

HINIDUMA BIO-LINK PROJECT

ANNUAL REPORT



PLAN VIVO

May 2023

THE HINIDUMA BIO-LINK PROJECT:
Reforestation of Traditional Home Gardens with Analog Forestry
Wet Zones of Sri Lanka

Carbon Consulting Company

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NOMENCLATURE

Abbreviation	Meaning
CBO	Community Based Organisation
CCC	Carbon Consulting Company
DBH	Diameter at Breast Height
FD	Forest Department
Ha	Hectares
PES	Payments for Ecosystem Services
PV	Plan Vivos
PVCs	Plan Vivo Certificates
USD	United States Dollar
TSS	Technical Specification Series

EXECUTIVE SUMMARY

The following report summarises the significant activities performed as a part of the Hiniduma Bio-link Project during the period of 1st January 2019 to 31st December 2022.

The Carbon Consulting Company (CCC) continued to improve the programme's administrative and management systems through regular updates of the database, as well as improved tracking of carbon credit sales and payments to farmers, and monitoring of actual carbon stock change.

The introduction of 5000 plants to the Hiniduma Bio-Link project was the highlight of the period. This consists of 72 new farmers who are currently managing 9.685Ha of land with 52 rainforest flora species. The extension was done in collaboration with Patagonia and Hirdaramani companies. Patagonia and Hirdaramani companies planted 3000 and 2000 seedlings respectively and pledged to fund the maintenance cost of the plants for 3 years. 1950 tonnes of CO₂ will be sequestered through this planting activity.

A 20% sample of tree monitoring was conducted in 2022 and the survival rate was 81%. CCC also conducted land surveys and farmer awareness sessions for newly selected farmers, in order to scale up the Hiniduma Bio-Link project in the next year. The details will be described in the following report.

The following is the Annual Report that details the progress of the Hiniduma Bio-link Project, Sri Lanka, submitted to the Plan Vivo Foundation.

1 SUMMARY

Project Overview	
Reporting Period	1 st of January 2019– 31 st of December 2022
Geographical areas	Galle District, Southern Province, Sri Lanka
Technical specifications in use	Mixed Species Reforestation

Project Indicators	Historical (2011 – 2018)	Added in the period (2019-2022)	Total
Number of smallholders with PES agreements	64	72	136
Number of community groups with PES agreements	N/A	N/A	N/A
Approximate number of individuals in these community groups	N/A	N/A	N/A
Area under Management (Ha) where PES agreements are in place	18.47	9.685	28.155
Total PES payments made to participants (USD)	12,126	952	13078
Total sum held in trust for future PES payments (USD)	4481		
Allocation to Plan Vivo buffer	488	334	832
Unsold Stock at Time of Submission			
2012 Vintage			5
2013 Vintage			433
Total Unsold Stock			438
Total Plan Vivo Certificates (PVCs) issued to date			2,767
Plan Vivo Certificates requested for issuance (2022 Vintage)			1950
Total PVCs issued (including this report)			4717

2 KEY EVENTS, DEVELOPMENTS AND CHALLENGES

2.1 Key Events

CCC conducted the following key events during the aforementioned reporting period.

2.1.1 Farmer Training Sessions

CCC selected new farmers to provide 5,000 saplings (2000 trees in 2019, 1000 trees in 2020 and 2,000 in 2022) as an extension to the existing project. CCC conducted a Training and Awareness Session for new farmer participants with the engagement of the Hiniduma Bio-Link Society. Farmer training sessions were held on 20th June 2019 and 19th March 2021 in Neluwa. The main objective of the sessions was to generate awareness of the project's importance and how it would benefit the community, village, and surrounding ecosystem. Furthermore, new farmers who expressed interest in engaging with the session were made aware of the importance of the project including future activities.

The training session held in 2021 was conducted with few participants under Covid 19 rules and regulations. Followed by the Covid 19 pandemic, an economic crisis and a fuel scarcity occurred in the country. Therefore, travelling was limited and most of the project activities were postponed. Now the situation is recovering and the postponed activities are actively ongoing. Farmer awareness and training activities have been extended after the pandemic.



Figure SEQ Figure 2: Farmer awareness session for the new farmer participants under Covid 19 guidelines (During the pandemic)

2.2 Key Developments

2.2.1 Fundraising for the Expansion of the Biolink:

CCC was able to expand the Hiniduma Bio-link by planting 5000 plants in new farmlands within the corridor. Patagonia and Hirdaramani International Exports Pvt LTD are two establishments who each contributed to the Bio-link during the years of 2019 to 2022 by planting 3000 and 2000 seedlings respectively and pledged to fund the maintenance cost of the plants for following three years. These new plants were from 52 different rainforest species and those were planted on 74 farmlands belonging to 72 farmers (72 new farmers).

Table 1: Number of new farmer participants joined each year

Year of planting	Number of new farmer participants	Number of flora species distributed
2019	16	42
2020	20	45
2021	19	48
2022	17	52

2.2.2 Organisational Development

2.2.2.1 Project Promotion

CCC is seeking additional stakeholders and funding to continue with the project. Special promotional material was developed to help spread the concept of the project among the corporate sector, including possible investment opportunities.

2.2.2.2 Species-Specific Biomass Equation

Species-specific biomass equations were used to calculate future carbon sequestration, which were then compared with the findings from recent monitoring activities and has been evaluated and adapted to the developed equations.

