially during rainy weather	FOs, watchers and stakeholders	Report observations and information to the NBRO and the DS of the area through the Manager. He will raise a CAR form and will be seeking expert opinion on the change. He will also facilitate mitigating action.
HCV 4.3	• Fire can happen at many economically important locations within a sub FMU. It is essential therefore to develop a fire prevention plan in all the FMUs of the FME using expert opinion. • Fire prone areas are to be mapped following a SH consultation. • Create fire gaps during leaf fall months or during prolonged droughts. • Create awareness in employees • Adhere to the company policy No.11 on fire forest procedure. • Conduct fire drills once in three months with all involved	• Ensure that the fire gaps are being maintained especially during drier months and in fire prone areas as per the maps • Record incidents of fire	By-weekly and half yearly as above. and especially during dry weather	FOs, watchers and stakeholders	• Appoint firefighting committees in relevant divisions • Train all watches and field staff to handle fire control • Inform incidents of fire to the Manager and raise a CAR form • Develop a fire prevention plan and conduct fire drills frequently in potential locations. • Train employees also to give first aid in case of wounds due to fire.

HCV 5	• Strict compliance of policy No. 18 • Grow dense vegetation of bamboo / Kumbuk along river / stream banks to prevent siltation • Buffer zone of 10M radius around springs should be established • Trees inside buffer zones will not be removed • Proper identification and recording of medicinal plants • Create awareness amongst the local community • Prevent exploitation of the tree/plants	Refer measures proposed under 4.1	By-weekly and half yearly as above	FOs, watchers and stakeholders	• Put up name boards • Create awareness • Raise CAR forms when violations occur • Bring such to the notice of the Manager
HCV 6	• Inform archeological department • Create awareness of its heritage value • Follow instructions of the archeological department	Maintain records on physical damages to the sites.	By-weekly and half yearly as above.	FOs, watchers and stakeholders	Publicize the ancient / cultural value through name boards etc Physical damages to be informed to the manager Raise a CAR form when needed

NB: General conservation measures: Getting interested stake holders to form committees amongst themselves and take active and voluntary participation with the aim of conserving each HCV as explained above will be encouraged by the management of the sub FMU.

Table 02. Monitoring and Management of identified HCVs

5. Annexures*

a. Stake Holder meeting minutes and signatures of participants (All meeting minutes are documented and available in each group office)
b. GIS maps marked with identified HCVs
c. Photographs of some of the meetings conducted as samples

*- Hardcopies of the annexures can be made available upon request.

6. References

d. Proforest the high conservation value forest tool kit. Edition 1 : 2003 (part 1 and 3)
e. Proforest – Assessment, management and monitoring of HCV
f. HCV forest assessment of Lalan Rubbers Pvt Ltd : Dr. S.P. Nissanka in 2016
g. HCV assessment of Prof Dewaka Weerakoon in 2021/22
h. Geology assessment by Prof Upul Subasinghe in 2018
i. National Red list- 2012 of Sri Lanka
j. National Red List of 2020 Sri Lanka