Some achievements of the WWF Greater Mekong Carbon, Biodiversity and Livelihood (CarBi) Programme

September 2014



"These are the most important wild animal photographs taken in Asia, and perhaps the world, in the last decade", said William Robichaud, coordinator of the Saola working group (an IUCN specialist group). "The pictures lift us with hope".

WWF Greater Mekong's CarBi programme is an unprecedented four-year, transborder conservation economy assignment, which aims to protect and regenerate more than 200,000 hectares of unique forest in one of the world's biodiversity hot spots, focused on the Central Annamite Mountains joining Laos and Vietnam. It brings together development partners, national, provincial and district governments, and local communities to preserve and restore the forests and their unique species, and to protect and enhance the livelihoods of the people whose existence depends on the ecosystem services provided by these forests. Financial support to CarBi is primarily provided by KfW, the German Development Bank.

CarBi operates in four national protected areas and two corridors that allow species to move between them in Quang Nam and Hue provinces in Vietnam, and Saravanh and Xekong provinces in Laos. It has four main elements: Protected Area Management, Forest Restoration, Timber Trade and Reduced Emissions from Deforestation and Forest Degradation (REDD).

CarBi works with the governments of Laos and Vietnam from national to local level, with partner agencies and with the people who live in and depend on the forest to survive. On the ground, CarBi:

- Conducts biodiversity surveys and monitoring to establish the status of species living in the forest.
- Trains and equips Forest Guards to protect the unique biodiversity and ecosystem services.

- Works with governments and villagers to reduce the illegal logging and hunting, and encourages sustainable community management of the forest that meets internationally recognised standards.
- Uses scientific expertise and advanced information management techniques to pinpoint 'hotspots' of illegal logging and timber trade, as well as areas of special biodiversity significance.
- Builds and musters the capacity and logistics of law enforcement agencies and enhances their ability to combat illegal trans-boundary timber and wildlife trade through facilitated synergy and multi-agency cooperation.
- Unlocks the potential of a Payment For Ecosystem Services system as a funding mechanism to sustain the gains made by CarBi after project end.

This report outlines some of CarBi's achievements since its active operationalization in July 2011 after the formal agreements with the relevant government partners were concluded.

CarBi's establishment of the Conservation Economy

CarBi recognizes that protection of forest biodiversity is not enough – it is equally important to ensure that the project enhances the livelihoods of the culturally diverse people living in the protected area. Accordingly, CarBi works to support the people who depend on the forest for their survival, discovering and acknowledging the factors that encourage exploitation of the forest, and involving local people in ways that demonstrate the sustainable use potential of forests. In short, the sustained success of CarBi depends on the successful development of a resilient *Conservation Economy* in its domain.

A Conservation Economy acknowledges the crucial value of sustainably conserved biodiversity to socio-economic development. Accordingly, CarBi works to ensure that objectives for biodiversity also take into account the needs of the people living in the project area. It does this by supporting the implementation of policies that enhance livelihoods and make them more resilient, promoting sustainable economic activity and responsible land use, and by showing governments, business and communities that healthy and protected ecosystems can provide long-term support to local economies, and beyond.

CarBi works to enhance the livelihoods of the people living in its planning domain through capacity building and creating jobs that are closely connected to conservation, for example, via training and employment in forest protection activities. Ecosystems that are protected and productive can enhance the resilience of livelihoods and economies. CarBi supports the introduction of policies that enable the protection of ecosystems and enhancement of livelihoods, such as the Payment for Forest Ecosystem Services (PFES) system, which provides income for

forest communities that work to protect their environment, whilst also nurturing the valuable watersheds which provide the "generator" for economic development in the adjacent receiving environments.

Benefitting the Conservation Economy

To date, CarBi has benefitted more than 3,750 people, creating in excess of 70,000 person days of work, and generating more than \$1,000,000 of income, which will grow significantly with the recent launching of its Community based Forest Restoration activities in Vietnam. More than 12,660 capacity building opportunities have also been established thus far. These figures are set to increase dramatically as new initiatives, such as community based forest restoration, gather pace in the months to come.