2.3 Key Challenges

New Land Scarcity

The main use of land in the Hiniduma area is for tea cultivation. When the monetary value of the tea leaves increases, the farmers will clear any bare land and convert them into suitable areas for tea cultivation. Even if they do agree to plant trees, they are not interested in planting wild varieties in their farmlands or gardens if the tree has limited or no commercial value. Thus, finding suitable lands for expansion was of significant difficulty, as the farmers were more interested in fruit/medicinal or trees with timber value. Therefore, after several discussions with the farmers, CCC agreed to provide extra trees, including fruit and timber trees along with wild varieties. However, from those extra trees, any species that are not included in the technical specification would not be taken into account in calculating the carbon credit generation.

Economic Crisis

Followed by the Covid 19 pandemic, Sri Lanka faced an economic crisis during this period (2020 and 2021). The fuel scarcity crisis was one of the main issues in the country. Therefore, travelling was limited by the government and most field activities were therefore limited. Under this situation the company decided to recruit a person from the Neluwa area to monitor the activities of the project. Therefore, limited activities were performed in keeping with the Covid 19 rules and regulations under the supervision of the newly recruited field assistants. During this period the company was able to continuously maintain connection with the farmers through virtual means.. The other main issue that was faced due to the economic crisis, was the unwillingness of the farmers to take forest plants, instead they were willing to go ahead with economic plants.

3 ACTIVITIES, TOTAL PROJECT SIZE AND PARTICIPATION

3.1 Summary of Total Participation and Project Size

The following data represents the scale of the project to date (all vintage).

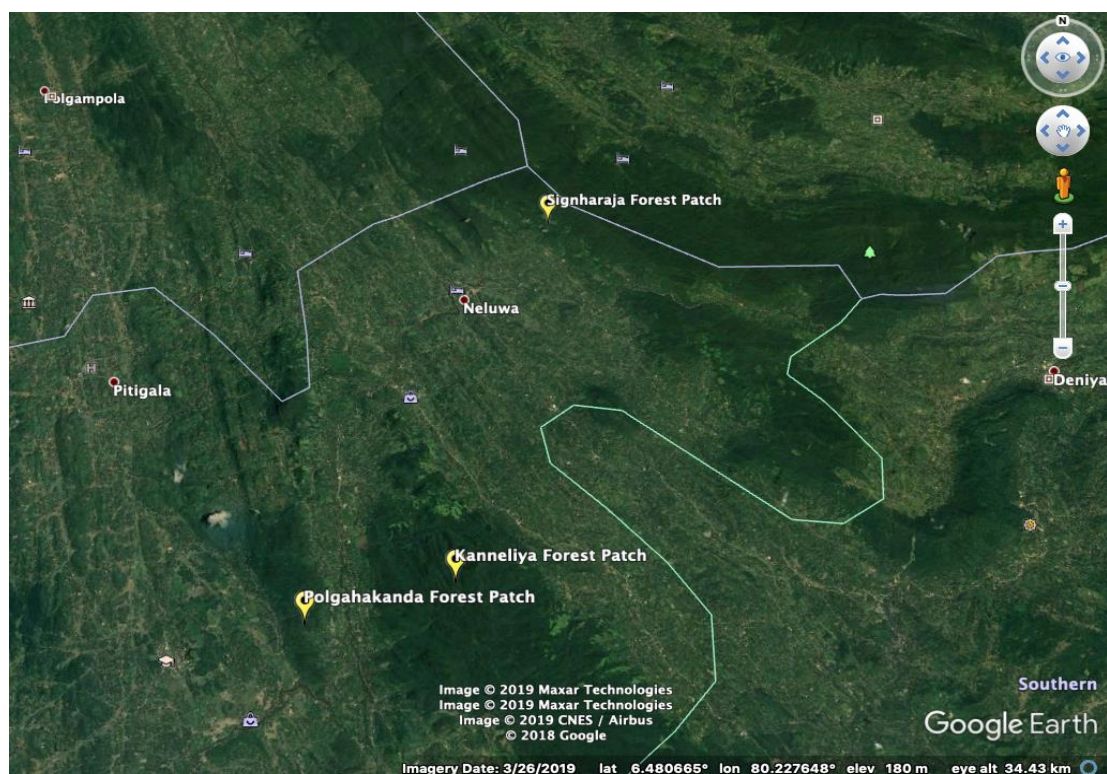
Table 2: Summary of the project size

Vintage		
2012	The number of producers with registered PES agreements:	15
	The area covered by the project:	6.85 ha equivalent
2013	The number of producers with registered PES agreements:	15
	The area covered by the project:	Approximately 1.97 ha
2017	The number of producers with registered PES agreements:	31
	The area covered by the project:	Approximately 7.73 ha
2018	The number of producers with registered PES agreements:	3
	The area covered by the project:	Approximately 1.93 ha
2022	The number of producers with registered PES agreements:	72
	The area covered by the project:	Approximately 9.685 ha
2022	Total number of producers with registered PES agreements (Up to 2022)	136
	The total area covered by the project (Up to 2022)	28.155

3.2 Expansion of the project

CCC planted 5,000 new saplings as an extension of the Bio-Link Project, with the support of two sponsors. Phases I and II of the planted lands are located between the Kanneliya Forest Reserve and the Polgahakanda forest patch.

