



On behalf of



Federal Ministry for the  
Environment, Nature Conservation  
and Nuclear Safety

of the Federal Republic of Germany



*for a living planet®*

## **Six Monthly Technical Progress Report July 2014 – December 2014**

for the BMU / ICI project

**Avoidance of deforestation and forest degradation in the border area of  
Southern Laos and central Vietnam for the long-term preservation of carbon  
sinks and biodiversity (“CarBi Project”)**

BMU signature 11\_III\_017\_ASIEN\_K\_Eindämmung Leakage

Fanie Bekker, Trans Boundary Director: CarBi

January 2015

## Table of Contents

<b>1. INTRODUCTION</b> .....	<b>5</b>
<b>2. RISK MANAGEMENT</b> .....	<b>5</b>
<b>3. STAFF MATTERS</b> .....	<b>6</b>
<b>4. COMMUNICATION</b> .....	<b>7</b>
<b>5. BUILDING A CARBI CONSERVATION ECONOMY</b> .....	<b>9</b>
<b>6. TECHNICAL PROGRESS</b> .....	<b>10</b>
<b>Specific result 1 – Protected area component Vietnam</b> .....	<b>10</b>
Summary.....	11
Intermediate result 1.1 .....	13
Intermediate result 1.2 .....	15
Intermediate result 1.3 .....	20
Intermediate result 1.4 .....	23
Intermediate result 1.5 .....	24
Intermediate result 1.6 .....	24
Intermediate result 1.7 .....	25
<b>Specific result 2 – Xe Sap NPA</b> .....	<b>26</b>
Summary.....	26
Intermediate result 2.1 .....	29
Intermediate result 2.2 .....	29
Intermediate result 2.3 .....	30
Intermediate result 2.4 .....	30
Intermediate result 2.5 .....	30
Intermediate result 2.6 .....	31
Intermediate result 2.7 .....	31
Intermediate result 2.8 .....	31
Intermediate result 2.10 .....	33
Intermediate result 2.11 and 2.12 .....	34
Intermediate result 2.13 .....	36
Intermediate result 2.14 .....	36

Intermediate result 2.15 .....	38
Intermediate result 2.16 .....	40
Intermediate result 2.17 .....	40
<b>Specific result 3 – Forest restoration component .....</b>	<b>41</b>
Summary .....	41
Intermediate result 3.1 .....	44
Intermediate result 3.2 .....	46
Intermediate result 3.3 .....	48
Intermediate result 3.4 .....	52
Intermediate result 3.5 .....	52
Intermediate result 3.6 .....	53
Intermediate result 3.7 .....	54
<b>Specific result 4 – Timber trade component .....</b>	<b>54</b>
Summary .....	54
<b>Specific result 5 – REDD+/PFES component .....</b>	<b>55</b>
Summary .....	55
Intermediate result 5.1 .....	56
Intermediate result 5.2 .....	56
Intermediate result 5.3 .....	57
Intermediate result 5.4 .....	58
Intermediate result 5.5 .....	58
Intermediate result 5.6 .....	58
Intermediate result 5.7 .....	58

## **ANNEXES**

**Annex 1: CarBi Summary (traffic light) Report FY15 Q1**

**Annex 2: CarBi Summary (traffic light) Report FY15 Q2**

**Annex 3: CarBi Priority Risk Assessment and Mitigation Plan December 2014**

**Annex 4: CarBi Updated Staff Establishment December 2014**

**Annex 5: Restoration Change Request**

**Annex 6: Some Laos timber trade media products**

## **1. INTRODUCTION**

The CarBi Technical Progress Report for July 2014 - December 2014 is a comprehensive reflection on *actual progress* made towards the *Indicators, Specific Results* and *Intermediate results*, measured against the *planned progress*. *Challenges, solutions* and *adaptive management* options based on real or potential risks, are also discussed in detail. Each *Specific Result* is also complemented by a *Summary* of progress made and challenges experienced during this reporting period. The CarBi Quarterly *Summary Progress Reports* for the period FY15 Q1 and Q2, indicating detailed progress made with specific Component activities in a *Traffic Light* format, are also attached as Annexes 1 and 2 respectively. This more cryptic version also provides a quantitative overview of implementation progress, and is updated quarterly. Despite the expected continuation of significant challenges on the timber trade front, albeit not insurmountable, we were still able to achieve an average implementation rate of around 80% for this reporting period.

Recent developments in the CarBi human resource domain, an overview of progress on the communications/marketing front, as well as an update on CarBi's priority risk profile and mitigating steps taken during this reporting period based on implementation realities, are also presented.

## **2. RISK MANAGEMENT**

Risk management remains an integral part of CarBi's integrated governance system, ensuring an updated reflection on the priority risks which impact on the project's ability to deliver according to specification, and within a framework of dynamic change and implementation realities which could not be foreseen during project conceptualization. A priority risk assessment was conducted at the end of December 2014 to assess the extent to which priority strategic risks, updated in December 2012, June 2013, December 2013 and June 2014, have been successfully addressed through adaptive management/mitigation interventions. Please see the revised Priority Risk Assessment and Mitigation Report for this reporting period attached as Annex 3 in this regard. It highlights the 8 priority risks which require specific and ongoing adaptive management intervention, and also reflects on the progress which has been made in this regard since the previous reporting period. No new priority risks have been identified in the reporting period, although some specific additional challenges have been added under the primary Risks. Operational risks are

sufficiently addressed through CarBi's detailed Component Catch Up Plans, and will be elevated to the priority strategic level if and when justified.

### **3. STAFF MATTERS**

A solid CarBi staff culture, sense of belonging and appropriate levels of the team's motivation/inspiration, enhanced our ability to retain almost all our staff during the last 6 months, despite the challenges experienced with the significantly delayed Project Extension Approval. This low staff turnover is continuing to enhance our ability to maintain consistent levels of service to our internal and external clients as far as possible, within the constraints of the challenges highlighted under the technical progress section (Section 6). CarBi's ability to grow its value offering from a Marketing and Communications point of view is still sub-optimal, but the recent appointment of a new WWF Laos Communications Manager will be the catalyst to unlock our potential in this regard on the Laos side.

There were some changes to CarBi's Forest Guard (FG) personnel at both the Saola Nature Reserves in Vietnam. At the Quang Nam Saola Nature Reserve, two camp managers resigned in November '14 due to poor health and replacements were recruited in December '14. At the Hue Saola Nature Reserve, one FG and one FG Team Leader were re-deployed by CarBi, the former to work for the CarBi biodiversity monitoring team and the latter to become a Protected Area Officer responsible for TTHue PA component activities. An existing FG was promoted to fill the vacant Team Leader position and a camp manager was promoted to the vacant FG position in October '14. A new camp manager was also recruited to replace the promoted camp manager in November '14. This particular situation demonstrates a beneficial flow of CarBi "genes", contributing to a more professionalised pool of young Vietnamese human capital working in conservation. The Laos Forest Carbon (REDD+) Officer vacancy will not be filled due to financial constraints, and the Trans Boundary CarBi Director will continue to facilitate the coordination required in this regard, within the framework of the recently approved REDD+/Payment for Forest Environmental Services Change Request.

Although the matrix staff structure and dual roles of some key CarBi staff members remain challenging, the operational experience and adaptive management applied during the last 42 months, are sustaining the ability of the team to ensure the necessary focus on their core CarBi responsibilities. The WWF Regional and Country Financial, Human Resource, Administrative and Communication Support Services staff, including our WWF Germany Colleagues as well as the continued enabling environment provided by KFW, are also an integral part of the extended CarBi

*Family* brand, and contribute significantly to the strengths of the collective. The same applies to the relevant WWF Greater Mekong Strategy Managers where synergy is cardinal towards alignment with regional strategy and focused scientific support to allow us to remain at the cutting edge. Our honest realization that we are still far from perfect, creates the enabling environment for continuous learning and growth, as can also be seen under the Adaptive Management reflections reported under the Intermediate Results in Section 6 below.

The Occupational Health and Safety risks which the Forest Guard and Ranger teams are confronted with in Vietnam and Laos respectively, necessitate a strong focus on the protection of our biggest asset, our staff. CarBi places a very high premium on the establishment and maintenance of a fairly robust Occupational Health and Safety Management system in its domain. It is with grave sadness that we have to report the tragic death of one of the Hue Saola Nature Reserve Government Rangers, who was killed on Saturday 27<sup>th</sup> December '14 whilst on a law enforcement operation supporting intelligence gathered by the CarBi FG teams. This tragedy acts as a stark reminder that we should not take for granted the danger and challenges Rangers and FGs face on a daily basis whilst performing their tasks diligently. WWF Greater Mekong Region currently operates a Ranger Welfare Fund supported by WWF Singapore to provide some modest compensation to Ranger families killed in the line of duty when working in partnership with WWF conservation initiatives. Although the deceased was not a CarBi staff member, we, in partnership with the relevant counterparts, have launched a proper investigation into the incident to ensure that the cause is fully understood, and appropriately reflected in our risk profile, complemented by the necessary adaptive management/mitigation actions for all future patrolling.

The updated status of CarBi's human resource capital as at December 2014, is reflected in detail in the attached CarBi Staff Establishment (Annex 4).

## **4. COMMUNICATION**

Despite the lack of dedicated CarBi communications capacity as discussed above, CarBi was still able to solicit some publicity during this reporting period, but not at levels reflecting our value offering on the ground. The establishment of a *Conservation Economy* in the CarBi planning domain and beyond, remains high on our agenda, and has been integrated into CarBi's revised Communications Implementation Strategy. CarBi has already built a solid database which demonstrates our ability to enhance livelihoods in the planning domain. Please also refer to Section 5 in this regard. We are hopeful that our value offering in this regard

will be continued during the intensified implementation phase of the Restoration Component of CarBi, as well as the livelihoods work we are conducting through additional funding we attracted on the Laos side. Planning is underway to show case these progressive results in our media and communications products in months to come.

Besides the establishment of a photo database as reported in the previous Technical Progress Report (links were also provided to these databases which are kept up to date as far as possible), CarBi has also embarked on a progressive approach to curate and display our comprehensive array of camera trap photographs taken since project start. This medium will allow easy access to each photograph as well as concomitant descriptive narratives, allowing both professional and public access to this CarBi resource. The final product is currently being tested, and will be readily available in February 25.

Besides the ongoing Saola re-discovery media hits, we also had the following media exposure for the reporting period June'14 – December'14, summarized below.

### **Summary of some CarBi Communication activities from July to December 2014**

#### **Vietnam side:**

##### **1. Bear story**

A story of a bear captured by a CarBi camera trap was shared in late July, 2014 in:

##### ***Website***

<http://vietnam.panda.org/en/newsroom/?226015/Endangered-Asiatic-Black-Bear-Found-Showing-on-the-ground-Conservation-Impacts>

##### ***National press***

Story on top and popular media such as VnExpress, Tien phong, Vietnam Net, Lao dong

1. <http://vnexpress.net/tin-tuc/khoa-hoc/phat-hien-gau-ngua-o-quang-nam-3020751.html>
2. <http://www.tienphong.vn/xa-hoi/phat-hien-gau-ngua-quy-hiem-tai-quang-nam-738637.tpo>
3. <http://vnmedia.vn/VN/xa-hoi/thoi-su/bat-ngo-phat-hien-gau-ngua-o-quang-nam-23-2729869.html>
4. <http://vietnamnet.vn/vn/khoa-hoc/187303/phat-hien-loai-gau-ngua-tai-quang-nam.html>
5. [http://www.tinmoitruong.vn/di-thay-va-viet/ca-the-gau-ngua-duoc-may-bay-anh-cua-wwf-ghi-nhan-lan-thu-2-o-quang-nam\\_71\\_35134\\_1.html](http://www.tinmoitruong.vn/di-thay-va-viet/ca-the-gau-ngua-duoc-may-bay-anh-cua-wwf-ghi-nhan-lan-thu-2-o-quang-nam_71_35134_1.html)



6. [http://www.nhandan.com.vn/mobile/\\_mobile\\_khoahoc/\\_mobile\\_thiennhien/item/23837302.html](http://www.nhandan.com.vn/mobile/_mobile_khoahoc/_mobile_thiennhien/item/23837302.html)
7. <http://laodong.com.vn/xa-hoi/phat-hien-ca-the-gau-ngua-tai-vung-rung-nui-quang-nam-227214.bld>
8. <http://citinews.net/khoa-hoc/phat-hien-gau-ngua-o-quang-nam-ENY2|71/>
9. <http://motthegioi.vn/khoa-hoc-giao-duc/thien-nhien/phat-hien-them-ca-the-gau-ngua-o-quang-nam-88422.html>
10. <http://giaoduc.edu.vn/news/xa-hoi-680/mot-ca-the-gau-ngua-dinh-bay-anh-o-quang-nam-231556.aspx>

### ***Social media***

#### **Facebook**

<https://www.facebook.com/VietnamWWF/photos/pb.433021940073910.-2207520000.1421828596./731028350273266/?type=3&theater>

The post got 195 Like; 18 share and 17 Likes

#### **2. Other activities**

- Some of CarBi's successful stories contributed to WWF-Vietnam's 20<sup>th</sup> anniversary book 'WWF-20 years of change'
- Developed content on Reforestation in Quảng Nam for a film on livelihood activities by WWF-Vietnam
- Hosted a workshop in October'14 on wild species prioritized by WWF-Vietnam, including several species conserved and protected under Carbi. The workshop was followed by a painting contest for children whose artworks have been developed to be the content of WWF-VN's New Year Calendar. Around 150 of 700 sets of calendars have been funded by CarBi to be distributed to different key stakeholders.

#### **Laos side:**

Although CarBi cannot claim the credit for the latest exponential growth in Laos' media coverage of the country's timber trade challenges, it should also be seen against the backdrop of the findings concluded in the Leakage Study. Some Laos media links do not remain active for too long, so a summary of some of these articles is provided in Annex 6.

## **5. BUILDING A CARBI CONSERVATION ECONOMY**

Due to the importance of CarBi's socio-economic footprint in the project's domain, we will continue to provide some key indicators of progress made in this regard,

with specific emphasis on Job Creation, Income Generation, and Capacity Building. A comprehensive series of detailed sub databases have been created to record all CarBi’s activities related to these indicators (by all 4 Components in both countries: Protected Area Management, Forest Restoration, Timber Trade and REDD+/PFES). This is summarised on a quarterly bases to reflect our impact on the livelihoods of the people we are privileged to share the CarBi experience with. The figures below provide an indication of the total number of beneficiaries, number of Person Days work created, income generated, as well as capacity building opportunities provided since project start. The figures in brackets indicate the accumulative totals till June 2014 (end of previous reporting period) to display progress made in the last 6 months, ending on 31 December 2014. There has been a significant increase in the number of person days employment created in this reporting period, due to some under-reporting in previous periods which has been corrected after an internal audit by the team, but more specifically due to the fact that we have started to capture the Restoration Component’s outputs since households’ performance based payments were effected.

