



**Plan Vivo Annual Report**

## **HINIDUMA BIO-LINK PROJECT, SRI LANKA**

*Reforesting traditional home gardens using the analog forestry*

*Concept in wet zones of Sri Lanka*



**Submitted by:**

**Carbon Consulting Company (Pvt) Ltd, Sri Lanka  
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## 1 Summary

<b>Project Overview</b>	
<b>Reporting Period</b>	<b>1<sup>st</sup> of January 2015 – 31<sup>st</sup> of December 2015</b>
<b>Geographical Areas</b>	<b>Galle District, SE, Sri Lanka</b>
<b>Technical Specifications in use</b>	<b>Mixed Species Reforestation</b>

<b>Project Indicators</b>	<b>Historical (2011 – 2015)</b>	<b>Added this period</b>	<b>Total</b>
<b>Number of smallholders with PES agreements</b>	32	0	32
<b>Number of Community Groups with PES agreements</b>	n/a	n/a	n/a
<b>Approximate number of individuals in these community groups</b>	n/a	n/a	n/a
<b>Area Under Management (Ha) where PES agreements are in place</b>	18.8	0	18.8
<b>Total PES payments made to participants (USD)</b>	5,740.40	1,826.40	7,566.80
<b>Total sum held in trust for future PES payments (USD)</b>			8,000
<b>Allocation to Plan Vivo buffer</b>	488	0	488
<b>Unsold Stock at time of submission</b>			
<b>2012 Vintage</b>			87
<b>2013 Vintage</b>			1,008
<b>Total Unsold Stock</b>			1,095
<b>Total <i>Plan Vivo</i> Certificates (PVCs) Issued to date</b>			<b>2,767</b>
<b>Plan Vivo Certificates requested for issuance (2015 Vintage)</b>			<b>0</b>
<b>Total PVCs issued (including this report)</b>			<b>2,767</b>



## EXECUTIVE SUMMARY

The following report summarises the significant activities performed during the period of 1<sup>st</sup> of January 2015 to 31<sup>st</sup> of December 2015, at the Hiniduma Bio-link Project.

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 the monitoring of actual carbon stock change.

The Hiniduma-Kanneliya Bio-Link Community-based organization (CBO) has been formed with the farmer community who has been involved in the project and 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.

## 2 Key Events, Developments and Challenges

### 2.1 2.1 Key Events

CCC conducted the following key events.

#### 2.1.1 CBO Formation

A Community Based Organization (CBO), named "Hiniduma-Kanneliya Bio-Link society" was formed on 22nd September 2015 at farmer Anura's house with the initiation of the majority of farmers currently engaged with the Hiniduma Bio-link Project by covering five domains as Eppala, Panangala North, Panangala West, Panangala South, Korlagama in the Hiniduma area. The main aims of the CBO is to support rural smallholder communities by managing their natural resources more sustainably, with a view to generate benefits to their climate, livelihood and ecosystem. Additionally, the CBO will enable CCC to streamline the company's engagement with the farmers, where the dissemination of awareness and training & payout of funds can be handled smoothly. Presenting the CBO constitution to the attendees, inquiring ideas and suggestions regarding the constitution, confirming the constitution and appointing society members took place at the initial meeting session. The constitution and minutes and attendance sheet of the initial meeting session of the CBO are in Annexure II, III and IV.



Figure 1 During the initial meeting of CBO

### 2.1.2 Aqua Nature Club visit to farmer lands

MAS Linea Aqua is one of the sponsors of the Phase III planting in 2013 and planted 1000 plants for the Hiniduma Bio-Link project and the MAS Aqua Nature Club arranged a field visit to monitor the project on 7th and 8th November 2015. CCC arranged awareness sessions for the MAS Aqua Nature Club members and explained the latest information about the project during visits to the respective farming lands.





Figure 2 Conducting awareness sessions for the Aqua Nature Club during the field visit

## 2.2.3 Organizational Developments

### *2.2.3.2 Project Promotion*

CCC is looking for buyers and funders for the project in order to scale up the existing project. Special promotional materials were developed to help spread the concept of the project amongst the corporate sector, and investment opportunities were detailed in these materials.

### *2.2.3.3 Species-Specific Biomass Equations*

Species-specific biomass equations used to calculate future carbon sequestration was evaluated with the recent finding of the monitoring; it has evaluated in order to adjust the developed equations.