As mentioned in the 2016 Annual Report, CCC was planning to expand the project between the Kanneliya Forest Reserve and the Sinharaja Rainforest to connect the three blocks of forest under Phase III of the planting process. In 2017 and 2018, CCC planted 5,000 saplings as replacements for dead plants in the Neluwa area, which is in between the Kanneliya Forest Reserve and the Sinharaja Rainforest as a part of the expansion. Neluwa is 10 Km away from the Hiniduma area and has similar climatic and soil conditions as Hiniduma. CCC selected the Neluwa area following land surveys conducted in 2017 and 2018, and selected 34 farmer lands to plant 5,000 saplings (4,000 in 2017 and 1,000 in 2018). As for the further expansion of this project, CCC has engaged in planting 5000 plants in Neluwa area during period of 2019 to 2022. The project expansion was done with 72 new farmer participants. Table 3 outlines new farmer participants for the project and the land area.





A



B



C



D



E



F

Table 3: List of farmers who recently joined the project

Farmer Number	Planted Area(ha)	Total Number of trees
P3-2019-225-01	0.29	150
P3-2019-225-02	0.387	200
P3-2019-225-03	0.097	50
P3-2019-225-04	0.097	50
P3-2019-225-04	0.097	50
P3-2019-225-04	0.193	100
P3-2019-225-05	0.097	50
P3-2019-225-06	0.193	100
P3-2019-225-07	0.097	50
P3-2019-225-08	0.116	60
P3-2019-225-09	0.097	50
P3-2019-225-10	0.077	40
P3-2019-225-11	0.097	50
P3-2019-225-12	0.097	50
P3-2019-225-13	0.097	50
P3-2019-225-14	0.097	50
P3-2019-225-15	0.097	50
P3-2019-225-16	0.097	50
P3-2020-225-01	0.097	50
P3-2020-225-02	0.097	50
P3-2020-225-03	0.097	50
P3-2020-225-04	0.097	50
P3-2020-225-05	0.097	50

P3-2020-225-06	0.097	50
P3-2020-225-07	0.097	50
P3-2020-225-08	0.097	50
P3-2020-225-09	0.097	50
P3-2020-225-10	0.097	50
P3-2020-225-11	0.097	50
P3-2020-225-12	0.097	50
P3-2020-225-13	0.097	50
P3-2020-225-14	0.097	50
P3-2020-225-15	0.097	50
P3-2020-225-16	0.097	50
P3-2020-225-17	0.097	50
P3-2020-225-18	0.097	50
P3-2020-225-19	0.097	50
P3-2020-225-20	0.097	50
P3-2021-225-01	0.097	50
P3-2021-225-02	0.193	100
P3-2021-225-03	0.097	50
P3-2021-225-04	0.097	50
P3-2021-225-05	0.097	50
P3-2021-225-06	0.097	50
P3-2021-225-07	0.097	50
P3-2021-225-08	0.097	50
P3-2021-225-09	0.097	50
P3-2021-225-10	0.097	50

P3-2021-225-11	0.097	50
P3-2021-225-12	0.097	50
P3-2021-225-13	0.097	50
P3-2021-225-14	0.097	50
P3-2021-225-15	0.58	300
P3-2021-225-16	0.484	250
P3-2021-225-17	0.29	150
P3-2021-225-18	0.464	240
P3-2021-225-19	0.116	60
P3-2021-225-20	0.193	100
P3-2021-225-21	0.097	50
P3-2021-225-22	0.097	50
P3-2021-225-23	0.097	50
P3-2021-225-24	0.097	50
P3-2021-225-25	0.097	50
P3-2021-225-26	0.193	100
P3-2021-225-27	0.097	50
P3-2021-225-28	0.097	50
P3-2021-225-29	0.097	50
P3-2021-225-30	0.097	50
P3-2021-225-31	0.097	50
P3-2021-225-32	0.097	50
P3-2021-225-33	0.097	50
P3-2021-225-34	0.193	100
P3-2021-225-35	0.097	50

P3-2021-225-36	0.097	50
9.685	5000	

3.3 Carbon benefit calculation for the newly planted trees

The carbon benefits of the newly planted 5,000 saplings were calculated based on the technical specification. Since there is no growth model for some plant species of these 5,000 in the TSS, the carbon credits generated from these plants were removed from the total quantification of the carbon emission reduction. This means that the actual carbon sequestration in the planted areas will likely be higher than calculated. In addition, CCC experts managed to identify and select fast-growing species that have high carbon sequestration. The total calculated tonnes of CO₂ after the deduction of the 15% risk buffer is 1,950 (tCO₂) and the risk buffer is 344 tCO₂. Any unallocated carbon will be withheld as a voluntary risk buffer to compensate for any potential future natural disasters or other risks to the project.

Table 4: Carbon benefit for the individual tree species

Scientific Name	Number of plants	Net Co2
Terminalia arjuna	499	393
Pericopsis mooniana	613	219
Mahua longifolia	282	50
Pachyrhizus erosus	57	11
Michelia champaca	58	36
Syzygium paniculatum	108	27
Mesua Nagassarium	96	26
Dipterocarpus zeylanicus	299	183
Melia azedarach	54	115
Garcinia quaesita	309	100
Canarium zeylanicum	3	6
Diospyros quaesita	2	1
Vateria copallifera	43	11
Shorea Stipularis	6	1
Calophyllum bracteatum Thw.	8	-
Artocarpus heterophyllus	104	222
Artocarpus nobilis	5	4
Syzygium cumini	46	3