<b>TOTAL NUMBER OF BENEFICIARIES</b>	<b>TOTAL PERSON DAYS EMPLOYMENT CREATED</b>	<b>TOTAL INCOME GENERATED (USD)</b>	<b>CAPACITY BUILDING BENEFICIARIES (NUMBER OF PARTICIPANTS)</b>
5,948 (3,757)	113,261 (10,512)	1,130,392 (916,519)	16,902 (12,662)

CarBi has also embarked on the development of some Socio-economic Impact Indicators which should provide some insight into our achievements in this regard. These Indicators are currently being tested and will be included in the next TPR.

## **6. TECHNICAL PROGRESS**

### **Specific result 1 – Protected area component Vietnam**

The Saola Protected Areas of the central Vietnam provinces from Quang Nam and Thua Thien Hue as well as the expansion area of Bach Ma National Park are effectively managed

## Summary

Enforcement activities within Vietnam continued to build upon and consolidate measures implemented during previous reporting periods. Forest guard (FG) patrols operating inside the Hue Saola Nature Reserve (HSNR) removed 5,257 snares, 47 illegal camps, whilst those at the Quang Nam Saola Nature Reserve (QNSNR), destroyed 1,973 snares and 38 camps. This brings a total of 50,245 snares and 809 illegal camps destroyed over 29,626 patrol days since the start of CarBi in Vietnam. 16 multi-agency patrols were conducted in the buffer zones including four at Bach Ma National Park (BMNP), four at HSNR and six at QNSNR.

Disappointingly no further advances were made working with government ranger counterparts and other stakeholders to intercept and arrest perpetrators who break the law inside the SNRs. This issue remains one of CarBi's greatest concerns and it is obvious that an alternative approach must be deployed to encourage buy-in and concomitant action from the provincial Forest Protection Departments (FPD) to provide tangible dimensions to commitments made in this regard. For CarBi to move the Law Enforcement Offender System initiative forward, the recruitment of an experienced Vietnamese consultant familiar with forest protection law / policy and understanding of the FPD, will now be pursued as a priority intervention for the Extension Phase.

Tragically one of the HSNR Government Rangers was killed in an accident on Saturday 27<sup>th</sup> December '14 during a field operation to support a FG team. Our sincere thoughts and condolences go out to the man's family and HSNR staff. This tragedy acts as a stark reminder that we should not take for granted the danger and challenges rangers and FGs face on a daily basis whilst performing their tasks diligently.

The TTHue FPD operationalised the online law enforcement database (supported financially by CarBi) which is designed to manage all data gathered within the province on forest and PA violations on a monthly basis. Training for 22 relevant rangers and staff from nine district sub-FPD staff and two from Nature Reserve sub-FPD (Phong Dien and Hue) was conducted on how to use the system.

The content of high impact law enforcement strategies for each SNR were finalised in December '14 and adjustments are now being made to the English versions. These documents will become operational from the 1<sup>st</sup> January '15 at both SNRs.

Field activities for the QNSNR and HSNR informant networks commenced at the beginning of July '14 and October '14 respectively. Efforts at both the SNRs extended across the semester with distribution of 1,000 informant network posters at key locations in buffer zone villages to attract and recruit covert informants. Six covert informants were recruited and a number of potential candidates were identified. CarBi staff conducted training for staff from both SNR on how to operate and manage the Informant Network Management Tool database (Microsoft Access).

Training initiatives focused upon PA management for nine PA management level staff from the HSNR, QNSNR & BMNP and planning was completed to train FGs on how to collect biological traces, e.g. hair, teeth, blood, scats etc. during patrols.

Implementation of recommendations from the external SMART assessment continued throughout the semester with two training activities implemented resulting in more accurate functional monthly reports that are easier to interpret. Two different types of assessment were conducted for FG teams and one under the WWF / Saola Working Group CEPF Project. These included the 1) annual Minimum Enforcement Standards Assessment with scores of 90%, 85% and 90% for QNSNR, HSNR and BMNP recorded respectively. All scores were an improvement upon those recorded during the 2013 assessment with the largest gain made at the QNSNR (increased by 32%); 2) Patrol Law Enforcement Assessment (PLEA) designed to assess the field performance of FG teams; and 3) Protection effectiveness of law enforcement activities assessment for Saola. The latter two assessments' outcomes must still be finalised.

Procurement and installation of three UHF radio sets with mounted antennae (one per ranger station and Atep outpost) were completed at the HSNR and six hand radios with spare batteries were provided to FG teams. This equipment enhances the ability of FG teams to communicate with SNR Sub-FPD rangers to both coordinate law enforcement activities and respond to medical emergencies.

Important milestones were achieved to improve the effectiveness of PA management within the CarBi planning domain. These include approval of both SNR's revised participatory boundary demarcation plans; installation of 100 PA management and conservation signs for both SNRs, and identification of a qualified consultant after an extensive search and definition of the 22 highest priority (threat wise) villages to implement and focus awareness raising activities.

The October '13 high impact Saola survey plan was reviewed and a revised plan was defined and commenced in October '14 targeting eight priority forest compartments (FCs) across the VPA domain, and 48 camera traps we installed as part of this revised plan. Images of at least 11 species of avifauna, ungulate and other species were photo captured during these field activities, including ungulates (three species of Muntjac, Samba, Serow), two species of Macaque, Masked Palm Civet, Yellow Throated Marten and Leopard Cat. Considerable progress was also made to improve CarBi's ability to store camera trap images and provide information driven conservation and PA management responses. Of particular interest has been the development and testing of an online camera trap image portal integrated into the WWF Greater Mekong Region intranet.

19 baseline comparison field surveys were completed for Crested Argus and Gibbon at 23 listening posts within the QNSNR, HSNR and BMNP Extension. A further three field trips are scheduled for completion at the HSNR by mid-January '15. 102 samples (50 leeches / sample) from the QNSNR leech samples were collected in accordance with the October '13 high impact Saola survey plan during the Gibbon / Crested Argus baseline comparison surveys. Results from 80 and 100 samples were received from Kunming and Germany respectively. Unfortunately no results identified the presence of Saola DNA yet, however, the Kunming samples detected DNA from 25 species and those from Germany 11 species, reconfirming the significant value of this monitoring strategy to detect species which would otherwise be quite challenging.

The final two field surveys to assess known Saola food types at the two remaining high priority HSNR FCs were completed and a final report with 194 digital and plant herbarium specimens was submitted to CarBi, and results from the survey activities prioritised several FCs 20 and 22 in QNSNR, 405 in HSNR and 410 in the BMNP Extension for future intensive Saola camera trapping activities.

Major progress was achieved to finalise the PA Component's Project Output Database for each Intermediate Result and updating CarBi's Knowledge Management System (KMS) accordingly. All completed, current and future outputs were defined across the component domain and summarised in a Microsoft Excel database after extensive consultation with all CarBi Vietnam and Laos PA staff. All completed outputs to-date (representing approximately 75- 80% of all component outputs) were collated and uploaded into the KMS. The status of all other outputs within the database has also been defined and will be updated on a monthly basis as outputs are tracked and completed.

### **Intermediate result 1.1**

*Hue and Quang Nam Saola Nature Reserves and Bach Ma National Park extension: By end of the project, the effectiveness of Protected Area management has increased to 70% of total possible scores (Source of verification: WWF-World Bank Management Effectiveness Tracking Tool). The following base lines have been established: Hue SNR Sept 2010: Scored 38: Quang Nam SNR Sept 2010: Scored 33: Bach Ma NP Sept 2010: Scored 67).*

### **Progress**

The revised boundary demarcation plans for both the SNRs proved to be compliant with government cost norms and gained final approval by the Quang Nam (QN) and Thua Thien Hue (TTHue) Provincial Forest Protection Departments during FY15Q2.

Contracts between WWF and both the Hue and QN SNR were in the final stages of preparation prior to implementation of field activities. These contracts are expected to be finalised in early FY15Q3.

100 (50 / SNR) protected area (PA) management and conservation signs were made and installed at defined functional locations along the reserve boundaries i.e. access points and ranger stations and internally at specifically defined hot spots during FY15Q1. These signs are anticipated to play a key information dissemination role to those entering the reserve to extract natural resources and make them aware of legal restrictions.

A four day training course for management level PA staff was conducted for nine trainees (5 HSNR; 2 QNSNR & 2 BMNP) during September '14 on PA management by the CarBi Law Enforcement Technical Advisor. Syllabus included modules on:

- Completing Operational plans
- Giving an operational briefing
- Understanding how to complete a Threat Analysis
- Conducting covert surveillance
- Deal effectively with informants
- Give instructions on how to complete Ranger Based Data Collection forms
- Understanding SMART conservation software
- Basic management of a wildlife crime scene

Strong progress with the awareness raising campaign was achieved during the semester. In FY15Q1 priority villages were identified across 14 communes within the buffer zone of each of the three PAs via a series of consultation workshops with local government, PA management boards (MBs), and local communities. As a result, 22 highest priority villages considered to place the greatest pressure / threats upon the PAs, were selected as target villages for the campaign. During FY15Q2 considerable effort was made to identify suitable consultants to prepare the field action plan for implementation. This process was time consuming due to few qualified and experienced candidates (in accordance with the defined TOR) available. Fortunately, one suitable consultant was located from Hanoi National University and contract negotiations with this person and their team are underway. It is anticipated that the contract will be signed during January '15 and work will commence on the Action Plan and field methodology design.

As part of the communications program, a Saola themed T-shirt was also designed late in FY15Q2 and will be printed and distributed to target audiences in FY15Q3.

### **Challenges and solutions**

Completion and approval of the participatory boundary demarcation plan represents a major step forward in the implementation of this activity. Unfortunately these delays and those currently experienced preparing the contract between WWF and the SNR MBs, will now be exacerbated due to the approach of the

Lunar New Year festivities resulting in postponement of field implementation until March '15. WWF will prioritise the finalisation of the contracts with both SNRs prior to the Lunar New Year holidays.

## **Intermediate result 1.2**

*By end of the project, infractions (violation of law, agreements and rules/illegal activities) into the three protected areas have been reduced by at least 30 % (e.g. based on trends in snare traps detected, and confiscation of timber and wildlife in relation to resource inputs from patrolling).*

### **Progress**

Enforcement activities within Vietnam continued to build upon and consolidate measures implemented during the previous reporting period. The below section is divided into protected area specific initiatives and then shared initiatives:

The following results were recorded during forest guard (FG) patrols:

#### ***Hue SNR Results:***

- 69 patrols totalling 2,172 patrol days (average 6 days per trip)
- 47 illegal camps of hunters and loggers destroyed
- 5,257 illegal animal traps (snares) removed

Around 426 people were confronted in the forest with verbal warning issued to them by SNR rangers to refrain from illegally extracting forest resources.

#### ***Quang Nam SNR Results:***

- 61 patrols totalling 2,450 patrol days (average 6.5 days per trip)
- 38 illegal camps of hunters and loggers destroyed
- 1,973 illegal animal traps (snares) removed

36 local people were confronted in the forest with verbal warnings issued to them by SNR rangers to refrain from illegally extracting forest resources.

#### ***Bach Ma National Park (Extension) Results:***

- Patrols targeted Forest Compartments thought to have the greatest potential to still hold Saola in the western section of the Extension area along the boundaries with the Hue and QN SNRs.
- 3 patrols totalling 90 patrol days (average 6 days per trip).
- 9 illegal camps of hunters and loggers destroyed.
- 1 m<sup>3</sup> of illegally cut timber destroyed.
- 4 truck inner tubes used to transport illegally cut timber down waterways were confiscated.
- 16 people were confronted in the forest with verbal warnings issued to them by BMNP rangers to refrain from illegally extracting forest resources.

- A patrol action plan was prepared for January – April 2015 consisting of 6 focused patrols.

**SPECIAL NOTE** on law enforcement patrols. Tragically one of the HSNR Government Rangers was killed on Saturday 27<sup>th</sup> December '14 whilst on a law enforcement operation supporting intelligence gathered by the FG teams. The ranger dislodged a branch from a tree which struck him with full impact on the face and head causing severe injuries. He was evacuated that afternoon from the forest and admitted to the Aluoi District Hospital where emergency treatment was provided. Unfortunately he succumbed to his injuries at 2am on Sunday 28<sup>th</sup> December '14. Our thoughts and condolences go out to the man's family and HSNR staff. This tragedy acts as a stark reminder that we should not take for granted the danger and challenges rangers and FGs face on a daily basis whilst performing their tasks diligently. WWF Greater Mekong Region currently operates a Ranger Welfare Fund supported by WWF Singapore to provide small compensation to ranger families killed in the line of duty when working in partnership with WWF conservation initiatives. Hopefully this contribution to the deceased ranger's family may assist to ease their financial burden in a small way.

In FY15Q2 there were a number of changes to FG personnel at both the SNRs. At the QNSNR two camp managers resigned in November '14 due to poor health and replacements were recruited in December '14. At the HSNR one FG and one FG Team Leader left their positions and were re-deployed by CarBi to work for the CarBi biodiversity monitoring team (he has a Tertiary qualification in Wildlife Biology) and the Team Leader was recruited as a Protected Area Officer (PAO), responsible for TTHue PA component activities. An existing FG was promoted to fill the vacant Team Leader position and a camp manager was promoted to the vacant FG position in October '14. A new camp manager was also recruited to replace the promoted camp manager in November '14. This particular situation demonstrates a beneficial flow on effect of CarBi activities contributing to a more professionalised pool of young Vietnamese people working in conservation.

16 multi-agency patrols were conducted in the buffer zones (with occasional visits inside protected areas when required) of BMBP (4), HSNR (4) and QNSNR (6) from July to December '14. These patrols included staff from district FPD, protected area agencies, local police and government authorities, with occasional collaboration with the 637 Army Station (HSNR). Multi-agency patrols will continue in accordance with local seasonal trends of forest resource use and plans prepared on a quarterly basis. The following multi-agency patrol results were achieved:

***BMNPE patrol results included:***

- Four patrols totalling 240 days (48 patrol days x 5 people /patrol = 240 days) specifically targeting illegal logging hotspots.
- SMART reports were prepared for all four patrols.