Law Enforcement Patrols and Initiatives

a) Forest Guards (Vietnam), Rangers (Laos) and Multi-Agency teams (Vietnam/Laos)

Forest guards work at the sharp end of the CarBi project, playing a crucial role in protecting the forest, and the biodiversity and ecosystem services its inhabitants depend upon. They patrol the protected areas, ensuring that the laws related to forest and wildlife preservation are enforced. Their activities include destroying illegal hunting and logging camps and confiscating illegal equipment such as chainsaws, removing thousands of snares and animal traps and destroying illegally logged timber. They also confront and record the identity of people found to be involved in illegal activities. Illegal loggers, for example, may be warned that their activities are unlawful or they may be arrested and handed over to the appropriate authorities. Guards may also become directly involved in rescuing animals found with hunters or trapped in snares.

Under the Carbi scheme, forest guards receive technical, leadership and health and safety training to ensure that they are able to work safely and effectively. Forest guards in Vietnam are also brought together in law enforcement stakeholder forums to improve inter-agency cooperation and the exchange of information.

Technical support for forest guards includes tactical mapping to enable the identification of 'hotspot areas' of illegal activity, and geographic information system (GIS) training. Forest patrols typically last 6 or 7 days, and involve staff from district Forest Protection Departments, protected area agencies, local police and government authorities, and the army where appropriate.

Forest Guards are also given field training in setting up camera traps to capture images of forest fauna that would otherwise be difficult to obtain. At least 20 types

of birds, ungulates and other species have already been captured on camera in the Quang Nam and Hue Saola Nature Reserves.

By June 2014, forest guards in Vietnam had spent 25,026 days on patrol. During this time, they destroyed 43,379 snares and 724 illegal logging and hunting camps. In a single six-month period in Quang Nam and Hue, guards confronted some 232 local people and issued warnings about the illegal exploitation of forest resources, and through multi-agency patrols facilitated by CarBi, 192 people were confronted and issued with warnings and 5 forest offenders were arrested. CarBi also constructed one Ranger Station and one remote outpost in the Quang Nam Saola Nature Reserve (QNSNR), and a second Ranger Station in the QNSNR is due to be completed by October 2014...

In the Lao protected area (Xe Sap), meanwhile, four patrol outposts and two camp outposts in the Kalo area of eastern Xe Sap are operational. Four CarBi teams are conducting regular patrols in Xe Sap. By June 2014, CarBi teams in Laos destroyed 4,659 snares and 200 illegal camps over 2,934 patrol days, since patrolling was operationalized in March 2012. CarBi patrols in Laos have adopted the same risk assessment system used in Vietnam, and hospital emergency evacuation MOUs have been signed in all three districts, enabling rangers to escape danger, identify risk and prepare strategies to prevent accidents.

Three multi-agency patrol teams, one from each of the three districts surrounding the Xe Sap NPA, were formed in March 2014. The first patrols commenced in May 2014. As they familiarize themselves with their roles and responsibilities and use of SMART as a patrol-planning tool, their effectiveness will increase.

In November 2013, CarBi successfully changed from MIST to the SMART spatial data management system for law enforcement patrols (monthly reporting) across the CarBi domain. Areas for improvement were identified during an external review conducted in February 2014, and recommendations for all four protected areas will be implemented progressively to the end of 2014.

The commitment of the Lao government to law enforcement in the CarBi area is demonstrated by the signing in June 2013 of a cooperation agreement between CarBi and the key law enforcement agencies in Sekong and Saravanh provinces. This groundbreaking agreement's aims include: the coordinated control of illegal timber and wildlife trade; synchronized procedures for investigating illegal activities including deforestation, timber smuggling, non-timber forest product and wildlife trading and mining; and the sharing of lessons among protected areas in Laos.