Litsea glutinosa	36	10
Berrya cordifolia	202	132
Syzygium Makul	23	-
Syzygium assimile	25	4
Elaeocarpus serratus	10	7
Annona muricata	239	68
Durio zibethinus	221	-
Garcinia mangostana	117	37
Persea Americana	68	35
Psidium guajava	55	4
Nephelium lappaceum	244	104
Mangifera indica	250	97
Citrus crenatifolia	132	-
Manilkara zapota	24	-
Syzygium aqueum	50	-
Averrhoa carambola	93	5
Citrus reticulata	170	-
Citrus aurantifolia	174	11
Doona ovalifolia	104	28
Azadirachta indica	66	-
Bridelia retusa	12	-
Shorea congestiflora	53	-
Vitex pinnata	10	-
Pouteria campechiana	11	-
Pongamia pinnata	19	-
	5000	1950

3.4 Monitoring Plan Vivos

The annual monitoring session of *Plan Vivos* for the Bio-link Project was conducted at the end of 2022 because during the Covid 19 pandemic monitoring activities were

postponed. Field officers and the CCC team conducted 20% sample monitoring for 136 farmer lands at Hiniduma and Neluwa, including the 5000 saplings that were newly planted during 2019 to 2022. Number of saplings initially planted were counted by using the plant maps on each land, where the number of dead plants were counted accordingly. The Diameter at Breast Height (DBH) and height of the trees were measured to justify species-specific biomass equations. The results were then used to calculate the survival rates and determine the natural regeneration rates for each farmer land.

3.5 Monitoring Overview

Table 5: Summary of the monitoring activities

Parameter	Number of lands visited	Average Survival rate	Number of farmers that did not meet the targets	Corrective action taken
2022				
Plant establishment	136	81%	24	The survival rate of the project is $\geq 80\%$ after the third year of planting as per the Technical Specification. Farmer payments were deducted based on survival rates.

Farmers SSR Lusina (P3-2011-225-14), P Wickramasinghe (P3-2017-225-02), Samajeewa Liyanage (P3-2017-225-09) and Piyasena Gamage (P3-2017-225-04) have cleared their lands to cultivate tea (the full list of farmers can be found in Annex 1). Therefore, CCC removed them from the project and the loss of the carbon credits were 234 (tCO₂). Saplings were provided to the new farmers and agreements with new farmers were prepared as a requirement of the project.



4 SALE OF PLAN VIVO CERTIFICATES

Table 6: Sale of Plan Vivo Certificates

Vintage	Name of purchaser/source of funds	Number of Plan Vivo certificates purchased	Price per certificate (\$)	Total amount received (\$)
2011	Marks and Spencer PLC – UK	1,500		
Markit Serial Number	PV-PVC-LK-100000000001114-01012012-31122012-2427895-2429394-MER-0-A			
2012	Standard Chartered Bank - Sri Lanka	40		
Serial Number	PV-PVC-LK-100000000001114-01012012-31122012-2429395-2429434-MER-0-A			
2013	ZeroMission AB – Sweden	68		
Markit Serial Number	Transfers			
2014	Steenbergs Limited – UK	29		
Markit Serial Number	PV-PVC-LK-100000000001114-01012012-31122012-2429503-2429531-MER-0-A			

2015	ZeroMission AB – Sweden	30
Markit Serial Number	Transfers	
2015	Geckoella Ltd.	5
Markit Serial Number	PV-PVC-LK-100000000001114-01012012-31122012-2429562-2429566-MER-0-A	
2016	ZeroMission AB – Sweden	30
Markit Serial Number	PV-PVC-LK-100000000001114-01012012-31122012-2429567-2429596-MER-0-A	
2016	ZeroMission AB – Sweden	37
Markit Serial Number	Transfers	
2017	ZeroMission AB – Sweden	27
Markit Serial Number	PV-PVC-LK-100000000001114-01012013-31122013-2844324-2844350-MER-0-A	
2018	ZeroMission AB – Sweden	10
Markit Serial Number	PV-PVC-LK-100000000001114-01012012-31122012-2429634-2429643-MER-0-A	
2020	Rockland Distilleries (Pvt) Ltd	198
Markit Serial Number	PV-PVC-LK-100000000001114-01012013-31122013-2844351-2844548-MER-0-A	
2020	His Excellency Gotabaya Rajapaksa	5
Markit Serial Number	PV-PVC-LK-100000000001114-01012012-31122012-2429644-2429648-MER-0-A	
2020	ZeroMission AB – Sweden	5
Markit Serial Number	PV-PVC-LK-100000000001114-01012012-31122012-2429639-2429643-MER-0-A	
2021	Planetly GmbH	350
Markit Serial Number	PV-PVC-LK-100000000001114-01012013-31122013-2844549-2844898-MER-0-A	

N.B. - Individual pricing information supplied to the Foundation will be for internal purposes only.

Table 7: Carbon Credit generation summary

Total issuance for sale of 1,759 tonnes of CO ₂		2,767 tonnes of CO ₂
(2012 AR) + 1,008 tonnes of CO ₂ (2013 AR)		
Total risk buffer		832 tonnes of CO ₂
310 (2012 AR) + 178 (2013 AR) + 344(2022 AR)		
Total certificate sales to date		2329 tCO ₂
Balance of unsold certificates		438 tCO ₂

5 PES UPDATE

5.1 Payments Made to Producers to Date

The payments were provided to farmers engaged in Phase I, II, III and IV of the project according to hitting their monitoring targets. The payment structure for the new farmers has been updated. In the earlier stages farmers were paid in monetary values (3 LKR per tree), but in later stages the payment structure has been updated to share the benefits among farmers in indirect ways such as

plant benefits with good varieties (economically valued plants), training programmes, gifts and donations, and awareness sessions. A portion of credit sales has been shared among farmers as other benefits each year. This earlier payment structure has been changed because the time value of money always decreases overtime. If the benefits are shared as monetary values, it will not be an incentive, as the value of money decreases.