### 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).

Vintage		
2012	The number of producers with registered PES agreements:	15
	The area covered by the project:	11 ha equivalent
2013	The number of producers with registered PES agreements:	17
	The area covered by the project:	Approximately 7.8 ha
2014	Total number of producers with registered PES agreements	32
	The total area covered by the project	18.8

#### 3.2 Causality Replanting

50 dead plants were replaced in 25<sup>th</sup> June , 2015 under one of the activates of the environment day programme which was held on 5<sup>th</sup> of June, 2015 by the CCC. During the environment day program, each invitees had a chance to tag their names and plant the tree in the Hiniduma Bio-Link project. Those 50 trees were planted as 20, 15 and 15 in Famer Anira's, Sardhasena and Senavirathne respectively. Those plants were counted and replanted during the monitoring session.



Figure 3 Plants tagging in the Environment day program





Figure 4 Replanting at Sardhasena's Land

### 3.3 Monitoring Plan Vivos

The annual monitoring session of *Plan Vivos* at the Bio-link was conducted in June 2015, with the involvement of the CCC team and some students from the Sabaragamuwa University of Sri Lanka.

Depending with the extent of the land, 100 m x 100 m or 50 m x 50 m random sampling plots were selected in each land. The number of saplings which were initially planted was counted by using the plant maps in each land and number of dead plants was counted accordingly.

The plots were selected to represent all planted areas in each farmer's land. The results were then used to calculate the survival rate and determine the natural regeneration rates of each area.



Figure 5 Tree monitoring at Farmer Anura's Land



Figure 6 Tree monitoring at Farmer Karunadasa's Land



Figure 7 Tree monitoring at Farmer Upul's Land



### 3.4 Monitoring overview

Sample plots were selected in each land to monitor trees and as part of the methodology, CCC counted the number of trees that were encountered from the centre of the plot (Refer Annexure I for the summary of the monitoring results).

Table 1: summary of the monitoring result

Parameter	Number of lands visited	Average Survival rate	Number of farmers did not meet the targets	Corrective action taken
Plant establishment in the ground	32	79%	3	<ul style="list-style-type: none"><li>• Farmer payments were deducted according to the survival rate.</li><li>• If farmers are unable to fill the targets before the next monitoring, trees will be planted in another farmer's land.</li><li>• Plant nursery will be maintained by the CBO of the project. Farmers would be able to buy the saplings for low prices and complete the number of trees which should be in the land.</li></ul>

As farmers agreed last year, farmer Siripala, Sarath Jagoda, Sardhasena and Senevirathne have planted trees instead of dead plants and the project coordinators decided to provide the rest of the farmers with an extended period of time in which they would have to complete the replanting. And it was decided that during the next monitoring session, CCC will monitor and count all newly planted trees by farmers and will provide monthly payments accordingly.





Farmer Subasena has cleared a tea land which was adjacent to the Bio-Link tree planted land to establish a rubber plantation and therefore, plants which were planted in the boundaries has been destroyed. But CCC noted that he has arranged new saplings to be planted in the boundaries instead of the dead plants. Although the farmer has planted new plants, well grown plants have been destroyed. Therefore, it was noted by CCC that the changes of the agricultural practices in lands are threatening the project activities. But replanting is minimising the impact to the project activities.



**Figure 8 Cleared land adjacent to the Bio-Link trees planted land**      **Figure 9 New saplings to be planted**



## 4 Sales of Plan Vivo Certificates

Table 2. Sales of Plan Vivo Certificates

Vintage	Name of purchaser/source funds	of of	Number of Plan Vivo Certificates purchased	Price per Certificate (\$)	Total amount received (\$)
2011	Marks and Spencer Plc, UK		1500		
<b>Markit Serial Number</b>	PV-PVC-LK-100000000001114-01012012-31122012-2427895-2429394-MER-0-A				
2012	Standard Chartered Bank, Sri Lanka		40		
<b>Serial Number</b>	PV-PVC-LK-100000000001114-01012012-31122012-2429395-2429434-MER-0-A				
2013	ZeroMission AB, Sweden		68		
<b>Markit Serial Number</b>	Transfers				
2014	Steenbergs Limited, UK		29		
<b>Markit Serial Number</b>	PV-PVC-LK-100000000001114-01012012-31122012-2429503-2429531-MER-0-A				
2015	ZeroMission AB, Sweden		30		
<b>Markit Serial Number</b>	Transfers				
2015	Geekoella Ltd.		5		
<b>Markit Serial Number</b>	PV-PVC-LK-100000000001114-01012012-31122012-2429562-2429566-MER-0-A				