Forest Guards Achievements

- 27,934 patrol days
- 47,674 snares removed
- 924 illegal camps destroyed
- Hotspots of illegal activity identified
- Hundreds of warnings on illegal activity issued and several offenders arrested
- Logging and hunting equipment seized or destroyed
- Advances in interagency cooperation
- Ranger stations and outposts built and equipped

b) Informant Networks

A law enforcement informant network commenced operation at the QNSNR in June 2014. QNSNR staff have made initial approaches at a number of villages to attract confidential informants, and expansion of the network to additional buffer zone villages is ongoing.

Management Plans

Significant progress has been made in the preparation and finalization of the four CarBi protected area management plans:

- The QNSNR plan was officially approved by Quang Nam Province in January 2014
- The Bach Ma National Park plan has been completed and final approval is pending from the national General Department of Forestry, which oversees management of the National Park
- The HSNR plan is in the final stages of revision and will be submitted for final approval in the first quarter of 2015 to the Thua Thien Hue Province
- The final draft of the Xe Sap NPA plan has been completed and will be reviewed in the first quarter of 2015 by NPA counterparts

Socio-Economic Assessment

A Carbi Socio-economic Assessment report for communities living inside and adjacent to the protected areas in Vietnam has provided valuable insights on community attitudes to the protected areas, the reasons why forest resources are used and exploited, and what drives illegal activities. It identified potential avenues for awareness raising activities and opportunities for community-based conservation economy initiatives in the protected area. CarBi responded to these

imperatives through the development of Awareness Raising Strategies aimed at providing the enabling environment for positive behavioral change of communities impacting on these CarBi Nature Reserves. The same principles also apply on the Laos side, and a similar strategy is being launched in key villages in and around Xe Sap, guided by Participatory Rural Appraisal (PRA) activities conducted by Carbi's partner, Village Focus International. Three district implementation teams in Laos are being trained in planning, developing a curriculum and preparing materials for the implementation of the village activities.

Management Effectiveness Tracking Tool (METT)

A CarBi domain-wide METT assessment was finalised during the third quarter of 2014 to determine the management effectiveness of each protected area at the end of 2013. All three Vietnam protected areas attained scores above the global METT average of around 50% (HSNR: 52.9%; QNSNR: 54.9% and BMNP: 70.6%). The Xe Sap NPA score was marginally below the global average at 48%. However, considering that the baseline score assessed in 2010 was 16.6%, this is a marked improvement.

Biological Surveys and Monitoring

a) Biodiversity Surveying

A detailed Xe Sap National Protected Area (NPA) biodiversity survey report has been finalized and is available for dissemination. The NPA still supports significant and representative biodiversity of the central Annamites. Particularly important are populations of two of the three species of endemic birds restricted to the Kon Tum Plateau Endemic Bird Area of central Vietnam and southern Laos: the chestnut-eared laughing thrush and the black-crowned barwing. Other significant mammals and birds detected during the surveys and subsequent camera-trapping include Owston's civet (the first records from southern Laos), Annamite striped rabbit (an ecological range extension representing the first record outside Ever wet Annamite Forest), serrow, gaur, black-shanked douc, *Nomascus* gibbon, Blyth's kingfisher and crested argus.

Although the majority of the botanical specimens collected have yet to be classified, amongst the most significant discoveries was a large population of *Pinus dalatensis*. This restricted range Annamite endemic was previously only known from central and southern Vietnam and one other site in Laos. Herpetological surveys revealed a characteristic suite of Annamite species with a minimum of 1 to 2 potential new species for Laos and one, possible, new species of frog for science. The globally vulnerable impressed tortoise

was recorded including one observation of a wild individual in the forest – an exceptional record from Indochina. This record has recently been published in the peer-reviewed journal *Asian Herpetelogical Review*.

b) Establishment of Biological Baselines

In the CarBi Vietnam sites, monitoring baselines, using advanced and robust Bayesian occupancy statistics, have been established for *Nomascus* gibbon and crested argus – two Annamite endemic forms whose population status reflects the conservation impact under CarBi. A peer-reviewed paper discussing this work has also been published.