Table 8: Ecosystem payments to date

Farmer No	Payment Year	Total Payment for the year (Rs.)	Total Payment for the year (\$)
-----------	--------------	----------------------------------	---------------------------------

P3-2011-225-06	January 2019 to December 2022	5,232	16
P3-2011-225-07	January 2019 to December 2022	8,208	25
P3-2011-225-08	January 2019 to December 2022	9,396	29
P3-2011-225-09	January 2019 to December 2022	8,748	27
P3-2011-225-10	January 2019 to December 2022	9,765	30
P3-2011-225-12	January 2019 to December 2022	2,609	8
P3-2011-225-13	January 2019 to December 2022	9,591	30
P3-2011-225-15	January 2019 to December 2022	5,625	17
P3-2011-225-17	January 2019 to December 2022	10,563	33
P3-2011-225-18	January 2019 to December 2022	8,703	27
P3-2011-225-19	January 2019 to December 2022	2,805	9
P3-2011-225-20	January 2019 to December 2022	10,773	33

P3-2011-225-21	January 2019 to December 2022	8,283	26
P3-2011-225-22	January 2019 to December 2022	2,696	8
P1 -2009-225-01	January 2019 to December 2022	12,144	37
P1 -2009-225-02	January 2019 to December 2022	19,743	61
P2-1210-225-01	January 2019 to December 2022	10,893	34
P2-1210-225-02	January 2019 to December 2022	16,205	50
P2-1210-225-04	January 2019 to December 2022	11,967	37
P2 1210-225-05	January 2019 to December 2022	49,361	152
P2-1210-225-07	January 2019 to December 2022	9,255	29
P2-1210-225-08	January 2019 to December 2022	70,935	219
P2-1210-225-09	January 2019 to December 2022	19,392	60
P2-1210-225-10	January 2019 to December 2022	56,862	176

P3-2011-225-01	January 2019 to December 2022	25,920	80
P3-2011-225-02	January 2019 to December 2022	12,312	38
P3-2011-225-03	January 2019 to December 2022	18,144	56
P3-2011-225-04	January 2019 to December 2022	37,908	117
P3-2011-225-05	January 2019 to December 2022	11,826	37
P3-2017-225-01	January 2019 to December 2022	3,780	12
P3-2017-225-03	January 2019 to December 2022	2,160	7
P3-2017-225-05	January 2019 to December 2022	18,900	58
P3-2017-225-06	January 2019 to December 2022	17,280	53
P3-2017-225-07	January 2019 to December 2022	16,200	50
P3-2017-225-08	January 2019 to December 2022	3,240	10
P3-2017-225-10	January 2019 to December 2022	7,560	23

P3-2017-225-11	January 2019 to December 2022	2,700	8
P3-2017-225-12	January 2019 to December 2022	10,800	33
P3-2017-225-13	January 2019 to December 2022	5,400	17
P3-2017-225-14	January 2019 to December 2022	17,280	53
P3-2017-225-15	January 2019 to December 2022	5,400	17
P3-2017-225-16	January 2019 to December 2022	8,100	25
P3-2017-225-17	January 2019 to December 2022	5,400	17
P3-2017-225-18	January 2019 to December 2022	3,240	10
P3-2017-225-19	January 2019 to December 2022	3,240	10
P3-2017-225-20	January 2019 to December 2022	5,400	17
P3-2017-225-21	January 2019 to December 2022	4,320	13
P3-2017-225-22	January 2019 to December 2022	5,400	17

P3-2017-225-23	January 2019 to December 2022	4,320	13
P3-2017-225-24	January 2019 to December 2022	2,700	8
P3-2017-225-25	January 2019 to December 2022	7,020	22
P3-2017-225-26	January 2019 to December 2022	3,240	10
P3-2017-225-27	January 2019 to December 2022	3,240	10
P3-2017-225-28	January 2019 to December 2022	5,400	17
P3-2017-225-29	January 2019 to December 2022	8,100	25
P3-2017-225-30	January 2019 to December 2022	8,100	25
P3-2017-225-31	January 2019 to December 2022	2,700	8
P3-2018-225-01	January 2019 to December 2022	0	0
P3-2018-225-02	January 2019 to December 2022	0	0
P3-2018-225-03	January 2019 to December 2022	0	0

P3-2019-225-01	January 2019 to December 2022	8,100	25
P3-2019-225-02	January 2019 to December 2022	10,800	33
P3-2019-225-03	January 2019 to December 2022	2,700	8
P3-2019-225-04	January 2019 to December 2022	2,700	8
P3-2019-225-05	January 2019 to December 2022	2,700	8
P3-2019-225-06	January 2019 to December 2022	5,400	17
P3-2019-225-07	January 2019 to December 2022	2,700	8
P3-2019-225-08	January 2019 to December 2022	5,400	17
P3-2019-225-09	January 2019 to December 2022	2,700	8
P3-2019-225-10	January 2019 to December 2022	3,240	10
P3-2019-225-11	January 2019 to December 2022	2,700	8
P3-2019-225-12	January 2019 to December 2022	2,160	7