- 8 illegal camps of hunters and loggers destroyed.
- 90 illegal animal traps (snares) removed.
- 4 local people were confronted in the forest and issued with verbal warnings, but due to lack of concrete evidence they were requested to leave the forest immediately rather than being detained.
- Patrol plans were prepared for FY15Q2 (FY15Q1 plan prepared in FY14Q4) and FY15Q3.

***Hue SNR patrol results included:***

- Six patrols totalling 180 patrol days (36 patrol days x 5 people / patrol) specifically focussed upon illegal hunting and logging hotspots from July to December '14 (excluding August) in the newly extended SNR area in Nam Dong district.
- SMART reports were prepared for all six patrols.
- 10.71 m<sup>3</sup> of timber confiscated and destroyed.
- One chainsaw confiscated and handed over to A Luoi Sub-FPD.
- Patrol plans were prepared for FY15Q2 (FY15Q1 plan prepared in FY14Q4) and FY15Q3.

***Quang Nam SNR patrol results included:***

- Six patrols totalling 180 patrol days (36 patrol days x 5 people / patrol) organised from July – December '14 targeting illegal hunting and logging.
- SMART reports were prepared for all six patrols.
- 26m<sup>3</sup> of timber was destroyed in the forest.
- 7 illegal camps of hunters and loggers destroyed
- Six people were confronted in the forest, but due to lack of concrete evidence they were requested to leave the forest immediately and issued with verbal warnings rather than being detained,.
- Patrol plans were prepared for FY15Q2 (FY15Q1 plan prepared in FY14Q4) and FY15Q3.

Field activities for the QNSNR informant network commenced at the beginning of July '14. Efforts have continued across the semester to attract and recruit confidential informants from buffer zone villages. 500 of the informant network promotion posters were distributed in villages and placed at key locations such as community halls, village leader houses, markets etc. By the end of the semester six informants had been recruited and a number of potential candidates had been identified. CarBi staff conducted a training course on how to operate and manage the Informant Network Management Tool database (Microsoft Access) for MB staff in July '14.

Implementation of the strategy to operationalise the HSNR informant network was realised at the end of September '14 with the finalisation of agreements between WWF CarBi Vietnam and the HSNR MB, and clarification of the operational mechanism. The HSNR specific informant network promotion poster was prepared and printed. From the beginning of October '14, 500 promotion posters were distributed in eight buffer zone villages at community houses, restaurants and other key locations. MB staff are following up a number of inquiries from potential confidential informants and hope to finalise their recruitment during FY15Q3. Informant recruitment will continue in additional villages during the next semester. CarBi staff conducted a training course on how to operate and manage the Informant Network Management Tool database (Microsoft Access) for MB staff in November '14.

The TTHue FPD operationalised the online law enforcement database supported financially by CarBi. This database has been designed to manage all data gathered within the province on forest and PA violations and for monthly reporting to the National FPD. Training for 22 relevant rangers and staff from nine district sub-FPD staff and two from Nature Reserve sub-FPD (Phong Dien and Hue) was conducted by the consultant on how to use the system in December '14. The system is now operational and monthly reports are being generated by the TTHue FPD and sent to the National FPD.

The content of high impact law enforcement strategies for each SNR was finalised in December '14 and changes are now being made to the English version of the document. These documents now become operational from the 1<sup>st</sup> January '15 at both SNRs.

Work was completed by the CarBi team from VPA, M&E and the TAPAM to finalise the FG Statistic Database during October '14 with population of all available MIST and SMART data from Vietnam since the commencement of FG patrols at each SNR. Data is added on a monthly basis after completion of each month's SMART report (including information from both November and December '14) and will continue indefinitely until FG patrols end. This Access database is a powerful tool intended to be used to collate a variety of important FG patrol statistics as a means to track and analyse FG law enforcement effort and compare success over time.

Progress was made during the semester on the law enforcement offender system until December '14 when another impediment arose (outlined in Challenges and Solutions section below). The following outputs were achieved:

- 1) Road map for implementation of the system was defined;
- 2) Mission statements for FGs and roles to be played by FGs when supporting SNR operations were drafted;
- 3) Meetings were held with key counterparts such as the SNR MBs and the TTHue and Quang Nam FPDs on impediments to making arrests; and

- 4) A revision of the DRAFT proposed system was made in line with knowledge advances.

During FY15Q2 the annual review of Emergency Evacuation Plans (EEPs) for both the SNRs was completed. These documents were shared with relevant stakeholders in Quang Nam province, e.g. Dong Giang Hospital, field teams and the QNSNR MB, and in TTHue province, e.g. ALuoi Hospital, field teams and the HSNR MB. The process to gather information from the newly expanded area of the HSNR in Nam Dong district commenced in November '14. Once completed, this information will be added to the MOU with the Nam Dong District Hospital, and negotiations for this essential agreement are scheduled to commence in FY15Q3.

Risk assessments for both the newly completed outpost and two ranger stations at the QNSNR were completed and posted on each structure during October '14. This follows the process outlined within the CarBi Project's Health and Safety Strategy and Guideline.

Procurement and installation of three UHF radio sets with mounted antennae (one per ranger station and Atep outpost) was completed at the HSNR and six hand radios with spare batteries were provided to FG teams. This equipment enhances the ability of FG teams to communicate with SNR Sub-FPD rangers to both coordinate law enforcement activities and to respond to medical emergencies as they arise. Plans are underway to install an UHF system at the QNSNR in FY15 Semester 2.

### **Challenges and solutions**

As with the reports from previous semesters, CarBi remains concerned about the lack of progress by rangers from the two SNR's (particularly the HSNR where 426 people were confronted in the forest over the semester) to detain / arrest people they encounter breaking the law inside their protected areas.

The law enforcement offender system activity was designed to work towards addressing this issue. However, a new complication arose this semester in relation to what constitutes "sufficient evidence" to detain / arrest people encountered, particularly in the Strict Protection Zone. This implies that we are still no closer to facilitating arrests of people who violate Special Use Forest law in the areas with the highest conservation significance. It is clear that at present there is insufficient dedicated commitment by the related agencies to provide the enabling environment for this initiative as demonstrated by new impediments that frequently arise to suspend progress at each step of the process. For CarBi to move this initiative forward, the recruitment of an experienced Vietnamese consultant familiar with forest protection law / policy and understanding of the FPD, will now be pursued as a priority intervention for the Extension Phase.

### **Intermediate result 1.3**

*By 18 months after project start (end 2012), baselines for selected large ungulates, Crested Argus and Nomascus gibbon occupancy estimates have been established for Hue and Quang Nam Saola Nature Reserves.*

#### **Progress**

All activities pertaining to this IR were completed during FY13Q3.

*By 30 months after project start (end 2013), extensive Saola specific surveys within Hue and Quang Nam Saola Nature Reserves, using; camera-trapping, genetic analysis of dung and haemophagous leaches, have been completed to establish Saola status.*

#### **Progress**

CarBi staff continued to implement the six month high impact Saola survey plan prepared during October '13 to install camera traps (in collaboration with the camera trapping programme), and the plan was wound down by the end of September '14 (except for leech collection which will be addressed in a separate section below). During September '14, CarBi conducted a review of the October '13 high impact Saola survey plan and with information from the Saola habitat assessment, redefined the next phase of the camera trapping program until the end of 2015 to new locations across the VPA landscape. Priority Forest Compartments (FCs) included: QNSNR: 20, 22, 13, 12; HSNR: 351, 405; 404 and BMNP Extension: 410. No additional sites were planned for the BMNP Extension due to the commencement of the Leibniz Institute for Zoo and Wildlife Research (IZW) systematic camera trapping program across the PA in FY15Q2. Instead, this partnership allows CarBi to strategically redeploy camera trap resources to maximize the opportunities to collect field data within the landscape.

#### *Conclusion of the October '13 plan camera trapping program:*

HSNR: all camera traps were removed from FCs 352 and 405. Two camera traps were stolen and five were discovered to be inoperable. Arrangements were made to repair them.

QNSNR: all camera traps were removed from FCs 14, 20 and 22. Of note is that all 14 camera traps located in FC14 were also removed. Two camera traps were discovered to be inoperable and arrangements were made to repair them.

BMNPE: batteries and memory cards for six camera traps placed in FC 410 were replaced / collected during August '14 and then all six were removed during October '14. These were moved elsewhere within the VPA landscape in accordance with the revised September '14 plan.

#### *Implementation of September '14 camera trapping program:*

The current status of the camera trap program is as follows. 48 are currently set in the forest, eight are under repair and four have been stolen. Camera traps were installed at FCs 405 and 351 in the HSNR and FCs 13, 12 and 22 in the QNSNR.

Members from the VPA biological monitoring team worked with colleagues from the German IZW project to prepare permits, an MOU with the BMNP MB, and coordinate logistics to commence field activities. Experts from IZW conducted a two day camera trapping training course at BMNP for the CarBi biodiversity team and BMNP rangers in early November '14. Installation of camera traps commenced shortly thereafter across the BMNP.

Leech collection activities implemented in accordance with the October '13 high impact Saola survey plan were conducted during the Gibbon / Crested Argus baseline comparison surveys across the Vietnam (V) PA landscape. 102 samples (50 leeches / sample) were collected from the QNSNR, stored following defined protocols and information updated into the leech sample database. Samples from the HSNR and the BMNP Extension were collected, however, information is currently being collated on their numbers. Once the target of 600 samples is reached after the conclusion of the three remaining HSNR gibbon / Crested Argus surveys (mid-January '15), these samples will be shipped to Germany for genetic analysis. A revised MOU was prepared for the German DNA analysis service provider and extended delivery of results to WWF until the end of 2015.

Results from the analysis of the Kunming samples have been arriving slowly, however, results from 80 samples were received in October '14. Unfortunately no Saola DNA was detected, yet DNA from 25 other species was recorded. The complete set of outstanding results, according to the service provider in Kunming, will be submitted by the end of FY15Q3. Results of 100 samples were received from Germany in July '14. These unfortunately didn't detect Saola DNA either, yet DNA from 11 other species was recorded. Once the results from Kunming are finalised, mapping of species genetic signatures will commence across the VPA landscape to visually represent the results of the program. As results from the German analysis are received, the genetic signatures will be progressively mapped.

*Saola habitat assessment survey:* The final two field surveys at the two remaining high priority HSNR FCs were completed in July '14 to assess known Saola food types (based upon local knowledge), prepare digital and plant herbariums and identify suitable areas to conduct future camera trapping activities. In September '14, CarBi also provided comments on the consultant's Draft report prepared during August '14. The consultant submitted the final report and the 194 digital and plant herbarium specimens in October '14. Results from the survey activities prioritised FCs 20 and 22 in QNSNR, 405 in HSNR and 410 in the BMNP Extension for future intensive Saola camera trapping activities in line with CarBi's High Impact strategy.

## Challenges and solutions

A significant emerging challenge is the notable increase in maintenance required for the Bushnell camera traps as they age. We are also noticing that the 38 newly purchased Cuddleback “Ambush” camera traps are surprisingly beginning to fail which suggests that this particular type may not be suitable for the rigours of high moisture (humidity and rainfall) conditions experienced in Central Annamites forests. The biological monitoring team will continue to monitor the status of both types of camera traps and make repairs when necessary. However, it must be noted that there is a high potential that an entire set of camera traps will need to be procured within the next two years when the set becomes too unreliable.

*By project end the status (measured through occupancy estimates from monitoring plots within Hue and Quang Nam Saola Nature Reserves) for selected large ungulates, shows an increase, and is stable for Nomascus gibbon and Crested Argus.*

## Progress

At least 11 species of avifauna, ungulate and other species were photo captured during these field activities. Notable species included ungulates (three species of Muntjac, Samba, Serow), two species of Macaque, Masked Palm Civet, Yellow Throated Marten and Leopard Cat.

Considerable progress was made during this semester to improve CarBi’s ability to store camera trap images and provide information driven conservation and PA management responses. Staff became proficient in the use of Microsoft Access camera trap database developed by WWF Malaysia and have modified it for our purposes. All camera trap images taken between December 2012 and September 2014 have now been uploaded into the database. To make this information more accessible across the CarBi Project and the Greater Mekong Region, a consultant IT company was engaged to assist WWF to integrate the Access database through an online portal into the WWF intranet. A demonstration website was uploaded and input sought from WWF on its functionality. The final version of the camera trap portal is expected to be completed by mid-February ’15.

Crested Argus and Gibbon baseline comparison surveys commenced at the QNSNR, HSNR and BMNP Extension in September, October and October ’14 respectively. The following field trips were conducted:

- a) HSNR: Five trips (six listening posts) in five forest compartments;
- b) QNSNR: Nine trips (10 listening posts) in eight forest compartments; and
- c) BMNP Extension: 5 trips (7 listening posts) in five forest compartments.

A further three field trips will be implemented at the HSNR for completion by mid-January ’15. Data from both the HSNR and BMNP Extension have been collated and sent to WWF for analysis. At the conclusion of the last three trips at the HSNR, the

data from this SNR will be sent to WWF for analysis. Results from this field work are expected to be available either by the end of FY15Q3 or the beginning of FY15Q4.

Preparations were completed in December '14 to implement training for FGs to collect wildlife traces specimens where appropriate during their patrol activities. An appropriately qualified consultant has been contracted and invitations sent out to participants to attend the training course at the end of January '15.

#### **Intermediate result 1.4**

*On an annual basis as of project start, the effectiveness of the patrolling and Management Information System (MIST) has been externally verified and validated.*

#### **Progress**

Implementation of recommendations from the external SMART assessment continued throughout the semester with a variety of training activities implemented to achieve them. These included:

- a) Upgrading of the SMART software to Version 3.0.1 with SMART Officers from each of the CarBi Project VPAs and the Laos PA SMART Officer over two days during September '14; and
- b) A two day refresher course for all SMART Officers also in September '14 which resulted in a review of the current reports generated and subsequent revision of the end of month reports which are now much more functional, results are easier to interpret and they are more accurate in the data presented.

Two different types of assessment were conducted during the semester for the FG teams and one protection effectiveness assessment under the WWF / Saola Working Group CEPF Project.