The first stage of a systematic camera trapping programme, using 39 camera traps, was completed in western Xe Sap NPA, in October and November 2013. The establishment of a species baseline to assess population status and monitor future population trends will be used to reflect the impact of CarBi project conservation activities upon biodiversity. Analysis of the data identified muntjac species as the most commonly encountered mammal (22 camera trap sites), followed by macaque (31 sites), Owston's civet (12 sites), and serrow (12 sites). However, overall detectability was low for all four target mammals.

c) Camera Trapping Programme

On-going camera-trapping in the Hue and Quang Nam Saola Nature Reserves and Bach Ma Extension recorded activity on 19,197 trapping nights and detected at least 31 species of animals and birds, including the Crested Argus and Silver Pheasant. Some of Vietnam's most threatened species were also photographed, providing the only recent field records from the country of the black bear and pangolin spp. The first live field record of the globally endangered large-antlered muntjac has also recently been recorded. The most significant achievement thus far was the rediscovery of saola, one of the rarest and most threatened mammals on the planet, which has been photographed in Vietnam for the first time in the 21st century. The enigmatic species was caught on film in September 2013 by a camera trap set by CarBi in the Central Annamite mountains. The last confirmed record of a saola in the wild had been in 1999 from camera-trap images from the province of Bolikhamxay in Laos. This was an historic moment in CarBi's efforts to protect the extraordinary biodiversity of its domain, and provides powerful evidence of the effectiveness of these globally significant conservation efforts in critical saola habitat. This great biodiversity news of international importance was soon followed by the release of a Truong Son Muntjac from a snare by CarBi Forest Guards in the Hue Saola Nature Reserve. This animal had last been seen in the wild more than 10 years ago.

d) High Impact Saola Survey and Monitoring

High impact monitoring for Saola in eastern Xe Sap and priority forest

compartments in Hue Saola Reserve and the Bach Ma Extension – areas identified with the highest potential for Saola presence in the landscape – began in December 2012, and the team is confident that Saola may also be detected in this remote and unique landscape. At present, 100 camera traps (60 in Vietnam and 40 in Laos) have been installed across the transboundary landscape in the highest priority Saola habitat areas. With luck more Saola will be photographed.

CarBi uses cutting edge techniques to assess the status of forest species. By analyzing the DNA found in leeches collected from the forest floor, it is possible to determine the animals they have been feeding from. In the Vietnamese CarBi area, the leech collecting programme provided more than 800 samples (more than 40,000 leeches) and 80 samples (2,386 leeches) in Xe Sap NPA by June 2014, which were submitted for analysis at laboratories in China and Germany. A trial batch of 20 samples was sent to the Kunming Institute of Zoology in China, which has signed a memorandum of understanding with WWF to analyze further DNA samples. While unfortunately no Saola DNA was found, the samples did reveal DNA from more than 12 species, including wild pig, serrow, ferret badger and muntjac, as well as rodents, squirrels, primates and cats. These findings have demonstrated the exciting potential of these technologies to detect species that would otherwise be very difficult to find, and prove that the biodiversity of the protected area remains significant.

Camera Traps and Leech Analysis

- Saola, one of the world's rarest and most threatened mammals, recorded in Vietnam for the first time in 15 years
- Truong Son Muntjac, last seen in the wild more than 10 years ago, released from a snare by CarBi Forest Guards
- In western Xe Sap NPA, baseline occupancy data was collated from the camera-trapping programme and established muntjac followed by macaque, Owston's civet and serrow as the most frequently encountered species, although overall detectability for all four species was low.
- More than 800 leech samples collected more than 40,000 leeches in Vietnam and 2,386 leeches in eastern Xe Sap NPA
- Camera traps and DNA analysis prove extraordinary biodiversity
- Usefulness and potential of survey technology proved

Xe Sap NPA Livelihood Diversification, Conservation Agreements and Capacity Building

CarBi's partner in Laos, Village Focus International (VFI), has implemented a wide variety of activities in 10 target buffer zone villages around and within the Xe Sap NPA including:

a) Livelihood diversification

Participatory Rural Appraisal (PRA) and Participatory Land Use Planning (PLUP) activities were completed in all 10 target villages. The results of PRA activities assisted both VFI and village communities to understand resource use, village demographics and socio-economic circumstances, which in turn were used to select a range of livelihood diversification measures for trial within each village. PLUP activities assisted village communities to plan future land use and understand their impact upon the adjacent protected area. Land use maps, boundary demarcation and preparation management regulations for each village were key achievements.