P3-2019-225-13	January 2019 to December 2022	2,700	8
P3-2019-225-14	January 2019 to December 2022	2,700	8
P3-2019-225-15	January 2019 to December 2022	2,700	8
P3-2019-225-16	January 2019 to December 2022	2,700	8
P3-2019-225-17	January 2019 to December 2022	2,700	8
P3-2019-225-18	January 2019 to December 2022	2,700	8
P3-2020-225-01	January 2019 to December 2022	2,700	8
P3-2020-225-02	January 2019 to December 2022	2,700	8
P3-2020-225-03	January 2019 to December 2022	2,700	8
P3-2020-225-04	January 2019 to December 2022	2,700	8
P3-2020-225-05	January 2019 to December 2022	2,700	8

P3-2020-225-06	January 2019 to December 2022	2,700	8
P3-2020-225-07	January 2019 to December 2022	2,700	8
P3-2020-225-08	January 2019 to December 2022	2,700	8
P3-2020-225-09	January 2019 to December 2022	2,700	8
P3-2020-225-10	January 2019 to December 2022	2,700	8
P3-2020-225-11	January 2019 to December 2022	2,700	8
P3-2020-225-12	January 2019 to December 2022	2,700	8
P3-2020-225-13	January 2019 to December 2022	2,700	8
P3-2020-225-14	January 2019 to December 2022	2,700	8
P3-2020-225-15	January 2019 to December 2022	2,700	8
P3-2020-225-16	January 2019 to December 2022	2,700	8
P3-2020-225-17	January 2019 to December 2022	2,700	8

P3-2020-225-18	January 2019 to December 2022	2,700	8
P3-2020-225-19	January 2019 to December 2022	2,700	8
P3-2020-225-20	January 2019 to December 2022	2,700	8
P3-2021-225-01	January 2019 to December 2022	2,700	8
P3-2021-225-02	January 2019 to December 2022	5,400	17
P3-2021-225-03	January 2019 to December 2022	2,700	8
P3-2021-225-04	January 2019 to December 2022	2,700	8
P3-2021-225-05	January 2019 to December 2022	2,700	8
P3-2021-225-06	January 2019 to December 2022	2,700	8
P3-2021-225-07	January 2019 to December 2022	2,700	8
P3-2021-225-08	January 2019 to December 2022	2,700	8
P3-2021-225-09	January 2019 to December 2022	2,700	8

P3-2021-225-10	January 2019 to December 2022	2,700	8
P3-2021-225-11	January 2019 to December 2022	2,700	8
P3-2021-225-12	January 2019 to December 2022	2,700	8
P3-2021-225-13	January 2019 to December 2022	2,700	8
P3-2021-225-14	January 2019 to December 2022	2,700	8
P3-2021-225-15	January 2019 to December 2022	16,200	50
P3-2021-225-16	January 2019 to December 2022	13,500	42
P3-2021-225-17	January 2019 to December 2022	8,100	25
P3-2021-225-18	January 2019 to December 2022	12,960	40
P3-2021-225-19	January 2019 to December 2022	3,240	10
P3-2021-225-20	January 2019 to December 2022	5,400	17
P3-2021-225-21	January 2019 to December 2022	2,700	8

P3-2021-225-22	January 2019 to December 2022	2,700	8
P3-2021-225-23	January 2019 to December 2022	2,700	8
P3-2021-225-24	January 2019 to December 2022	2,700	8
P3-2021-225-25	January 2019 to December 2022	2,700	8
P3-2021-225-26	January 2019 to December 2022	5,400	17
P3-2021-225-27	January 2019 to December 2022	2,700	8
P3-2021-225-28	January 2019 to December 2022	2,700	8
P3-2021-225-29	January 2019 to December 2022	2,700	8
P3-2021-225-30	January 2019 to December 2022	2,700	8
P3-2021-225-31	January 2019 to December 2022	2,700	8
P3-2021-225-32	January 2019 to December 2022	2,700	8
P3-2021-225-33	January 2019 to December 2022	2,700	8

P3-2021-225-34	January 2019 to December 2022	5,400	17
P3-2021-225-35	January 2019 to December 2022	2,700	8
P3-2021-225-36	January 2019 to December 2022	2,700	8
946,484	2905		

6 ONGOING COMMUNITY PARTICIPATION

CCC conducted Awareness Sessions to ensure effective communication with all participants.

Awareness Session

Training and awareness sessions were conducted for new farmers currently engaged with the Hiniduma Bio-link Project to educate them on the importance of the project and its key aspects.

In addition, CCC conducted a few awareness sessions in several village communities within the project area focusing on the importance of the Bio-link Project as CCC plans to further develop the project next year. These sessions contributed towards sourcing new lands for the project and cleared any misconceptions among producers.



7 BREAKDOWN OF OPERATIONAL COSTS

The following table provides an overview of all operational costs connected to the project's pilot phase from 1st January 2019 to 31st December 2022.

Table 9: Breakdown of operational costs

Expense	Description	Cost (US\$)	Cost covered through sale of PVC
Project salaries	Project officer payments	10012.26	No
Travel	Travel to project site	749.18	Yes
Stationery & other expendables	Accommodation/meals	297.29	Yes
Training/ Awareness session	Farmer training and awareness programmes	521.17	No
	Project development		No
Land surveys		791.53	
Farmer payments		2905	No
Total		15289.43	

8 FUTURE DEVELOPMENT

8.1 Community Based Organisation

The Hiniduma-Kanneliya Bio-link Society started a nursery in 2016 that sells native and endemic trees commercially. CCC bought 50% of saplings for the Bio-Link extension from this plant nursery that is maintained by the CBO.



8.2 Scaling up

The project team had identified several new Plan VIVOs to further scale up the project into the Neluwa area. CCC is presently conducting discussions with sponsors regarding financial support to plant trees in the Hiniduma Bio-link Project in the following year.