- 1) A desktop annual Minimum Enforcement Standards Assessment, following the ASEAN standards, was conducted by the Law Enforcement Technical Advisor for all three VPAs.. The following scores were recorded 90%, 85% and 90% for QNSNR, HSNR and BMNP respectively. Each recorded score was an improvement from the 2013 assessment of 61%, 83% and 83% respectively. The large gain made at the QNSNR (by 32%) brings all three PAs to roughly the same standard – a significant achievement.
- 2) Patrol Law Enforcement Assessment (PLEA). A new system designed to assess the field performance of FG teams was developed, training of assessors conducted and field testing began at the end of October '14. By the end of December '14, two FG teams from each SNR had been assessed with results due at the beginning of January '15. Preliminary results from the four FG teams assessed to date, however, suggest that they are quite professional in their patrol activities, follow health and safety procedures closely and are mostly

effective in detecting and deactivating snares that they encounter during patrols. The remaining four teams will be assessed by the end of January '15.

- 3) Protection effectiveness of law enforcement activities assessment for Saola. During November and December '14, a 22 day assessment was conducted by wildlife biologist Rob Timmins across both the SNRs. This activity was implemented through the Saola Working Group / WWF CEPF project titled "*Finding Saola, Saving Saola: Transforming Saola Conservation in Key Sites in Lao PDR and Vietnam*", under the CarBi umbrella. Six FCs each from the Hue and QN SNRs were visited. A preliminary report has been received from the consultant and is currently being reviewed by WWF.

### **Intermediate result 1.5**

*By 12 months after project start: MIST and all ranger stations are established and fully operational.*

#### **Progress**

SMART FG reports continued to be completed, also using the revised reporting format (please refer to IR1.4) from October '14, for each month of the semester. They continue to provide a consistent level of reliable information to plan and respond accordingly. SMART reports for 16 (6 QNSNR; 6 HSNR and 4 BMNP) Multi Agency Team (MAT) patrols were also completed for the semester (please refer to I.R 1.2).

Construction of the SongKon ranger station in Quang Nam's Dong Giang district was completed and officially handed over to the MB in September '14. With its completion, patrols conducted by Quang Nam rangers, MATs and FGs can now be staged from both the rangers stations (the other in Tay Giang district) constructed by the CarBi Project., following the same model as in Hue.

Two weather stations and two laptop computers i.e. two sets, were installed at a ranger station located at the QNSNR and HSNR respectively to record meteorological data and act as an early warning system for FG teams on patrol. A half day training course was completed by CarBi staff for staff at each SNR.

The micro-hydropower system for the QNSNR outpost (located within the Strict Protection Zone) was successfully installed during October '14 and is now operational.

### **Intermediate result 1.6**

*By 18 months after project start: Management plans for the Saola Nature Reserves have been developed and appraised as well as revised for Bach Ma National Park.*



## **Progress**

Progress on the finalization and approval of the Hue SNR Management Plan was slow this quarter. However, a key milestone was achieved in September '14 when the final document was sent from the TTHue FPD to the TTHue Department of Agriculture and Rural Development (DARD) who will officially request the TTHue People's Committee to approve it.

## **Challenges and solutions**

Unfortunately no action was taken by TTHue DARD to send the document to the TTHue People's Committee despite a number of reminders during PMU meetings to the Vice Director of TTHue DARD. A formal request will now be made to the TTHue DARD to expedite the submission of the Management plan to the TTHue People's Committee prior to the Lunar New Year celebrations that commence mid February '15.

No further change to the status of the Bach Ma NP Management Plan can be reported since the previous semester Technical Progress Report. The National General Department of Forestry must still officially approve the document, which is primarily delayed due to some tourist infrastructure related matters still to be resolved. To avoid any further delays, the sections relating to both protected area and conservation management (CarBi's core function) are being implemented in accordance with the agreed work plan. CarBi, however, will continue to monitor and support the situation with BMNP and report as information becomes available.

## **Intermediate result 1.7**

*By end of the project: One sustainable financing mechanism will have been developed per Protected Area.*

Please refer to CarBi's proposed Payment for Forest Ecosystem Services (PFES) value offering under Intermediate Results 3.2 and Specific Result 5, which will also impact on both HSNR and QNSNR.

The implementation of the CarBi VPA landscape ecotourism feasibility assessment was conducted during this reporting period. Consultation workshops and site surveys were conducted at locations in the buffer zones of Hue and QN SNR and the BMNP Extension area. Target groups consulted included PA MBs, District FPD, District Culture and Tourism Departments, local commune authorities (with key village leaders) and key selected tourism businesses from Da Nang, Hoi An and Hue. A final report was prepared by the consultant, after CarBi provided comments on the draft document. The document has been translated into Vietnamese and sent to

the MBs of each of the three PAs and the consultant travelled to each PA to present the results from the survey. Principal findings include:

- 1) Great potential exists for both minimum impact and adventure based activities where infrastructure can easily be developed to support this;
- 2) Cultural activities are difficult to market because there is little to differentiate them from other areas in Vietnam and also many cultural traditions are being lost to modernisation;
- 3) Access to the area is challenging due to government regulations and policy which create severe limitations (plus extra costs) to private business from developing tourism products;
- 4) Private business should be the driving force of eco-tourism development. Government / private partnerships should be developed involving time-bound exclusive access rights being granted at locations to conduct minimum impact activities; and
- 5) Government authorities should create visitor friendly policies and procedures to encourage private business.

## Specific result 2 – Xe Sap NPA

The Xe Sap National Protected Area is effectively managed

### Summary

SMART reports for ranger patrols operating in north-eastern Xe Sap NPA of Sekong province were prepared each month of the semester, and for only July and August '14 in Saravanh. No SMART reports were generated for Saravanh province from September to December '14 due to the exhaustion of the CarBi ranger patrol budget. However, results from ranger patrols are illustrated in the following outputs:

- 8 patrols totalling 443 patrol days (average 5.5 days per patrol)
- 52 illegal camps destroyed
- 417 illegal animal traps (snares) removed
- 1.770 m<sup>2</sup> of encroachment by villagers into the NPA was recorded in Saravanh province.
- 3 Vietnamese people were verbally warned for poaching and 19 local people were encountered in the forest.

An internal audit of patrol statistics was conducted covering the timeframe between January 2012 until September 2014 and when combined with FY15Q2 data, a revised statistical tally recorded a total of 5,669 snares, 318 illegal camps destroyed and over 3,699 patrol days from 70 patrols since CarBi patrols commenced in Laos.

The quality of monthly SMART reports increased noticeably from October '14 after the SMART Officer participated in training courses in Vietnam. Measures were implemented from the internal assessment conducted during June '14 to improve the quality of data entered into the RBDC sheets through experiential training of patrol team leaders, patrol team members and district and provincial counterparts. A MOU was signed with the Kaluem District Hospital through which our objective was successfully achieved to establish agreements with all three district hospitals to provide emergency evacuation and other medical services (upon evacuation) when they are contacted by our field workers.

The MAT patrol initiative recorded disappointing progress with only one patrol conducted in Kaluem district with no results submitted to CarBi thus far. This occurrence is of considerable concern to CarBi and priority attention is being devoted to resolve this problem by WWF Laos and CarBi.

The Draft Xe Sap NPA law enforcement strategy was completed and translated into Laotian. A further check between the Laotian and English versions of the document is required to ensure congruency prior to the scheduled counterpart review meeting in January '15.

Installation of the final two small solar power systems for the Kouboy and Doub villages ranger stations was completed. One set of sleeping equipment and cooking pots / pans was supplied to all four outposts. Xe Sap NPA staff organised local people from each village to protect the contents and equipment of each ranger station.

Major developments towards improving the effectiveness of PA management were achieved:

- The NPA zonation maps were finally delivered to Laos CarBi staff by the consultant after a 3.5 month delay;
- Ground truthing of the NPA external boundary was conducted by MONRE and it was certified. However, additional boundary markers were requested to be installed at some key locations close to some villages in both provinces;
- Significant advances were achieved for the village level activities component of the Xe Sap NPA awareness raising campaign. This included completion of: 1) The detailed day long awareness raising workshop agenda; 2) the final version of the draft awareness raising materials summarised into a booklet; 3) Implementation guidelines for each District Implementation Team; and 4) a foldable A4 brochure on Xe Sap NPA prepared in Laotian.
- The final draft of the Management Plan was checked for congruency between the English and Laotian documents and the Draft Implementation Schedule and Budget were prepared prior to the final review workshop scheduled for mid-January '15.

The camera trapping component of the high impact Saola monitoring program within north eastern (Kalo area) Xe Sap NPA, entered its final phase after batteries and memory cards were replaced in September'14 for 30 of the original 40 camera traps installed (two cameras were stolen and a further eight were inoperable). All data was entered into both the Microsoft Access and Excel databases. The trip scheduled to remove all the cameras from the forest at the end of December '14 was postponed until the end of January '14 so that an extra month of data could be collected to compensate for the unavailable 10 cameras.

Village Focus International (VFI) made some significant headway with CarBi's Community Conservation activities during this reporting period:

- The baseline socio-economic data comparison assessment was completed for all 10 CarBi target villages – calculation of the economic improvements generated from household participation in the livelihoods diversification activities will now begin to provide a response to IR 2.13
- Data from the target village livelihoods diversification monitoring system was collated and considerable progress was made to prepare the final livelihoods diversification report which is scheduled for completion by early January '15.
- Five new buffer zone villages i.e. Pro and Oung (Kaluem), Adone and Tahuak (Taoy) and Atouk (Samouy) were selected for participation in additional livelihoods diversification activities funded by SIDA. Meetings were held in each of the five villages to introduce the project to the community and reach agreement on an implementation partnership with them. A Participatory Rural Appraisal (PRA) field mission was completed at all five villages during December '14, and completed PRA reports are expected in FY15Q3.

Implementation of the incentive implementation plans for each of the three target Biodiversity Conservation Agreement (BCA) villages commenced with significant energy expended by VFI, and positive impacts are already being made through the following initiatives:

- a) Rice bank (Aho and Arok villages);
- b) Irrigation system repair (Doup / Portang villages);
- c) Hill gravity water system (Aho and Arok Villages);
- d) Dry season crop cultivation (Doup village);
- e) Organic Vegetable gardening (Aho, Arok and Doup villages);
- f) Fish aquaculture (Aho village);
- g) Village patrol units (Aho, Arok and Doup villages); and
- h) Sustainable harvesting of Wild Bees (Arok Village).

## **Intermediate result 2.1**

*By end 2012 biodiversity surveys of three priority areas complete and populations of bird, mammal, reptile, amphibian and plant species of conservation value in Xe Sap NPA identified.*

### **Progress**

All outputs for the biodiversity activities were completed in FY13 Semester 2 and referenced in the FY13 January – June '13 Technical Progress Report. The baseline data collected through these surveys will be complemented through the ongoing camera trapping, as well as high impact Saola monitoring strategy (please refer to IR 2.8).

## **Intermediate result 2.2**

*By 7 months after project start: MIST is established and fully operational.*

### **Progress**

SMART reports were prepared each month of the semester for ranger patrols operating in north eastern Xe Sap NPA of Sekong province, and only for July and August '14 in Saravanh. No SMART reports were generated for Saravanh province from September until the end of December '14 due to the cessation of ranger patrol activities once the CarBi budget allocation was exhausted.

The quality of monthly SMART reports improved noticeably from October '14 after the SMART Officer participated in training courses organised by CarBi VPA staff in Hue City, Vietnam during September '14 (please refer to details provided in IRs 1.4 and 2.16 in this report).

Measures were also implemented from the internal assessment conducted during June '14 to improve the quality of data entered into RBDC sheets by patrol team leaders and the use of GPS hardware. To address this significant issue, a training course was organised for 20 participants including patrol team leaders, patrol team members and district and provincial counterpart staff from funds supplied by the IUCN SOS project. The training course held at the Doub village ranger station in Taoy district between 20 and 22 November '14 was mostly experientially based and focused on the following topics:

- Patrol management (patrol work planning, data collection (RBDC sheets));
- GIS usage;
- Introduction to SMART;
- Crime scene investigation; and
- Conducted a review of law enforcement activities by PA and SOS patrol teams.

It is hoped that through this intensive and hands on training, there will be a significant improvement in both the accuracy and quality of data entered into RBDC sheets during each patrol, which in turn will lead to more accurate monthly SMART reports.

### **Challenges and solutions**

No initiative has been taken as yet to pursue the transition towards the preparation of monthly SMART reports by the government counterparts. A detailed plan will need to be prepared in conjunction with both the PONRE counterpart offices to capacitate and technically support them to take on this responsibility. This is an important task aimed at ensuring sustainability after project end.

### **Intermediate result 2.3**

*By 18 months after project start: an incentive system for patrol staff payments has been devised and is being implemented.*

#### **Progress**

As indicated during the July to December'12 Technical Progress Report, CarBi is obliged to operate within the WWF Greater Mekong Human Resources Policy regarding performance management, and this system is being applied to incentivize excellence for patrol staff in the CarBi domain as well. Therefore, no further actions will be implemented with this Intermediate Result other than applying the above mentioned Human Resources Policy.

### **Intermediate result 2.4**

*By 12 months after project start: two ranger outposts have been constructed and equipped, and are operational a minimum of 20 days per month by trained and equipped field staff.*

#### **Progress**

As mentioned previously during the July – December '13 reporting period, the construction of two ranger outposts, one each in Salavan (Kouboy village) and Sekong (Pro village), were completed. Since then, equipment to operationalize both ranger stations was installed.

### **Intermediate result 2.5**

*By 18 months after project start: four ranger outposts have been constructed and equipped, three of which are operational a minimum of 20 days per month by trained and equipped field staff.*

## **Progress**

Installation of the final two small solar power systems for the two ranger stations (Kouboy and Doub villages) in Saravanh province was completed. One set of sleeping equipment and cooking pots / pans was supplied to all four outposts. Due to security concerns generated by vandalism to the Doub village ranger station during May '14, staff from the Xe Sap NPA organised local people from each village to reside at the location (the agreement was to rotate three people / station) whilst patrol teams are not present to protect the contents and equipment.

## **Intermediate result 2.6**

*By 7 months after project start: Co-operation agreements between key law enforcement agencies within Laos have been signed and activities have begun.*

## **Progress**

This was successfully concluded during the January to June '13 semester, and reported accordingly.

## **Intermediate result 2.7**

*By 12 months after project start: district level trans-boundary (Laos / Vietnam) co-operation agreements have been signed, including a budget and work plan, and activities have begun.*

## **Progress**

Please also refer to intermediate Result 4.2 for additional information on progress with this Intermediate Result.