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

Table 3 Carbon Credit Generation Summary





<b>Total issuance for sell</b> 1,759 ton CO <sub>2</sub> (2012 AR) + 1,008 ton CO <sub>2</sub> (2013 AR)	<b>2767 ton CO<sub>2</sub></b>
Total Risk buffer 310 (2012 AR) + 178 (2013 AR)	488 ton CO <sub>2</sub>
<b>Total certificate sales to date</b>	<b>1672 ton CO<sub>2</sub></b>
<b>Balance of unsold certificates</b>	<b>1,095 ton CO<sub>2</sub></b>

## 5 PES update

### 5.1 Payments made to producers to date

Table 4: Ecosystem Payments to date

<b>Farmer No</b>	<b>Producer/ Producer Group name or ID number<sup>1</sup></b>	<b>Payment Year</b>	<b>Total Payment for the year (Rs)</b>	<b>Total Payment for the year (\$)</b>
P3-2011-225-06		January 2015 to December 2015	1915	13.2
P3-2011-225-07		January 2015 to December 2015	3225	22.2
P3-2011-225-08		January 2015 to December 2015	2293	15.8
P3-2011-225-09		January 2015 to December 2015	2467	17.0
P3-2011-225-10		January 2015 to December 2015	4392	30.3
P3-2011-225-11		January 2015 to December 2015	3430	23.7
P3-2011-225-12		January 2015 to December 2015	3430	23.7
P3-2011-225-13		January 2015 to December 2015	2597	17.9
P3-2011-225-14		January 2015 to December 2015	3969	27.4
P3-2011-225-15		January 2015 to December 2015	2862	19.7
P3-2011-225-16		January 2015 to December 2015	1885	13.0

<sup>1</sup> Due to data protection regulations, the names of participants have been removed from the public version of this document



P3-2011-225-17	January 2015 to December 2015	5281	36.4
P3-2011-225-18	January 2015 to December 2015	4854	33.5
P3-2011-225-19	January 2015 to December 2015	1296	8.9
P3-2011-225-20	January 2015 to December 2015	8721	60.1
P3-2011-225-21	January 2015 to December 2015	3513	24.2
P3-2011-225-22	January 2015 to December 2015	1512	10.4
<b>Phase I Planting</b>			
P1 -2009-225-01	January 2015 to December 2015	5190	35.8
P1 -2009-225-02	January 2015 to December 2015	12827	88.5
P2-1210-225-01	January 2015 to December 2015	7528	51.9
P2-1210-225-02	January 2015 to December 2015	6970	48.1
P2-1210-225-04	January 2015 to December 2015	7615	52.5
P2 1210-225-05	January 2015 to December 2015	40526	279.5
P2-1210-225-07	January 2015 to December 2015	6922	47.7
P2-1210-225-08	January 2015 to December 2015	36377	250.9
P2-1210-225-09	January 2015 to December 2015	7200	49.7
P2-1210-225-10	January 2015 to December 2015	24300	167.6



P3-2011-225-01	January 2015 to December 2015	16545	114.1
P3-2011-225-02	January 2015 to December 2015	8856	61.1
P3-2011-225-03	January 2015 to December 2015	7875	54.3
P3-2011-225-04	January 2015 to December 2015	14068	97.0
P3-2011-225-05	January 2015 to December 2015	4388	30.3



Figure 10 During the farmer payment

## 6 Ongoing Community Participation

To ensure effective communication with all participants from the local, CCC implemented the following:

### 6.1 Awareness session

The awareness sessions were conducted for all farmers currently engaged with the Hiniduma Bio-link Project in order to educate them on the importance of the project and its key aspects. This helped in significantly speeding up the process and avoids confusion among producers.

### 6.2 Community meetings

Several community meetings were conducted to make farmers more aware about the formation of the CBO and to explain the benefits derived from being with a CBO.



## 7 Breakdown of operational costs

The following table provides an overview of all operational costs connected to the project's pilot phase from 31<sup>st</sup> December 2014 to 31<sup>st</sup> December 2015.

Expense	Description	Cost (US\$)	Cost covered through sell of PVC
<b>Project salaries</b>	Project officer payments	3230.77	No
<b>Travel</b>	Travel to project site	615.38	Yes
<b>Stationery&amp; other expendable</b>	Accommodation/food	307.69	Yes
<b>Training</b>	Farmer Training programs	384.62	No
<b>CBO formation</b>		206.90	No
<b>Total</b>		4068.97	No

## 8 Future Development

### 8.1 Community-based Organizations (CBO)

The CBO started this year with the expectation of implementing several activities as suggested by farmers involved with the project as well as the project coordinators of CCC.