A total of 150 households (15 households per village) were selected to participate in livelihood diversification model trials. Twelve different models were trialed including: raising small animals (chickens, goats); fish and cattle raising; vegetable and rice (dry and wet) growing; and planting banana, *Y Bong*, acacia and coffee trees.

Livelihood improvement plans were also prepared for the 150 households. The plans outlined which model each household would participate in, the assistance they would receive (including training, materials and technical support), types of reciprocal commitments as conditions of participation, and the responsibilities of village para-trainers. By the end of June 2014, all training courses, materials and

technical support had been delivered to all participating households and a robust field monitoring system implemented in collaboration with district extension service counterparts.

b) Conservation Agreements

Three villages were engaged to prepare conditional participatory conservation agreements covering their village areas. Each agreement was finalised and endorsed by village and local government leaders, WWF and VFI at the end of June 2014. The principal objectives of the agreements were to: raise the awareness of the village communities of their impact upon local natural resources, including those within the adjacent protected area; encourage sustainable use and management of these natural resources; and engage the village communities as local natural resource management stewards. As part of the conditional element of each agreement, incentives to encourage each village community to follow the agreement terms were negotiated in exchange for certain natural resource management trade-offs. Incentives included: establishing rice banks; installing agricultural irrigation systems; animal husbandry and agricultural materials and training; training in sustainable harvesting of NTFPs; and equipping and training village patrol units.

c) Capacity Building

VFI engaged target village communities and District and Cluster level leaders in capacity building and awareness raising activities, including workshops on village level introduction of rights and responsibilities under the law and environmental education. Perhaps the greatest success was the mentoring and training programme for district- and cluster-level and village leaders on community development and leadership, which concluded in June 2014. This activity provided opportunities for participants to apply their recently acquired knowledge in their village communities.

Forest Restoration, Land Use Planning and Community Based Conservation

All of the planned restoration activities are being properly implemented in line with CarBi's restoration philosophy and monitored at the project sites. Some 45ha of bare land have been planted with indigenous species and 125.3 ha of forest regeneration without enrichment plantings have been implemented by farmers in two communes. CarBi has facilitated the opening of 102 savings accounts for 100 households in Vietnam, and VND1,17 billion (equal to \$55,714) has been transferred to these accounts. Relevant authorities have inspected the planted and regenerated sites, and afforestation and forest regeneration planning for 1,100 ha is being implemented in five other communes.

Through CarBi, communities are being compensated for replanting indigenous trees in selected priority areas, and taking on the managed regeneration of the forest. The forest restoration programme is creating employment, enhancing livelihoods and restoring forests in priority biodiversity corridor areas.

Community Forest Management (CFM) and Forest Protection Contracts are two ways of incentivizing the people living in and around the protected areas to protect and manage the forest sustainably. In Vietnam, the completed CFM plan for one community has been approved, and the opening of a community savings account for a second village is being processed. This first successful model of CFM based on CarBi guidelines will now be replicated in five more villages in Thuong Nhat commune, and four villages in Thuong Lo commune, with 2,804ha of natural forest being allocated to communities for sustainable management. CarBi support of a number of PFES activities in Quangnam, meanwhile, has been activated in 27,830ha of natural forest. Another 3,059ha of natural forest have been protected under forest protection contracts with 24 groups of farmers. A further CarBi success has been the transfer of long-term land use rights ('Red Books') for 50 years to 312 households thus far. Close synchronisation with PFES (already negotiated with government) will ensure the sustainability of the gains made beyond CarBi.