## **Challenges and solutions**

Please refer to Intermediate Result 4.2 for a detailed reflection on Challenges and Solutions in this regard.

## **Intermediate result 2.8**

(Replacing old 2.8 and 2.9 as per CarBi's Inception Report)

*A) By 30 months after project start (end 2013) monitoring baselines have been established for a minimum of two priority species/groups, including *Nomascus gibbon*, inside priority areas of Xe Sap NPA.*

## Progress

This Intermediate Result was concluded in May '14. Please refer to the detailed account of the final results provided in the January – June 2014 Technical Progress Report.

*B) By 42 months after project start (end 2014), extensive Saola specific surveys within eastern Xe Sap NPA, using; camera-trapping, genetic analysis of dung and haemophagous leeches, have been completed to establish Saola status*

## Progress

The camera trapping component of the high impact Saola monitoring program within north eastern (Kalo area) Xe Sap NPA, entered its final phase during the semester. From 5 – 21 September'14 a battery / memory card change mission was organised for the 40 camera traps installed during the April and May/June '14 field trips. During the course of this trip, two cameras were found to be stolen and a further eight were discovered to be inoperable (and removed from the forest). Data retrieved from the May / June '14 camera traps (September '14) was entered into both the Microsoft Access and Excel databases during November '14.

The trip scheduled to be conducted at the end of December '14 was postponed until the end of January '14 based on advice from the CarBi Wildlife Biology Technical Advisor so that an extra month of data could be collected from the 30 remaining camera traps as a way to compensate for the 10 that were lost during the September field trip to ensure a sufficient sample size.

The eight inoperable camera traps removed from the forest were sent to Hue City in Vietnam for repairs. Once repaired, these will be sent back to Laos for use during the western Xe Sap baseline camera trap comparison program scheduled to commence in March '15.

## Challenges and solutions

A small problem was encountered when entering the September '14 data from two camera traps into the Microsoft Access database. The TAPAM will work with the PAM during his next technical backstopping mission to Laos in January '15 to resolve this technical problem.

*C) By project end, the status of a minimum of two priority species/groups, including *Nomascus gibbon*, inside the priority areas of Xe Sap NPA is improved in comparison with 2013 baselines*



## **Progress**

Small progress was made during the semester due to the decision to postpone retrieval of the eastern Xe sap NPA camera traps until the end of January '15. However, a number of planning and logistics activities were completed including:

- a) Revision of the Consultant TOR to manage the field aspects of the camera trap program; and
- b) Organisation of a preliminary meeting with the consultant to discuss the program and introduce the revised camera trapping protocol.

## **Intermediate result 2.10**

*By 3 months after project start: 10 key target villages have been selected for interventions.*

## **Progress**

Information from the target village livelihoods diversification monitoring system was collated during the semester. A template format for the final report was prepared by the CarBi team and passed onto VFI for action who in turn commenced preparation of the final livelihoods diversification report. The Draft report is scheduled for completion in early January '15 after which CarBi will provide detailed comments.

Funding from the SIDA project facilitated the process to identify and define five new target villages for livelihoods diversification activities within the Xe Sap NPA buffer zone. This new funding obtained by CarBi adds significant value to the activities implemented at the 10 CarBi KFW funded villages.

Workshops were organised by VFI during early October '14 with government officials from Taoy and Samouy (Saravanh province) and Kaluem (Sekong province) districts to select the five new villages. The five selected villages are Pro and Oung (Kaluem), Adone and Tahuak (Taoy) and Atouk (Samouy).

Meetings were held in each of the five villages during November '14 to introduce the project to the community and reach agreement on an implementation partnership with them. A VFI team, accompanied by district and provincial technical staff, conducted Participatory Rural Appraisal (PRA) field activities in each village between 15 – 30 December '14. Preparation of the five PRA reports is expected to be completed during FY15Q3.

## Intermediate result 2.11 and 2.12

2.11. *By 7 months after project start: one target village (selected as a model) has signed a biodiversity agreement, and has begun with implementation.*

2.12. *By 12 months after project start: three target village have signed biodiversity agreements, and have begun with implementation*

### Progress

With the conclusion and endorsement of the three target village Biodiversity Conservation Agreements (BCAs) at the end of June '14, actions were taken to implement the incentive implementation plans for each village by VFI. The included:

#### **a) Rice bank (Aho and Arok villages):**

- A baseline survey for the rice bank at Arok village between 4-11 August '14 and Aho village 15 – 18 November '14 to determine current rice consumption patterns for comparative purposes and design the rice bank mechanism;
- Consultation meetings with both villages were held during November '14 to introduce activity and obtain community agreement;
- Two rice bank management committees were formed (five persons / village with a minimum of two women / village) to manage all issues and run activities;
- Rules for the rice bank operational mechanism were drawn up at each village and agreed to by the village community; and
- A detailed work plan was prepared for both villages and is now ready for implementation.

#### **b) Irrigation system repair (Doub / Portang villages):**

- The Provincial irrigation unit conducted a site survey (mid October '14) and prepared a budget and work plan;
- Repair work conducted during November and December'14 and completed by local builders;
- An inspection was completed by district agriculture and forestry office on 6<sup>th</sup> December'14 and met the required quality assurance standards; and
- The irrigation system is now operational and services a minimum of 30ha of arable land year round in both Doub and **ALSO** neighbouring Portang village. Paddy cultivation can now be conducted twice / annum, as can dry season plantations and fish aquaculture.

#### **c) Hill gravity water system (Aho and Arok Villages):**

- Field survey of the Arok hill watering system was conducted between 4 - 11 August '14 and identified both the current source and a new source that can be

channelled to supply year round water to the village. A work plan was also developed;

- Field survey conducted at Aho village between 3 - 5 November '14 where a water source was identified and a work plan created;
- Construction of both hill gravity water systems was completed in December ' 14 and now 23 and 75 households at Arok and Aho villages respectively have regular access to fresh water.

**d) Dry season crop cultivation (Doups village):**

- Six families were selected to participate in learning how to grow and maintain watermelons, cucumbers and Yard long beans to sell along the road-side;
- Seasonal work plans were prepared with the households;
- Equipment provided included hoes, shovels, watering cans;
- 500 seeds were provided for each species to each household;
- Technical training provided on soil preparation and fertility, seed propagation and tending;
- All watermelon seeds have been propagated and cucumber and Yard Long bean seeds are to be sown during January '15.

**e) Organic Vegetable gardening (Aho, Arok and Doups villages):**

- 73 families in Doups, 75 families in Aho and 27 families in Arok participated in the activity;
- All gardens fenced off by families as an in-kind contribution;
- Seed species of choice provided to each household and planted;
- Technical training provided on how to prepare land, propagate different types of vegetable seeds, fertiliser application and tending;
- Vegetable gardens are active and some vegetables have been harvested (details not available yet).

**f) Fish aquaculture (Aho village):**

- Early November '14 village meeting held to introduce and discuss the activity;
- 43 families participated and 6,500 fingerlings provided to the village;
- 2 hoes, 2 shovels, feeding equipment, nails for feeding decks, electricity wire and bulbs (to attract insects) were provided to each family;
- Technical training provided mid December '14 on raising fish, pond preparation, food preparation and nutrition and water quality maintenance.

**g) Village patrol units (Aho, Arok and Doups villages):**

- Community meeting organised in each of the three villages to discuss activities and select village patrol units (5 people per village): Aho - 11 - 13 November, Arok - 1 - 5 December and Doup 23 - 24 December '14.
- Plan prepared for training scheduled for FY15 Q3.

#### **h) Sustainable harvesting of Wild Bees (Arok Village):**

- Training course conducted on sustainable harvesting of wild bees in Arok village from 4 - 11 August '14.
- 8 village people participated in the training.

#### **Challenges and solutions**

During FY15Q1 a major challenge arose in transferring the required funds to implement the BCA Incentive activities to VFI. This was caused by CarBi's review of the LPA budget and prioritisation of activities to ascertain whether internal savings could fund the planned activities; and delays by VFI in preparing budgets on how the US\$36,000 was going to be spent at each village (US\$12,000/village). These problems were overcome through close inter organisation liaison and problem solving, and funds, which could fortunately be sourced through CarBi's SIDA funding, were transferred to VFI in October '14.

#### **Intermediate result 2.13**

*By end of the project, monitoring of the implementation of biodiversity agreements in 10 key villages within the Xe Sap Protected Area show improvement of livelihoods by a minimum of 15 % over the course of the project.*

#### **Progress**

Between the 15 – 26 December '14, staff from VFI conducted the baseline socio-economic data comparison assessment at all 10 CarBi target villages. This is a significant milestone as the collected data may now be compared to the baseline data and commence the process to calculate the economic improvements generated from household participation in the livelihoods diversification activities. VFI will analyse the data and prepare the final report scheduled for completion by the end of April '15.

#### **Intermediate result 2.14**

*By end of the project, the effectiveness of Protected Area management has increased to 70% of total possible scores (Source of verification: WWF-World Bank Management Effectiveness Tracking Tool). Base-line for Sept 2010: Scored 17.*

## Progress

During the January to June 2014 Technical Progress Report we reported that the GIS consultant completed and submitted 90% of the required draft zonation maps to CarBi, detailed feedback was provided in return, and a due date was agreed to with the consultant to make the revisions. A meeting was held at the beginning of August '14 with the consultant to conduct a final review of the maps. Quite a few modifications were requested and another due date for completion of revisions was requested by the end of August '14. The consultant disappeared for 3.5 months without word (refer to Challenges and Solutions below for details) and we finally received delivery of the outputs late in December '14 after tracking him down. These outputs will now need to be checked by CarBi staff to determine whether any further work is required. If so, this will be done in-house rather than work with the consultant again.

After the installation of the final seven permanent boundary markers in Sekong province in early June '14, MONRE staff from Vientiane conducted a ground-truthing boundary certification mission after the IMC meeting in September '14. They agreed with the boundary demarcation, however, requested additional boundary markers be installed at some key locations close to some villages in both provinces.

Significant advances were made during the semester with the village level activities component of the Xe Sap NPA awareness raising campaign (ARC). These included:

- 1) Three workshops with members of the three District Implementation Teams (DITs) were conducted to provide orientation, finalise the content and develop the materials to be used during village level activities;
- 2) Completion of the detailed day long awareness raising workshop agenda to be used at all villages;
- 3) Final version of the draft awareness raising materials summarised into a booklet ready for printing by professional printers;
- 4) Preparation of implementation guidelines for each DIT; and
- 5) A foldable A4 brochure on Xe Sap NPA was prepared in Laotian for distribution.

A small workshop was held between CarBi staff, counterparts and the consultant at the end of December '14 to review the materials. A few revisions have been requested, particularly to the maps. Unfortunately the consultant's contract expired at the end of December '14 and these adjustments have not been made.

## Challenges and solutions

From mid-July until early November '14, CarBi was unable to contact the consultant who did not answer either of his two phone numbers or any of the numerous emails

that were sent to him. This caused a delay in completing the activity across quarter 2. Finally we managed to contact him and we are now in possession of all the requested maps and shape-files defined in the original consultancy TOR, and will evaluate the outputs to confirm whether they are completed.

WWF was unable to provide further funds to assist the Sekong and Saravanh PONRE to install the requested additional boundary markers as the budget had well and truly been over expended. Additional funds will have to be sought from other sources to complete this by the government.

The final revision of key content from the awareness raising materials has not been completed due to the expiration of the consultant's contract at the end of December '14. At present there are insufficient funds: to a) re-employ the consultant to make the required adjustments; b) print three sets of the materials for use by the DITs when implementing the village level activities; and c) Implement the day long village level awareness raising workshops. Additional funds will need to be obtained from savings found within the Laos CarBi budget (from other components), from external funding sources or from the government to continue these activities.

### **Intermediate result 2.15**

*By end of the project, infractions (violation of law, agreements and rules/illegal activities) into Xe Sap protected area have been reduced by at least 30 % (e.g. based on trends in snare traps detected, confiscation of timber and wildlife, logging roads).*

#### **Progress**

CarBi funds were not available for patrol activities to be conducted in Saravanh province after August '14. However, funds available from the IUCN SOS Project, managed under the CarBi umbrella, were used to continue ranger patrols in north eastern Xe Sap NPA throughout the semester.

#### ***Xe Sap NPA results:***

- 8 patrols totalling 443 patrol days (average 5.5 days per patrol) were conducted
- 52 illegal camps destroyed
- 417 illegal animal traps (snares) removed
- 1.770 m<sup>2</sup> of agricultural encroachment into the NPA was recorded in Saravanh province.
- 3 Vietnamese people were verbally warned for poaching and 19 local people were encountered in the forest.

An internal audit of patrol statistics was conducted covering the timeframe between January 2012 and September 2014, and some statistical discrepancies were discovered. This report verified the following updated statistics for Xe Sap NPA until

the end of September '14: 67 patrols and 3,538 patrol days conducted, 303 illegal camps destroyed and 5,349 snares removed. With the addition of the FY15Q2 data, this brings a total of 5,669 snares and 318 illegal camps destroyed over 3,699 patrol days from 70 patrols since CarBi patrols commenced in Laos.

Advances were made during the semester to improve the field safety of CarBi staff, rangers and members of MATs through the signing of a MOU with the Kaluem District Hospital in July '14. With achievement of this outcome, there are now agreements in place with all three district hospitals (MOUs with Taoy and Samouy district hospitals were completed during FY14 Semester Two) where all three will provide emergency evacuation and other medical services (upon evacuation) when they are contacted by our field workers. Some progress has been made with the preparation of Emergency Evacuation Plans for each Xe Sap NPA district, with the identification of mobile phone coverage across the NPA needing to be defined as an essential component of the emergency evacuation procedure. Discussions are currently underway with the government counterparts on how this information may be gathered.

The MAT patrol initiative lead by the Timber Trade (TT) Component and supported by the PA Component, recorded disappointing progress during the semester. Only one patrol was conducted in Kaluem district between 24 – 30 November '14. From this patrol no results were submitted to CarBi yet (either to the TT or PA components).

The Draft Xe Sap NPA law enforcement strategy was completed in October '14 with completion of the Laotian language translation at the end of December '14. From previous experience gained after problems associated with the Management Plan translation, a check between the Laotian and English versions of the document is still necessary to ensure congruency. Completion of this check is scheduled by mid-January '15. A workshop has been scheduled to review the draft strategy document in January '15.