Annex I: Phase III Farmer-Wise Carbon Benefits Calculation

	Number of Plants	Tones CO2 (after allocation 15% buffer stock)
1	146	50
2	199	85
3	50	23
4	54	22
5	55	40
6	109	17
7	60	25
8	91	36
9	49	20
10	63	21
11	50	27
12	44	17
13	50	22
14	47	20



15	44	22
16	38	15
17	46	16
18	48	18
19	52	16
20	53	18
21	52	20
22	47	15
23	47	18
24	61	21
25	40	12
26	51	17
27	60	24
28	53	15
29	40	12
30	50	13
31	50	18
32	36	12
33	47	28
34	54	14
35	52	14
36	108	122
37	64	16
38	55	12
39	53	13



40	58	15
41	48	21
42	50	12
43	48	18
44	49	17
45	49	17
46	52	18
47	42	19
48	44	19
49	54	18
50	51	19
51	50	17
52	56	21
53	296	90
54	252	119
55	150	69
56	235	80
57	60	27
58	100	35
59	50	19
60	50	11
61	50	15
62	50	29
63	50	24
64	100	33



65	50	29
66	50	25
67	42	29
68	50	21
69	50	15
70	50	18
71	48	16
72	98	34
73	50	19
74	50	16
	5000	1950

Annex II: Summary of the Monitoring Results – 2022

Farmer No	Area (Ha)	Total Number of Trees Initially Planted	Total Number of Trees (After 2022 Monitoring)	Percentage of Area Under Sampling	Number of Plants Monitored In Sample Plot	Number of Dead Plants	Survival Rate (%)
P3-2011-225-06	0.094	57	48	20%	8	1	81
P3-2011-225-07	0.147	95	76	20%	11	0	78
P3-2011-225-08	0.168	87	87	20%	14	3	95
P3-2011-225-09	0.157	81	81	20%	15	1	98
P3-2011-225-10	0.175	137	88	20%	16	3	64
P3-2011-225-12	0.047	115	21	20%	5	1	18



P3-2011-225-13	0.172	111	87	20%	15	1	78
P3-2011-225-14	0.133	153	0	20%	0	0	0
P3-2011-225-15	0.101	124	51	20%	12	2	38
P3-2011-225-17	0.189	163	95	20%	20	3	56
P3-2011-225-18	0.156	158	78	20%	15	2	47
P3-2011-225-19	0.05	49	24	20%	5	1	50
P3-2011-225-20	0.193	285	90	20%	18	5	28
P3-2011-225-21	0.148	118	75	20%	15	1	62
P3-2011-225-22	0.048	52	20	20%	5	2	38
P1 -2009-225-01	0.218	173	102	20%	22	2	56
P1 -2009-225-02	0.354	457	181	20%	37	1	38
P2-1210-225-01	0.195	246	96	20%	20	2	40
P2-1210-225-02	0.29	242	112	20%	30	3	60
P2-1210-225-04	0.214	277	98	20%	20	4	35
P2 1210-225-05	0.884	1576	428	20%	60	8	24
P2-1210-225-07	0.166	209	80	20%	17	3	38
P2-1210-225-08	1.271	1642	670	20%	110	7	36
P2-1210-225-09	0.347	285	165	20%	36	3	59
P2-1210-225-10	1.019	795	527	20%	105	50	52
P3-2011-225-01	0.464	600	225	20%	45	3	38
P3-2011-225-02	0.221	300	105	20%	20	3	36
P3-2011-225-03	0.325	300	150	20%	30	3	50
P3-2011-225-04	0.679	450	326	20%	60	2	75
P3-2011-225-05	0.212	150	130	20%	20	2	70



P3-2017-225-01	0.135	70	40	20%	14	6	60
P3-2017-225-02	0.271	140	0	20%	0	0	0
P3-2017-225-03	0.077	40	32	20%	8	2	87
P3-2017-225-04	0.484	250	0	20%	50	0	0
P3-2017-225-05	0.677	350	302	20%	70	9	91
P3-2017-225-06	0.619	320	302	20%	64	6	90
P3-2017-225-07	0.58	300	264	20%	60	7	88
P3-2017-225-08	0.116	60	39	20%	12	4	65
P3-2017-225-09	0.155	80	72	20%	16	1	91
P3-2017-225-10	0.271	140	137	20%	28	0	98
P3-2017-225-11	0.097	50	44	20%	10	1	88
P3-2017-225-12	0.387	200	170	20%	40	5	85
P3-2017-225-13	0.193	100	81	20%	20	3	81
P3-2017-225-14	0.619	320	294	20%	64	5	92
P3-2017-225-15	0.193	100	92	20%	20	1	92
P3-2017-225-16	0.29	150	127.5	20%	30	4	85
P3-2017-225-17	0.193	100	92	20%	20	1	92
P3-2017-225-18	0.116	60	42.6	20%	12	3	71
P3-2017-225-19	0.116	60	48	20%	12	2	80
P3-2017-225-20	0.193	100	81	20%	20	3	81
P3-2017-225-21	0.155	80	76	20%	16	0	95
P3-2017-225-22	0.193	100	92	20%	20	0	92