Increasing community involvement in forest protection and regeneration means new income and strengthened livelihoods among the people most dependent on the forest, as well as raised levels of awareness of the importance of these areas as "factories" of ecosystem services. Carbi is also focused on enhancing the involvement and benefits to women in its domain, and have been successful in securing equal rights for women in the issuing of Red Books which provide security of tenure, and access to forest based livelihood opportunities for 50 years. CarBi also facilitated the opening of bank accounts in the names of the women in the beneficiary households.

Involvement of Forest Communities

- 'Ownership' of forest restoration and protection in the hands of communities
- Farmers benefit from forest land allocations. 312 households have already received Red Books
- Securing gender equity regarding ownership of Red Books, and also facilitated the opening of bank accounts in the names of women members of beneficiary households
- Communities funded to take on long-term forest management enjoy enhanced livelihoods
- Economically viable indigenous trees shown to be alternatives to acacia and rubber plantations
- Pilot livelihood models show viable alternatives to unsustainable forest exploitation

Timber Trade Management

Extensive field surveys in the CarBi domain have focused on areas vulnerable to large-scale unauthorized logging hidden behind approved infrastructure projects, such as dams, roads and mining concessions. The result has been the identification of illegal trans-boundary timber trade in the CarBi area, and the mapping of the primary destinations of wood products from Xekong and Saravanh provinces in Laos. Another result has been a fairly robust estimation of the extent of unauthorized logging and associated trans-boundary timber trade with the neighbouring countries of Vietnam and Thailand.

These estimates indicate that the outflow of timber products (in round wood equivalent) from Xekong during the 2010-2011 logging season exceeded the officially issued quotas by over 200%, and the actual volume of timber removed from the CarBi monitoring area (Champassak, Attapeu, Xekong and Saravanh provinces) in the same season exceeded the officially registered production of timber by at least 110%.

This study will be quite useful in facilitating smooth European Union Forest Law Enforcement, Governance and Trade (FLEGT) and related processes. It may also give new impetus to the current discussion of whether the Legality Definition and Timber Legality Assurance System elaborated within the framework of the Voluntary Partnership Agreement in Vietnam adequately address the issue of the legality of imported timber.

CarBi has begun piloting the traceability system for timber harvested under two selected logging quotas. Improvement of tracking technology has to result in reducing illegal logging and timber trade in the pilot areas. In a very short time and despite the challenge of limited access to official documentation, CarBi has succeeded in testing basic elements of the system, including the analysis of quantities and composition of timber at critical points of the supply chain, and exact locality confirmation of logging areas compared to authorized concession boundaries, using random field inspection complemented by interpretation of very high resolution (VHR) satellite imagery.

This process resulted in the conclusion that timber harvesting within the framework of the targeted special quotas does not even meet basic legal requirements. Prefelling inventories are lacking or incomplete, concession borders are neither demarcated on a map, nor in-field. Timber is harvested wherever logging companies find desired wood, whether inside or outside concession boundaries. Evidence of intentional undervaluation of the quality of harvested timber and subsequent understatement of payments and charges, and inadequate documentation checking at the Laos-Vietnam border were also revealed. There is currently a clear lack of appropriate control and no functional system in place to ensure compliance.

Focused Timber and Wildlife Trade Action Plans have been drafted for participating provinces in Vietnam and Laos, followed by a Trans Boundary Timber and Wildlife Trade Workshop between the countries in February 2014. Senior government representatives from both countries and all four provinces attended the workshop, which resulted in a list of agreed High-Impact Trans Boundary Compliance Management Activitie. This will also provide an enabling environment for some tangible action based on the 2012 Laos/Viet Timber and Wildlife Trade MOU .

CarBi is also currently consulting with the Department of Forest Inspection (DOFI) in the development of a remote sensing monitoring system for logging activities in the CarBi monitoring area, based on the application of VHR satellite images. Launching this unprecedented large-scale application of high cost VHR images to monitor logging in tropical forests has been made possible by CarBi securing free access to the majority of the required images (with an estimated commercial price of \$252,500), in the form of a donation within the framework of the Open Landscape Partnership Platform, a joint initiative with Scanex R&D Center and Digital Globe Inc.