### **Challenges and solutions**

Of concern to CarBi was that only one MAT patrol was conducted across both provinces during the semester. Action is being taken by the TT Component to resolve this matter, so please refer to IR 4.2 for a detailed explanation of the problems and the proposed solutions to address them.

## **Intermediate result 2.16**

*On an annual basis as of project start, the effectiveness of the patrolling and Management Information System (MIST) has been externally verified and validated.*

### **Progress**

Implementation of recommendations from the external SMART assessment continued throughout the semester with a variety of training activities implemented to achieve them. These included:

- a) Upgrading of the SMART software to Version 3.0.1 with SMART Officers from each of the CarBi Project VPAs and the LPA SMART Officer over two days during September '14; and
- b) A two day refresher course for all SMART Officers (including the Laos SMART Officer), also in September '14, which resulted in a review of the current reports generated and subsequent revision of the end of month reports which are now much more functional, results are easier to interpret and they are more accurate in the data presented.

During October '14 the annual Minimum Enforcement Standards Assessment following the ASEAN standards was conducted by the TAPAM with the PAM for Xe Sap NPA. The recorded score of 34.8% remained par with the previous year's score. Although slightly disappointing because CarBi always strives to build upon the previous year's results and improve, this result comes as no surprise as acquisition of law enforcement experience takes many years of consistent practice to achieve with adequate financial and human resourcing, both of which the provincial counterparts still lack at the moment. This is work in practice requiring significant mentoring, capacity building and support investment for many years to come.

## **Intermediate result 2.17**

*By 18 months after project start: A management plan for the Xe Sap NPA has been developed and appraised.*

### **Progress**

The revised Parts 1 – 3 of the Management plan were translated from English into Laotian and both versions were checked for congruency. Both the Implementation Schedule and budget were revised by TAPAM, ready for the final counterpart consultation workshop scheduled for January '15.



## Challenges and solutions

The level of technical complexity from an English language vocabulary perspective, remained a challenge for the translator resulting in further delays to prepare the Laotian language version of the final draft. The CarBi PAM again spent a significant amount of time checking accuracy between the English and Laotian versions. Preparation of the Draft Implementation Schedule and budget for the final counterpart consultation workshop is also a significant milestone, and we are confident that the document is now in the final stages of completion before it is submitted to the provincial authorities in both Sekong and Saravanh provinces for official endorsement.

## Specific result 3 – Forest restoration component

Natural forests are restored and fragmentation reduced in the A Luoi corridor in ThuaThien Hue Province and the Tay Giang corridor in Quang Nam province

### Summary

The primary focus in this reporting period was to ensure that all the planned restoration activities are intensified and well monitored at the project sites in both provinces Quangnam and Thuathien Hue, despite the challenges experienced.

In Quangnam province, the planting and regeneration activities were continued in the planned areas for the 2013 planting season, and implemented in the new areas planned for 2014. Thus far, 55.4 ha of bare land have been planted with indigenous species. 72 savings accounts for farmers who conducted afforestation work, have been opened, and VND691,100,000 (equal to 32 910USD) have been transferred to the banks. All households, who completed planting work according to specification, were allowed to withdraw the first payment (25% of total amount of their saving accounts) from the bank. Forest regeneration activities towards the first stage (cleaning boundary, marking and taking care of target regeneration trees) have been implemented in 176.5ha in Quangnam. Thus far, 71 savings accounts for farmers who conducted regeneration work, have been opened, and VND884,200,000 (equal to 42 105USD) have been transferred to the banks. 41 households, who completed the first stage work according to specification, were allowed to withdraw the first payment from the bank.

In Thuathien Hue province, the plantation and regeneration planning for 297 ha in two communes have been approved by DPC. The land preparation for planting (vegetation treatment and holes digging) is being implemented in 116.56 ha by 63 households. Training on planting techniques have also been provided to farmers. We have signed a contract with a supplier to purchase 162 700 seedlings for planting in these areas, and a bio-fertilizer supplier has also been sourced. The contracts with the banks in Nam Dong and A Luoi have finally been signed in the end of July 2014. The regeneration activities have also been activated in 178.27ha in

Thuathien Hue province since August 2014, and training on regeneration techniques have been provided to farmers. The first activities (boundary clearance, regenerated trees marking) have been completed for 104.86ha, and 524,300,000VND (equal to 24 960USD) has been transferred to the saving accounts of 52 households.

For the remaining four communes, site mapping has been completed in additional areas, spanning 210 ha in three communes in Thuathien Hue province, and also being conducted in Prao commune, Quangnam province covering around 70ha. The project has also conducted regeneration techniques training for relevant households, where recent land measurement for regeneration was successfully concluded.

Farmers are conducting tending activities for the plantation planted in the 2013 planting season in Quangnam province, with more than 9 700 seedlings provided to them for supplementary planting, and 8 890kg of fertilizer applied to the planted trees.

3 059ha of forest areas are being protected by 24 groups of farmers in two provinces under the Forest Protection Contracts, were inspected for quality assurance based on FY15Q1 activities, and payments have been settled in October'14. 1 600ha have also been inspected in Quangnam province and the payments to households have been settled for FY15Q2. The inspections for FY15Q2 are also being implemented in 1 459ha in Thuathien- Hue. This activity is carried out regularly in line with the contract conditions.

CarBi continued to support government counterparts in Quang Nam to scale up PFES activities in 27 832 ha of natural forest. Apart from the activities of signboard establishment and boundary demarcation, the training on forest management and protection was also provided to groups of households who protect forest under the PFES scheme. A total of 66 training sessions have been organized, and 2 558 people received training. The PFES support to Quang Nam provinces has now been completed. Local people have also been receiving payment from the provincial PFES fund for their contribution to forest protection. In 2014, households in the A Vuong and Song Con hydropower catchments received 274 000 VND per ha for their work. Each household on average protect and manage from 10 to 15 ha, so they received between 3 and 5 million VND (equal to 143USD to 238USD) per year through the PFES program, which will allow them to purchase sufficient rice for the family for more or less 6 months.

The CFM plans for 2 750 ha in ten villages belonging to two communes in Thuathien Hue, were completed and approved by DPC of Nam Dong. The contract with Nam Dong FPU and Agribank for opening and managing the saving accounts for communities has been signed, and 3,299,280,000VND (equal to 157 100USD) has been transferred to saving accounts of ten communities for implementing CFM plans, including forest protection.

In line with CarBi's approach towards impact monitoring, a short-term consultant was sourced to assess the impact of project activities on the income improvement of local people. Baseline data on income of project households have been collected and

analyzed, and the report has been completed. It was concluded that the income of the sampled households increased by around 11.5% on average per year in the CarBi Restoration areas (average for Thuathien Hue and Quang Nam provinces). CarBi's restoration activities enhanced local households' income by around 17% in Quangnam due to an earlier start, whilst in Thuathien Hue, the household income only increased by around 8.3%. It is expected that this income levels will increase during the next two years when more local people will become beneficiaries of income sources through CarBi's investment.

The results of VLUP, site mapping, land allocation and afforestation & regeneration design in the project communes under CarBi, indicated that the available areas for forest restoration are not compatible with the originally planned areas, mainly due to strong economic competition from commercial non-indigenous tree plantations, including rubber and acacia. Due to a much quicker economic benefit compared to CarBi's indigenous afforestation approach, farmers are very active in encroaching potential restoration land for the establishment of acacia and rubber plantations. The available qualifying land for CarBi's restoration Component is thus not meeting the restoration targets, especially for natural regeneration as set in the approved Intermediate Results. This reality is exacerbated by the beneficiary communities (mostly Ko-tu ethnic minority people) also not being accustomed to our project payment system with saving accounts, only being able to withdraw money five times in 4.5 years. The Ko-tu communities in Central Vietnam also have a different culture and work ethic, which is primarily focused on subsistence livelihoods, prioritising work which can deliver a quick return on their time/labor investment.

After all the extensive efforts and intervention strategies/adaptive management conducted since CarBi's Restoration activities commenced (as also reported in previous TPRs), it can now be concluded that all reasonable steps have been taken by all relevant parties to motivate communities to actively participate according to specification, and to acquire additional land in line with the set Intermediate Result targets. This matter was again discussed in detail at the recent round of PMU meetings in both provinces, and agreement was reached, also in consultation with relevant government authorities and relevant local communities, to propose some amendments to the approved target areas (please refer to *Annex 5 for a detailed proposal in this regard*).

CarBi also conducted a Forest Fragmentation Index assessment using 30-meter Landsat derived land cover information for the years 2010 and 2014, and the net forest gain/loss as well as the changes in six forest types (see below), were calculated. Results show that with the exception of the restoration sites, the Total Forest Proportion (TFP) has hardly changed over time. Changes over time are more evident in the Forest Continuity (FC) Index. The FC value for Saola Nature Reserve slightly increased, but in all three remaining reference sites, a decrease in forest continuity was detected which shows that deforestation and forest fragmentation are still omnipresent in the Central Annamites outside of protected areas.

### Intermediate result 3.1

*At least 450 ha corridor area is reforested by individuals, 3400 ha of natural regeneration (also individuals) and 3000 ha of natural forest are under a formal community forest management system by end of the project.*

#### Progress

In Quangnam province, the planting and regeneration work were continued in the areas planned for the 2013 planting season, but could not be completed. It is currently also being implemented in the new areas planned for 2014. Thus far, 55.4 ha of bare land have been planted with indigenous species. 72 savings accounts, have been opened for farmers who conducted afforestation work, and VND691,100,000 (equal to 32 910USD) have been transferred to the banks. The plantation has been inspected by local authorities and re-checked/accepted by WWF staff in line with our quality assurance strategy. All these households, who completed planting work according to specification, were allowed to withdraw the first payment (25% of total amount of their saving accounts) from the bank.

Forest regeneration activities for the first stage (cleaning boundary, marking and taking care target regeneration trees) have been implemented in 176.5ha in Quangnam. The results have been inspected by local authorities and re-checked/accepted by WWF staff. Thus far, 71 savings accounts for farmers who conducted regeneration work, have been opened, and VND884, 200,000 (equal to 42 105USD) have been transferred to the banks. 41 households, who completed the first stage work according to specification, were allowed to withdraw the first payment (25% of total amount of their saving accounts) from the bank.

In Thuathien Hue province, the plantation and regeneration planning for 297 ha in two communes have been approved by DPC. The land preparation for planting (vegetation treatment and holes digging) is being implemented in 116.56 ha by 63 households. Training on planting techniques has been provided to farmers. We have also signed a contract with a supplier to purchase 162 700 seedlings for planting in these areas. The bio-fertilizer supplier has also been sourced. The contracts with banks in Nam Dong and A Luoi have finally been signed at the end of July 2014 after several meetings/negotiations with banks and relevant authorities.

The regeneration activities have also been activated in 178.27ha in Thuathien Hue province since August 2014. Training on regeneration techniques has also been provided to farmers. The first measures (boundary clearance, regenerated trees marking) have been completed for 104.86ha and were acceptance by local authorities and WWF staff after applying the normal quality assurance procedures. 524,300,000VND (equal to 24 960USD) has been transferred to saving account of 52 households.

Please see the summarized table of saving accounts opened until end of December 2014 below.

	Category	Number of saving accounts opened	Number of households/ communities	Amount of money transferred (VND)	Amount of money allowed to be withdrawn (VND)
1	Afforestation	72	64	691,100,000	164,255,000
2	Regeneration	123	110	884,200,000	157,025,000
3	Community forest management	10	10	3,299,280,000	0
	<b>Total</b>	<b>205</b>	<b>184</b>	<b>4,874,580,000</b>	<b>321,280,000</b>

For the remaining four communes, site mapping has been completed spanning an additional area of 210 ha in three communes in Thuathien Hue province (Huong Nguyen, Huong Phong and A Roang), and being implemented in Prao commune, Quangnam province covering around 70ha. The project has conducted regeneration techniques training for relevant households in three communes in Thuathien Hue, where recent land measurement for regeneration was completed. They are still awaiting Land Use Certificates (Red book) as a last condition to carry out activities in the field, which should be issued by the end of February 2015.

Farmers are implementing the tending work for the plantation planted in the 2013 planting season, and more than 9 700 seedlings were provided to farmers for supplementary planting, and 8 890kg of fertilizer were applied to the planted trees.

### Challenges and solutions

Restoration progress in the Thuong Nhat commune, Thuathien Hue province is very slow due to farmers' lack of capacity regarding regeneration techniques, despite training which have been conducted. Some of them (who did not participate in the technical training but their wives or husbands did instead) perceived it to be unreasonable to invest much labor and receive no advance payment initially. After discussions with the relevant local authority, the project decided to conduct village meetings and refresher training to clarify regeneration households' benefits, responsibilities, workload, payment, etc., after which the farmers agreed to continue implementation according to specification.

In Quangnam, the progress with planting and regeneration is equally slow. Farmers are not much interested in project activities for the same reasons as reported in previous reports, despite many attempts from our partners to motivate them to get involved, but quicker cash still remains the main attraction. The implementation challenges have been reported regularly to PMU members through the weekly plan and report we instituted informing them of support required. Our respective Catch Up Plans have been discussed and commented on by the PMU members to ensure that there is clear ownership of steps to be taken to address delays.

- PMU Quangnam, CarBi WWF staff in cooperation with related counterparts, have made significant efforts in different ways in order to speed up the progress. Several meetings have been conducted in pursuance of adaptive management: between WWF staff and PMU members; between PMU member, WWF staff, district PC and related departments at district and commune level; WWF staff, implementing units (District Management board of plantation 661 project) and farmers. No significant success has been achieved.
- We also assisted to speed up the process of payment to the beneficiaries for the work done: We agreed with the Quangnam PMU to make inspection/re-check and allow the farmer to withdraw money from account after he/she completed the task at the site satisfactorily; Inspections are conducted even if only one farmer in the village/commune complete her/his work.
- We have also conducted a study tour for village headmen, well-performing farmers and commune staff in seven communes in Quangnam to visit afforestation and regeneration models of KfW6 in Quangnam province to inspire them into action. The lesson learnt on restoration procedure and the financial system of KfW6 project farmers, were also shared with them. They also saw the good models of indigenous species plantation and regeneration.

The CarBi planting ceremony for the planting season 2014 in Quang Nam province was conducted on 3<sup>rd</sup> October 2014 in Talu commune. During the ceremony, the farmers who had achieved high-performance and participated in the study tour to KfW6 restoration models shared the experience and lesson learnt to other new project farmers, in another effort to motivate local people to get involved.