In future, CCC has planned to arrange a centre to collect produce (ie: fruits & spices) from these farmers as they lack a mechanism to collect and sell these for a competitive price. Positive signs emerged as successful meetings were held with leading private corporations who discussed requirements (financial and otherwise) needed to make this idea a reality.

Another suggestion raised was to start a plant nursery, which will be maintained by CBO. The nursery will provide plants to the other tree planting projects and excess funds generated can be used to scale up the Bio-Link project and assist in replanting activities.

### 8.2 Scaling up

The project team had identified several new plan VIVO's and the scaling up of the project will depend primarily on demand generated by individuals/corporations who seek to purchase carbon credit. However, it is expected that the project will expand to another 5 acres in the following year.





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## Annexure I: Summary of the monitoring results, 2015

Farmer No	Producer/ Producer Group name or ID number <sup>2</sup>	Area (ha)	Total number of Trees	Sample Area (m2)	Number of Plants which initially planted in the sample plot	Number of Plants Monitored in Sample Plot	Number of Dead Plants in Sample Plot	Survival rate ( % )
<b>Phase II &amp; III Planting</b>								
P3-2011-225-06		0.304	57	50 x 50	45	42	3	93
P3-2011-225-07		0.304	95	50 x 50	35	33	2	94
P3-2011-225-08		0.194	87	50 x 50	56	41	15	73
P3-2011-225-09		0.405	81	100 X 100	52	44	8	85
P3-2011-225-10		0.405	137	100 X 100	73	65	8	89
P3-2011-225-11		0.304	153	100 X 100	53	33	20	62
P3-2011-225-12		1.012	115	100 X 100	35	29	6	83
P3-2011-225-13		0.304	111	50 x 50	80	52	28	65
P3-2011-225-		0.506	153	50 x 50	68	49	19	72

<sup>2</sup> Due to data protection regulations, names of participants have been removed from the public version of this document



<b>14</b>								
<b>P3-2011-225-15</b>		0.405	124	50 x 50	78	50	28	64
<b>P3-2011-225-16</b>		0.304	62	50 x 50	45	38	7	84
<b>P3-2011-225-17</b>		0.506	163	50 x 50	70	63	7	90
<b>P3-2011-225-18</b>		0.506	158	100 X 100	75	64	11	85
<b>P3-2011-225-19</b>		0.202	49	50 x 50	49	36	13	73
<b>P3-2011-225-20</b>		1.619	285	100 X 100	80	68	12	85
<b>P3-2011-225-21</b>		0.405	118	50 x 50	52	43	9	83
<b>P3-2011-225-22</b>		0.121	52	50 x 50	52	42	10	81
<b>Phase I Planting</b>								
<b>P1 -2009-225-01</b>		0.404	173	50 X50	72	60	12	83
<b>P1 -2009-225-02</b>		0.404	457	50 X50	59	46	13	78
<b>P2-1210-225-01</b>		0.455	246	50 X50	40	34	6	85
<b>P2-1210-225-02</b>		0.455	242	50 X50	45	36	9	80
<b>P2-1210-225-04</b>		0.405	277	50 X50	55	42	13	76
<b>P2 1210-225-05</b>		2.43	1576	100 X 100	105	75	30	71



<b>P2-1210-225-07</b>		0.425	209	50 X 50	50	46	4	92
<b>P2-1210-225-08</b>		2.83	1642	100 X 100	78	48	30	62
<b>P2-1210-225-09</b>		0.202	285	50 x 50	57	40	17	70
<b>P2-1210-225-10</b>		1.62	810	100 X 100	36	30	6	83
<b>P3-2011-225-01</b>		1.45	600	100 X 100	47	36	11	77
<b>P3-2011-225-02</b>		0.405	300	50 x 50	50	41	9	82
<b>P3-2011-225-03</b>		0.405	300	50 x 50	48	35	13	73
<b>P3-2011-225-04</b>		0.607	450	100 X 100	38	33	5	87
<b>P3-2011-225-05</b>		0.202	150	50 x 50	32	26	6	81

## **Annexure II: Constitute of Hiniduma- Kanneliya Bio-Link Society**

### **Constitute of Hiniduma- Kanneliya Bio-Link Society**

➤ **Vision:**

Directly contribute and adopt to minimize the climate change effects.