P3-2017-225-23	0.155	80	72.8	20%	16	1	91
P3-2017-225-24	0.097	50	39	20%	10	2	78
P3-2017-225-25	0.252	130	117	20%	26	2	90
P3-2017-225-26	0.116	60	39	20%	12	4	65
P3-2017-225-27	0.116	60	34.2	20%	12	5	57
P3-2017-225-28	0.193	100	84	20%	20	3	84
P3-2017-225-29	0.29	150	138	20%	30	1	92
P3-2017-225-30	0.29	150	117	20%	30	6	78
P3-2017-225-31	0.097	50	45	20%	10	1	90
P3-2018-225-01	0.387	200	190	20%	40	1	95
P3-2018-225-02	0.58	300	285	20%	60	2	95
P3-2018-225-03	0.967	500	460	20%	100	1	92
P3-2019-225-01	0.29	150	135	20%	30	3	90
P3-2019-225-02	0.387	200	190	20%	40	5	95
P3-2019-225-03	0.097	50	46	20%	10	2	92
P3-2019-225-04	0.097	50	48	20%	10	2	96
P3-2019-225-05	0.097	50	49	20%	10	1	98
P3-2019-225-06	0.193	100	94	20%	20	3	94
P3-2019-225-07	0.097	50	47	20%	10	2	93
P3-2019-225-08	0.193	100	94	20%	20	3	94
P3-2019-225-09	0.097	50	47	20%	10	1	93
P3-2019-225-10	0.116	60	57	20%	12	1	95
P3-2019-225-11	0.097	50	49	20%	10	1	98
P3-2019-225-12	0.077	40	38	20%	8	2	94



P3-2019-225-13	0.097	50	48	20%	10	1	96
P3-2019-225-14	0.097	50	47	20%	10	3	94
P3-2019-225-15	0.097	50	47	20%	10	1	93
P3-2019-225-16	0.097	50	48	20%	10	1	96
P3-2019-225-17	0.097	50	47	20%	10	1	94
P3-2019-225-18	0.097	50	46	20%	10	1	92
P3-2020-225-01	0.097	50	47	20%	10	0	94
P3-2020-225-02	0.097	50	48	20%	10	1	96
P3-2020-225-03	0.097	50	46	20%	10	1	92
P3-2020-225-04	0.097	50	48	20%	10	1	95
P3-2020-225-05	0.097	50	46	20%	10	1	92
P3-2020-225-06	0.097	50	45	20%	10	1	90
P3-2020-225-07	0.097	50	47	20%	10	1	93
P3-2020-225-08	0.097	50	46	20%	10	1	92
P3-2020-225-09	0.097	50	49	20%	10	0	98
P3-2020-225-10	0.097	50	46	20%	10	2	92
P3-2020-225-11	0.097	50	46	20%	10	1	92
P3-2020-225-12	0.097	50	47	20%	10	1	93
P3-2020-225-13	0.097	50	47	20%	10	1	93
P3-2020-225-14	0.097	50	47	20%	10	1	93
P3-2020-225-15	0.097	50	47	20%	10	1	93
P3-2020-225-16	0.097	50	47	20%	10	1	94
P3-2020-225-17	0.097	50	49	20%	10	1	98
P3-2020-225-18	0.097	50	47	20%	10	1	94



P3-2020-225-19	0.097	50	47	20%	10	1	94
P3-2020-225-20	0.097	50	47	20%	10	1	92
P3-2021-225-01	0.097	50	46	20%	10	1	91
P3-2021-225-02	0.193	100	90	20%	10	1	90
P3-2021-225-03	0.097	50	47	20%	10	1	93
P3-2021-225-04	0.097	50	46	20%	10	1	92
P3-2021-225-05	0.097	50	47	20%	10	1	93
P3-2021-225-06	0.097	50	47	20%	10	1	94
P3-2021-225-07	0.097	50	46	20%	10	1	92
P3-2021-225-08	0.097	50	45	20%	10	1	90
P3-2021-225-09	0.097	50	47	20%	10	2	93
P3-2021-225-10	0.097	50	47	20%	10	1	94
P3-2021-225-11	0.097	50	46	20%	10	1	92
P3-2021-225-12	0.097	50	47	20%	10	1	91
P3-2021-225-13	0.097	50	45	20%	10	1	90
P3-2021-225-14	0.097	50	47	20%	10	1	94
P3-2021-225-15	0.58	300	276	20%	60	2	92
P3-2021-225-16	0.484	250	233	20%	50	1	93
P3-2021-225-17	0.29	150	138	20%	30	1	92
P3-2021-225-18	0.464	240	226	20%	48	1	94
P3-2021-225-19	0.116	60	57	20%	12	1	95
P3-2021-225-20	0.193	100	97	20%	20	1	97
P3-2021-225-21	0.097	50	46	20%	10	1	92
P3-2021-225-22	0.097	50	46	20%	10	1	91
P3-2021-225-23	0.097	50	45	20%	10	1	90



P3-2021-225-24	0.097	50	45	20%	10	1	90
P3-2021-225-25	0.097	50	46	20%	10	1	92
P3-2021-225-26	0.193	100	91	20%	20	2	91
P3-2021-225-27	0.097	50	47	20%	10	2	93
P3-2021-225-28	0.097	50	47	20%	10	1	94
P3-2021-225-29	0.097	50	47	20%	10	1	94
P3-2021-225-30	0.097	50	48	20%	10	1	96
P3-2021-225-31	0.097	50	49	20%	10	1	98
P3-2021-225-32	0.097	50	46	20%	10	1	92
P3-2021-225-33	0.097	50	45	20%	10	1	90
P3-2021-225-34	0.193	100	89	20%	20	1	89
P3-2021-225-35	0.097	50	46	20%	10	1	91
P3-2021-225-36	0.097	50	45	20%	10	1	90