After all the extensive efforts and intervention strategies/adaptive management conducted since CarBi's Restoration activities commenced (as also reported in previous TPRs), it can now be concluded that all reasonable steps have been taken by all relevant parties to motivate communities to actively participate according to specification, and to acquire additional land in line with the set Intermediate Result targets. This matter was again discussed in detail at the recent round of PMU meetings in both provinces, and agreement was reached, also in consultation with relevant government authorities and relevant local communities, to propose some amendments to the approved target areas. This matter was also discussed with KfW during their recent CarBi Review Mission in November'14. Please refer to Annex 5 in this regard.

### **Intermediate result 3.2**

*Additionally 3000 ha are under performance based protection contracts in the buffer zones in both provinces by 12 months after project start.*

#### **Progress**

The forest areas protected under forest protection contracts for 3 059ha with 24 groups of farmers in two provinces are being inspected for FY15Q1, and the payments have been settled in October 2014. 1 600ha in Quangnam province have

also been inspected and the payments to households have been settled for FY15Q2. The inspections for FY15Q2 are also being implemented in 1 459ha in Thuathien-Hue. This activity is carried out regularly in line with the contract conditions.

CarBi continued to support government counterparts in Quang Nam scaling up PFES activities. Apart from the activities of signboard establishment and boundary demarcation, training on forest management and protection was also provided to local communities, groups of households, and households who signed contracts with Forest Management Boards for protecting and managing forest under the PFES scheme. A total of 66 training sections have been organized, and 2558 people received training. The contents of these training courses are very diverse and useful to suit the needs of local communities regarding forest protection, forest management and benefit sharing mechanism. This specifically includes the introduction of the decree 99 on payment for forest environmental services, the role of local communities and groups of household in this PFES's implementation, and what benefits they can earn while engaging in this work. In addition, the training courses provide knowledge and skills on forest protection and management which local communities can implement to better protect the contracted forest, like patrolling, how to take notes while doing forest patrolling, etc.

The PFES support to Quang Nam provinces has now been completed. CarBi provided technical and financial support to three agencies including Sao La nature reserve, A Vuong Forest Management Board and Song Con Forest Management Board, with a total PFES implementation area of 27 832 ha of natural forest. Local communities have been paid under the PFES scheme for the management and protection of these areas. Local people have also been receiving payment from the provincial PFES fund for their contribution to forest protection and management. In 2014, households in the A Vuong and Song Con hydropower catchments received 274 000 VND per ha for their work. Each household on average protect and manage from 10 to 15 ha, so they got from 3 million to 5 million VND per year through the PFES program. This amount of money can buy enough rice for household consumption for on average of 6 months. The PFES program is not only a good model for local people to get actively involved in forest protection, but also to improve their livelihoods, which will reduce the pressure on unsustainable natural resource utilization.

The biodiversity monitoring methodology and plan for CarBi restoration areas have been developed and approved. From Dec'13, a consultant was employed to conduct a base line for biodiversity in the CarBi restoration area. Due to the continued search for additional restoration land and change request on the approved target areas discussed above, we have decided to delay this work to ensure that we can cover the total area once the final restoration footprint has been confirmed. Monitoring will then continue under a new consultancy agreement soon in the next quarter. The data collected thus far has been provisionally evaluated and meets CarBi's base line specifications.

The short-term consultant, assessing the impact of project activities on the income improvement of local people, has been recruited. Baseline data on income of project

households have been collected and analyzed, and the report has been completed. It was concluded that the income of the sampled households increased by around 11.5% on average per year in the CarBi Restoration areas (average for Thuathien Hue and Quang Nam provinces). CarBi's restoration activities enhanced local households' income by around 17% in Quangnam due to an earlier start, whilst in Thuathien Hue, the household income only increased by around 8.3%. It is expected that this income levels will increase during the next two years when more local people will become beneficiaries of income sources through CarBi's investment.

### Challenges and solutions

Local people and authorities strongly propose that CarBi should support NTFP development in the forest areas under CFM, protection contracts, and PFES in order to provide an additional sustainable utilization and livelihood opportunity. Rattan is suggested to be the species of choice for enrichment planting under the canopy of natural forest areas. This proposal considers the reality of strong competition from alternative land-use options with attractive short term financial benefits for beneficiary communities and strengthens the efforts towards an enhanced PFES value offering as well as providing an additional sustainable utilization and livelihood opportunity through the rattan enrichment plantings. WWF, in partnership with relevant government agencies, has a strong track record in this regard. Another positive outcome would be a stronger sense of ownership from relevant beneficiary communities and long term sustainable forest protection. This matter is also dealt with in the proposed Change Request (please refer to Annex 5 in this regard).

### Intermediate result 3.3

*By end of the project, the forest fragmentation index for the project areas with direct rehabilitation interventions has been reduced by 50 % (based on an analysis of the fragmentation and the monitoring of the forest carbon in those areas).*

### Progress

The forest fragmentation index presented here is based on the results of a forest fragmentation model, developed by Riitters et al.<sup>1</sup> (2000), in which forest pixels are classified as belonging to one of six types: interior forest, edge forest, perforated forest, undetermined forest, transitional forest, and patch forest. For this research, the forest fragmentation model was modified for use with 30-meter Landsat derived land cover information. The forest fragmentation index calculates a forest continuity value from the results of the forest fragmentation model. This value is used in conjunction with the total proportion of forest for a given area (excluding water) to

---

<sup>1</sup> Riitters, K., J. Wickham, R. O'Neill, B. Jones, and E. Smith. 2000. Global-scale patterns of forest fragmentation. *Conservation Ecology* 4(2):1-28.



produce an index of forest fragmentation. The state of forest fragmentation index is comprised of two parts. The first is the total forest proportion (TFP):

$$\text{TFP} = \text{total forest area} / \text{total non-water area.}$$

The second component of the index is a measure of forest continuity (FC) within the region. The FC value takes into account the weight of each fragmentation class<sup>2</sup> and is calculated via the equation:

$$\text{FC} = \text{weighted forest area} / \text{total forest area} * \text{area of largest interior forest patch} / \text{total forest area}$$

Sites to calculate the forest fragmentation index were identified in two areas where CarBi operates, namely: (i) restoration sites and (ii) Hue Saola Nature Reserve. The area of the restoration sites included land of the target villages where restoration activities are taking place, comprising a total area assessed of approx. 6,066 ha. Hue Saola Nature Reserve was assessed completely and covered an area of approx. 12,588 ha. Two forest corridors within the greater CarBi project domain: (iii) southern forest corridor (approx. 50,714 ha) and (iv) northern corridor (approx. 27,310 ha), but where no forest restoration takes place, were also selected as reference areas. Imagery for these areas were analyzed for the years 2010 and 2014, and the net forest gain/loss as well as the changes in the six forest types (see above), were calculated.

Results show that with the exception of the restoration sites, the TFP has hardly changed over time. The TFP index within the restoration reference sites changed from 0.818 (year 2010) to 0.798 (year 2014), and this change corresponds to a net total forest loss of 260 ha, which can possibly be explained through the preparation work for the forest restoration as well as active land clearing to make provision for acacia, rubber or cassava plantations (Fig. 1). Please note that for the time being, afforestation and natural regeneration in the target villages have only covered an area of approx. 1,000 ha, whereas the total restoration area assessed was more than 6,000 ha.

---

<sup>2</sup> Weighted Forest Area (WFA) = (1.0 \* inferior) + (0.8 \* (perforated + edge + undetermined) + (0.5 \* transitional) + (0.2 \* patch)

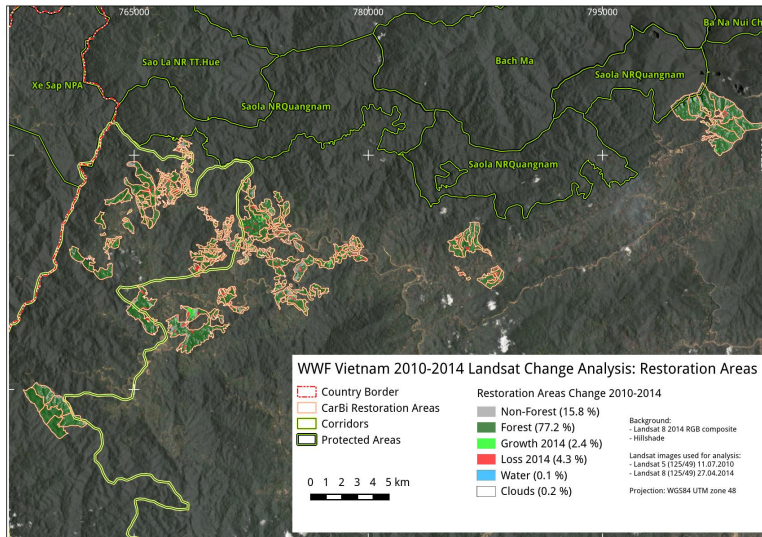


Figure 1: Forest cover change over time in the CarBi restoration areas.

Changes over time are more evident in the forest continuity (FC) index. The FC value for Saola Nature Reserve slightly increased from 0.717 to 0.719, which reflects a net forest gain of approx. 40 ha (Fig. 2), but in all three remaining reference sites, we detected a decrease in forest continuity which shows that deforestation and forest fragmentation are still omnipresent in the Central Annamites outside of protected areas. It is also evident that forest continuity within the so-called forest corridors appears to be higher (FC between 0.75 and 0.82 in 2014) than in Hue Saola Nature Reserve. However, this discrepancy is attributed to the growth of exotic plantation forest since the applied method does not differentiate between natural and plantation forest.

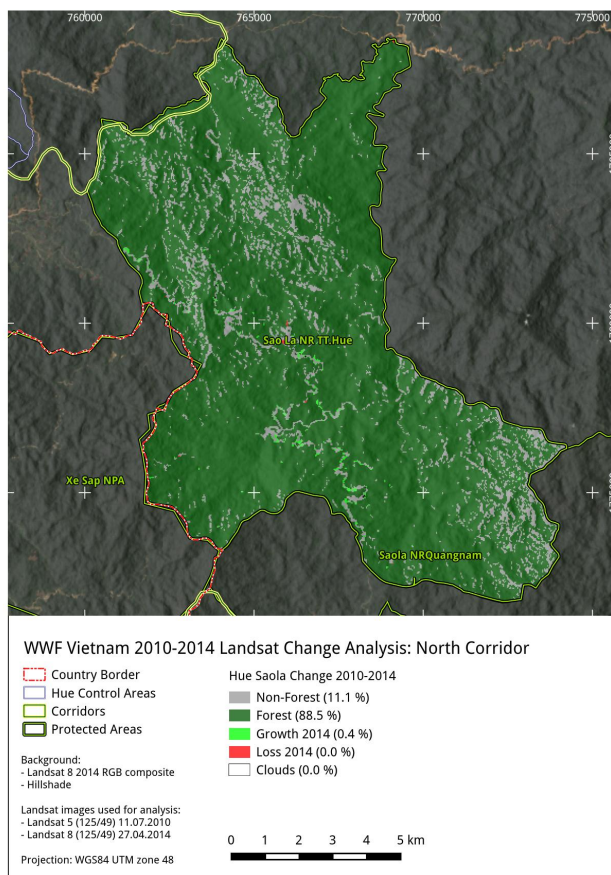


Figure 2: Forest cover change over time in the Hue Saola Nature Reserve.

The analysis gives a sound overview of the dynamics of forest cover loss and gains in the CarBi landscape. It also shows that forest continuity is stable in Hue Saola Nature Reserve since the onset of project activities, whereas we detected a trend towards deforestation and forest fragmentation outside of special use forests. Furthermore, restoration interventions at current intensities are hardly detectable at landscape level, since those efforts are over-shadowed by forest conversion.

### Challenges and solutions

The fact that we are still not able to finalise the restoration areas' exact boundaries due to the change request for the approved target areas as discussed above, creates a moving target in this regard. In order to report on the indicator / intermediate result 3.3 (see above), it is required to focus the analysis on those sites where actual restoration work does take place at local level, which will be conducted at project end.

### **Intermediate result 3.4**

*The participatory land use planning of the forest areas to be restored has been completed for the first areas by 18 months after project start, including the development of maps and the red-book allocation.*

#### **Progress**

In Thuathien Hue, 116.56 ha of forest land were allocated to 63 households for afforestation and another 178.27ha were allocated to 93 households for regeneration without enrichment planting activity.

VLUP has been completed in an additional areas of 484.72 ha in 3 communes in Thuathien Hue province (Huong Nguyen, Huong Phong and A Roang), of which 175.47 ha has been measured and allocated to households for regeneration. The rest of the area belongs to Protection Forest and may change to Production Forest (based on a recent discussion between Thuathien Hue PMU representative and A Luoi DPC). VLUP is also being implemented in Prao commune, Quangnam province in an area of around 70ha.

#### **Challenges and solutions**

The qualifying land is still not meeting the restoration targets, especially for regeneration measure, as set in the Intermediate Results. After all the extensive efforts and intervention strategies/adaptive management conducted, it can now be concluded that all reasonable steps have been taken by all relevant parties to acquire additional land in line with the set targets. This matter was again discussed in detail at the recent round of PMU meetings in both provinces, and agreement was reached, also in consultation with relevant government authorities and relevant local communities, to propose some amendments to the approved target areas.

### **Intermediate result 3.5**

*At least 6850 ha of forest land (e.g. natural forests and afforestation) areas are formally allocated to households and communities by the end of the project.*

#### **Progress**

Please refer to 3.4 for information on progress with VLUP.

In Thuathien Hue province, 116.56 ha of forest land were allocated to 63 households for afforestation and another 178.27ha were allocated to 93 households for regeneration without enrichment planting activities. Additionally, 175.47 ha in three communes of Huong Nguyen, Huong Phong and A Roang were measured and documentation is being submitted to the District People's Committee (DPC) for allocation to households for regeneration.

In Quangnam province, most areas planned for restoration activities (afforestation, regeneration) in three new communes (A Vuong, Bhalee and A Tieng), were allocated to farmers with red books by government and Malteser projects. CarBi,

working in close partnership with these projects, does thus not have to repeat this work in these areas.

### **Challenges and solutions**

The delays were exacerbated by adverse weather in the project area during the last few months (continuous rain, and cold) for fieldwork which resulted in land measurement progress running slowly.