➤ **Objectives:**

- Take actions to minimize the bio diversity degradation.
- Encouraging organic fertilizer production in order to obtain hygiene food products.
- Providing welfare facilities for mutual rest among the members.
- Creating a stable market place for the members' products.

• **Domain:**

Grama niladhari divisions of Panangala North, Panangala West, Panangala East, Koralegama & Eppala.

➤ **Requirements for membership:**

- Should be a permanent resident of the above mentioned domain.
- Should have a connection with the reforestation project.
- Age limit- above 18 years.

➤ **Committee Members**

It should be consisted with the president, secretary, vice president, vice secretary and a treasurer. In addition to that there should be a committee of six members representing each grama niladhari division. Councilling will be done by Carbon Consulting Company and sub committees can be formed according to the approval of the society with a representation of the executive committee. Term of office of the committee is limited to a year and new committee can be appointed according to the consent of the members.

➤ **Society's Meetings & Procedures:**

Final Friday falling on once an every three months period time at 4 p.m at Mr. Anura Liyanage's house.

➤ **Committee and Sub Committee Meetings:**

Final Friday falling on once an every month at 4 p.m at Mr. Anura Liyanage's house.

• **Congress Meeting:**





Congress meeting should be held annually in between the time period of January to April. Special congress can be called according to the requirement and the date will be decided by the executive committee. Amendments to the constitute can be done in a congress or a special congress meeting with 2/3 of members' consent.

➤ **Obtaining Membership:**

- Simply, every initial member should be entitled to gain the membership.
- When obtaining anew membership, an application form should be filled accordingly and should be submitted to the secretary.
- Membership is being belonged after receiving the approval of the committee.
- Rs.75 of membership subscription fee should be paid by monthly.

➤ **Cancelling The Membership:**

- Continuous absenteeism for two consequent meeting sessions without any prior intimation.
- Acting against the society does constitute.
- Behaving as a disturbance to the society's activities.
- There is no right to have any benefit in a cancellation of the membership.

➤ **Financial Control:**

- Membership subscription fees should be paid at every meeting session and should obtain a receipt for the payment.
- Treasurer can only have Rs.5000 in his possession and the excessive amount should be deposited in a bank account made for society's name.
- Accountant should present an annual accounts report at the annual congress meeting.
- In a case of money withdrawal, president, secretary and treasurer should sign for the document.

➤ **Welfare Services:**

Welfare Services are done by sub committees according to the consent of the congress.

## Annexure III: Meeting Minutes of the Initial Meeting

### Hiniduma- Kanneliya Bio-Link Society

#### Initial Meeting Session- Meeting Minutes

The initial meeting session of the Hiniduma- Kanneliya Bio-Link Society was held on Friday, 29<sup>th</sup> of January in 2016, at Mr. Anura Liyanage's house. The initial speech was done by Ms. Lakmini Senadheera on behalf of Carbon Consulting Company. At there, presenting the society constitute to the assembly, inquiring the ideas and suggestions about the constitute from the assembly and confirming the constitute was taken place. Accordingly, the following things were suggested and agreed by all attendees at the meeting:

- ❖ To expand the domains according to the dispersion of members
- ❖ To form the sub-committees
- ❖ To held the society meetings on final Friday coming on once an every three months period time at 4 p.m at Mr. Anura Liyanage's house
- ❖ To held the committee meetings and sub-committee meetings on final Friday coming on once an every month at 4 p.m. at Mr. Anura Liyanage's house
- ❖ To cancel the membership due to continuous absenteeism for two consequent meeting sessions without any prior intimation.

Thereafter, it was taken place to appointing the society members. Mr. Wijedasa was appointed as the secretary of the society from the majority consent of the congress and it was submitted to Mr. Wijedasa to continue the meeting further. The following personnel were appointed as the committee members.

Position	Name <sup>3</sup>	Suggested by	Confirm by
President			
Secretary			
Vice President			
Vice Secretary			
Treasurer			
<b>Committee Members</b>			
Eppala			
Panangal North			

<sup>3</sup> Due to data protection regulations, names of participants have been removed from the public version of this document



Koralegama			
Panangala West			
Panangala West			
Panangala East			

After that, plant monitoring summary speech was done by Ms. Shermila Weragoda of Carbon Consulting Company. The meeting was turned over after doing the speeches of new president and new secretary of the society.