### **Intermediate result 3.6**

*By 30 months after project start, first land titles with red book certificates of natural forests of good quality (at least 2c or 3a) have formally been issued to communities for sustainable forest management.*

The CFM plans for 2,750 ha (the planned areas are 2,804ha, but 54ha were reduced during the approval process) in ten villages belonging to two communes (Thuong Nhat and Thuong Lo) in Thuathien Hue, were completed and approved by DPC of Nam Dong. The contract with Nam Dong FPU and Agribank for opening and managing the saving accounts for communities has been signed. 3,299,280,000VND (equal to 157 000USD) has been transferred to saving account of ten communities for implementing CFM plans, including forest protection.

### **Challenges and solutions**

After extensive negotiations, the Contracts were finally signed by WWF and Agribank of Nam Dong and A Luoi FPD for implementation as soon as the documents for supporting households/communities have been finalised.

Communities and local partners strongly propose that CarBi should support NTFP development in the forest under CFM areas of the project in order to provide an additional sustainable utilization and livelihood opportunity to communities. Rattan is suggested to be the species of choice for enrichment planting under the canopy of natural forest areas. This proposal considers the reality of strong competition from alternative land-use options with attractive short-term financial benefits for beneficiary communities, as well as providing an additional sustainable utilization and livelihood opportunity through the rattan enrichment plantings.

WWF, in partnership with relevant government agencies, has a strong track record in this regard. Another positive outcome would be a stronger sense of ownership from relevant beneficiary communities and long term sustainable forest protection.

In Quangnam, the CFM activities are on hold related to the fact that the forest areas planned for CarBi CFM are now mostly overlapping with the new areas managed by the Management Board of Protection Forest, after recent land re-allocated by the Quangnam People Committee. We are now implementing the CFM model in remaining possible areas, while increasing the total CarBi CFM areas in Thuathien – Hue to make up for the reduced areas in Quangnam.

### Intermediate result 3.7

*By 36 months after project start: Restoration measures are completed on 50% of the designated areas for reforestation, enrichment planting and natural regeneration as well as all forest protection agreements have been signed.*

Please refer to the status of afforestation and natural regeneration in 3.1, and forest protection contracts in 3.2 above.

### Specific result 4 – Timber trade component

The Provinces of Xekong and Salavan consistently apply transparent and efficient timber tracking systems for logging quotas and effectively cooperate with relevant Vietnamese agencies.

#### Summary

CarBi managed to commence the long-planned development of a remote sensing monitoring system for logging activities in the monitoring area, based on the application of very high-resolution (VHR) satellite imagery. The contract with Transparent World for this assignment was signed on 1 August'14 after getting approved from KfW, and despite the protracted process of procuring the required satellite imagery, the mid-term progress report with intermediate results was delivered according to specification by mid-December'14. Among others, the excellent level of detectability of logging sites and associated road network for selected monitoring spots have been demonstrated.

During the reporting period, CarBi has also continued the tracking of timber harvested under two selected logging quotas. The application of VHR satellite images for the mapping of logging sites, enabled the team to identify new large clusters of previously unknown logging sites conducted under pilot logging quotas.

Among other documents, CarBi has also gathered comprehensive records on timber imports via the Kaleum-Tay Giang border gate situated in close proximity to the area with ongoing logging under the quota for the construction of road Ban Panon-Thongsa "101 km". This invaluable information provided us with an unique opportunity to validate data from the Lao side on the volume and composition of timber harvested. An analysis of the collected documents and a comparison with other relevant documents and field observations, revealed some significant discrepancies which will have to be clarified in consultation with our government counterparts. These findings were already presented and discussed with CarBi's focal points from POFI Saravan and Sekong at a meeting on 25 of September'14.

Based on lessons learnt from these pilots, recommendations on minimum requirements (according to a step-wise approach) to control timber harvesting under special logging quotas were developed, which will also be submitted for

consideration in the draft timber legality definition (TLD) and timber legality assurance system (TLAS).

Results of the leakage study were summarized in the report “Assessment of Scope of Illegal Logging in Laos and Associated Trans-boundary Timber Trade: As Baseline for International Leakage Estimation”. The main conclusions of the leakage study have been informally presented and discussed in a series of meetings with relevant partners/staff/experts specializing in timber harvesting and trans-boundary timber trade, obviously without compromising the integrity of the confidentiality of the sensitive nature of this report’s content. CarBi is also planning a comprehensive communications strategy to ensure that the leakage study is disseminated appropriately at relevant government levels to ensure the ultimate endorsement of its content by the Laos government before its content will be disseminated in consultation with our government counterparts.

Based on the approved Timber and wildlife Trade Action Plans of Thua Thien Hue and Quang Nam provinces in Vietnam, and the draft plan for the Sekong and Salavan provinces in Laos, also in pursuance of the resolutions from the Trans Boundary Timber and Wildlife Trade workshop in Pakse (2014), a draft joint inter-provincial trans boundary action plan on illegal timber trade and wildlife trafficking for the four targeted CarBi provinces has been drafted.

**Regarding progress with the specific Timber Trade Intermediate Results, we are not in a position to publish specific findings externally due to the fact that final conclusions can only be achieved after close consultation with CarBi’s government counterparts.**

## **Specific result 5 – REDD+/PFES component**

Capacity Building for REDD+ and Development of a Project Design Document for the transboundary area in Xekong and Salavan Provinces in Lao PDR and Quang Nam and ThuaThien Hue Provinces of Vietnam

### **Summary**

The formal REDD/PFES Change Request was eventually approved by the BMU at the end of October 2014, which paved the way for CarBi to activate its revised REDD and new PFES planning. A PFES Action Plan was drafted for the next 6 months, including a number of activities such as a Training Needs Assessment (TNA), compilation of a comprehensive CarBi PFES guideline, provision of technical training to government officers and local communities, as well as organizing a workshop on the use of PFES funding to sustain the CarBi Forest Guards in the two Sao La Nature reserve after project end.

CarBi continued its support to the Quang Nam province in scaling up their community based PFES activities in an area of more than 27 000 ha of natural forest. A total of 66 capacity building sessions have been conducted, and 2 558 people received training. Local people have also been receiving payment from the provincial PFES fund for their contribution to forest protection. We were also successful in attracting additional external funding from CEPF to support CarBi's PFES initiatives, and also submitted a further funding proposal which may enhance our value offering further if successful.

CarBi is also continuing its support to REDD readiness preparation at National level in Vietnam through active involvement in and support to the preparation of the ERPD (Emission Reduction Proposal Design), led by VN-Forest. Apart from these activities, CarBi staff has worked closely with ADB to finalize the proposal on Participatory Forest Management (PFM), as part of the approved funding Contract of 240 000 USD, which will be an important match funding contribution to CarBi's REDD value offering.

Due to the overlap with the pre-Change Request REDD+ Component, CarBi will still report (in this TPR) on this semester's progress, on the same Intermediate Results as usual, and will change the format to the new revised Intermediate Results for the next reporting period.

### **Intermediate result 5.1**

*The methodology for the forest carbon inventory has been negotiated with all relevant Government partners by 6 months after project start.*

#### **Progress**

As the CarBi project will no longer be pursuing PDD development, there is no longer a need to develop a forest carbon methodology.

#### **Challenges and solutions**

n/a

### **Intermediate result 5.2**

*Representatives of local Government agencies in Vietnam and Laos are trained in REDD baseline and monitoring methods by 9 months after project start, in development of PDDs by 12 months after project start as well as in compensation and benefit mechanisms by 24 months after project start.*

#### **Progress**

After the ERPIN concept was accepted by the World Bank, VN-Forest/MARD requested additional support from organizations to prepare the full project proposal. Thua Thien Hue is one of the six beneficiary provinces under the Emission Reduction Proposal Development (ERPD), and once the ERPD is approved by the World Bank, the province will benefit significantly from funding which may be



applied to unlock its REDD potential. It is thus in the interest of CarBi's REDD Objectives to continue its support in this regard to ensure a maximum return on investment.

CarBi, among other organizations and projects were invited to attend a meeting organized by VN-forest to discuss the way forward with the preparation of the ERPD, where we again confirmed our support. To prepare the ERPD, VN-forest will soon establish a number of working groups which will be responsible for each topic on MRV, safeguards, benefit sharing, etc. In addition, VN-forest will work closely with each supporting organization to discuss how to best mobilise the collective support from these organizations in the development of the ERPD.

CarBi staff also attended a regional workshop on Participatory Forest Monitoring organized by USAID, SilvaCarbon and SNV in Dalat city, Lam Dong province of Vietnam from 18<sup>th</sup> to 20<sup>th</sup> Nov 2014. The workshop is to share experiences on PFM in Vietnam and other countries. Many presentations on PFM from SNV, Forestry University, Lam Dong DARD, Indonesia, etc. were given in the workshop, of which the experiences of Lam Dong DARD is very useful and important for CarBi to apply for the implementation of the REDD+ project funded by ABD. This experience will surely help CarBi to save some time and costs while involving local communities in forest inventory and forest management for REDD+ activities afterwards.

CarBi's Trans Boundary Director was also invited to present our Community Conservation work at an international symposium in Tokyo in October'14, and could share many CarBi lessons which have been received very well. The symposium also provided solid exposure to some progressive Participative Monitoring work being conducted across the world, which will also be quite useful as lessons for CarBi.

### **Challenges and solutions**

CarBi's ability to make a significant financial contribution towards VN-Forest's ERPD preparation work is limited, and we will position our financial and other theoretical support to ensure maximum impact, also through joint cooperate with other organizations like SNV.

### **Intermediate result 5.3**

*By 11 months after project start: Carbon baseline for the project area is established.*

#### **Progress**

An initial carbon baseline was established as part of the REDD feasibility study. As PDD development will not be pursued, a more detailed carbon baseline using higher resolution satellite imagery will not be developed.

## Challenges and solutions

n/a

### Intermediate result 5.4

*By 12 months after project start: The framework and scope for a possible cross-border REDD project has been appraised with a feasibility study.*

#### Progress

The CarBi REDD feasibility study was concluded in December 2012, with the final report made available in April 2013.

#### Challenge and solution

The study concluded that developing the CarBi project area as a REDD project for the voluntary carbon market was not financially feasible, therefore the team has been exploring alternative opportunities for sustainable conservation financing (PFES) and submitted a formal proposal in this regard in March 2013, as well as a formal Change Request in July 2013, which has eventually been approved in October 2014.

### Intermediate result 5.5

*By 18 months after project start: The framework and the terms of references for the development of the PDD have been developed.*

Given the results of the REDD feasibility study, development of the PDD will not be pursued, therefore this IR is no longer relevant.

### Intermediate result 5.6

*By 23 months after project start: The ToR and tender for the development of the PDD has been published.*

Given the results of the REDD feasibility study, development of the PDD will not be pursued, therefore this IR is no longer relevant.

### Intermediate result 5.7

*By end of project, the changes in forest carbon and degradation and deforestation in the project areas are assessed.*

Given the results of the REDD feasibility study, the resources necessary to conduct this monitoring (which would have been an important part of the PDD) will be reallocated to support the development of PFES in the project area, subject to approval from the donor, which has now been received (October'14).

## Progress with PFES planning

CarBi supported Quang Nam in scaling up PFES activities in the province. A number of activities have been conducted during the last few months under the PFES program like the establishment of signboards on PFES implementation at strategic points in the project area, provision of training courses on forest protection and management for local communities, and marking management unit boundaries. Under the monitoring and coaching of WWF CarBi's staff, officers of A Vuong and Song Con Forest Management Boards and Sao La Natural Reserve have been conducting these activities.

In A Vuong and Song Kon Forest Management Boards' areas, 24 signboards on PFES and on forest protection have been set up in the field; 55 village training sessions have been organized in 55 different villages to prepare for PFES implementation. Local people together with staff of these boards have identified and demarcated clear boundaries for forest blocks among the groups of households of these communities. Local people have also been receiving payment from the provincial PFES fund for their contribution to forest protection and management. In 2014, households in the A Vuong and Song Con hydro power catchments, receive 274 000 VND per ha for their work. Each household on average protect and manage from 10 to 15 ha, so they received from 3 million to 5 million VND per year through the PFES program. This amount of money can buy enough rice for household consumption for on average of 6 months. The PFES program is not only a good model for local people to get actively involved in forest protection, but also to improve their livelihoods, which will reduce the pressure on unsustainable natural resource utilization.

After the official approval of the change Request by the BMU, a PFES Action Plan was drafted for the next 6 months. A number of activities are planned in this period, such as a Training Need Assessment (TNA), compilation of a comprehensive CarBi PFES technical guideline which can potentially also be used beyond the CarBi planning domain in other provinces, provision of technical training to government officers and local communities, and organizing a workshop on the use of PFES funding for forest guards in the two Sao La Nature reserve to provide some sustainability beyond project end. So far, the contract for the TNA has been prepared and the selection of a consultant has been concluded. The TNA will be conducted in January'15 and the final report concluded in February'15. Based on the results of the TNA, the contents of the PFES training courses will be designed to be ready for capacity building in March 2015. In addition, CarBi will organize a meeting to invite representatives of organizations and projects working on PFES to give comments on the outline of the draft PFES guidelines.

The support CarBi provided to the government of Quang Nam Province to develop PFES in the 27 000 ha referred to in the previous report, is continuing to contribute towards forest protection in the area, as well as enhancing some livelihoods through the payments the beneficiaries are receiving through the scheme.

We were also successful in attracting additional external funding to support CarBi's PFES initiatives, and also submitted a further funding proposal which may enhance our value offering further if successful.

### **Challenges and solution**

One of the biggest challenges in the implementation of PFES, is the appropriate monitoring of the local communities forest protection and management activities. While local communities are contracted for forest protection and paid through the PFES scheme, current projects remunerate purely based on area protected, and no real focus is placed on the quality of the protection services, and its impact. Therefore, it is hard for conducting monitoring and evaluation of their work. Many solutions have been proposed (for example a simple sampling of number of trees actually protected). In addition, the forest guard model can also be applied for monitoring of PFES work conducted by local communities. However, comprehensive training must be provided such as the application of SMART, documentation, methods of patrolling, etc., and will require significant resources to ensure functionality. CarBi will continue to work with government counterparts to devise an appropriate quality assurance system to be applied in the planning domain, and will also address this important matter in the Technical Guideline.

The long delay experienced with the BMU approval of the change Request impacted quite negatively on the strong momentum we built after conceptualizing PFES in the CarBi domain, and some momentum will have to be reconstructed to ensure that we regain the strong support from our counterparts in this regard.