This remote sensing monitoring will be followed by focused law enforcement action by provincial forest inspection staff in hotspot areas. Fundraising approximately \$340,000 from a private donor to the Eyes on the Forest Laos project has enabled a foundation to be laid for the continuation and expansion of the progressive monitoring of logging activities in southern Laos, beyond the end of CarBi.

Timber Trade

- Hotspots of illegal logging defined
- Realistic assessment of trans-boundary timber 'leakage' through scientific analysis
- Weaknesses of forest control identified
- New tracking system for conversion timber piloted
- Progressive monitoring system for logging activities based on remote sensing in development
- Trans-boundary cooperation strengthened
- Good relations and trust established with governments and government departments

Reduced Emissions from Deforestation and Forest Degradation (REDD) and Payment for Forest Ecosystems (PFES)

In the 2014 financial year, CarBi supported the scaling up of PFES activities in project areas of Quang Nam in Vietnam. These included:

- Establishing signboards explaining PFES implementation 24 explaining PFES and forest protection, and 175 denoting the position of household groups within the project area forest blocks
- Training courses on forest protection and management for local communities in 55 villages
- Boundary marking by local people and Forest Management Boards to identify clear forest block boundaries

These activities were conducted by officers of the A Vuong and Song Con Forest Management Boards and Saola Natural Reserve, together with CarBi monitoring and coaching staff.

In 2014, Households in the A Vuong and Song Con hydropower catchment areas are also receiving payment from the provincial PFES fund for their contribution to forest protection and management, amounting to 274,000 VND per hectare. This is enough to pay for an average of 6 months' rice consumption per household. In this way, the PFES program is providing a good model for local involvement in forest protection that can improve livelihoods and reduce unsustainable natural resource utilization.

CarBi has successfully negotiated a strategic partnership with Vietnam-Forest, culminating in an MOU on cooperation in the preparation of an Emission Reduction Program Idea Note (ERPIN). This will be submitted to the Carbon Fund to facilitate the solicitation of significant funding from the World Bank for Vietnam REDD+ Readiness, 2016 to 2020.

CarBi provided technical and financial support for two Vietnam -Forest workshops to facilitate this process. These workshops, held in Hanoi on 15 April 2014 and Thua Thien Hue on 29 April 2014, provided a consultative platform for input from relevant agencies at both national and local level on the ERPIN concept note. It covered detailed REDD+ mechanisms, deforestation, forest degradation and the participation of local people in forest monitoring and management. A number of provincial CarBi partners from the Forest Protection and Forestry Departments, in Thua Thien Hue and Quang Nam provinces attended the workshops, contributing to and learning from the process, and increasing their REDD+ awareness and capacity levels.

The ERPIN concept was subsequently approved by the World Bank on 19 June 2014 in Bonn. The next step will now be to develop this concept towards a full ERPIN proposal, providing another opportunity for staff to gain experience in this field.

REDD and PFES

- Local communities capacitated and funded to protect forests
- Enhanced and more resilient livelihoods among forest communities
- Forest guard models maintained beyond the life of CarBi
- Increased government staff capacity in REDD and PFES
- Industry secures reliable ecosystem services from healthy forest to sustain socio-economic growth
- REDD specific capacity building to ensure that the CarBi domain will be prepared for viable future market opportunities
- Supported the government of Vietnam to conduct formal consultation with Provincial and District Authorities as well as Civil Society organisations regarding the development of an Emission Reduction Programme Idea Note (ERPIN), which was also subsequently approved by the World Bank

Trans-boundary achievements

CarBi is unique in its extent and complexity. It covers territory in two countries, so its success depends on building a cooperative, transparent and uniform approach in Laos and Vletnam. CarBi's staff works to build capacity and cooperation between governments, agencies and stakeholders in Laos and Vietnam to ensure that consistent strategies are followed and that appropriate quality standards are set. This approach also ensures that the lessons learned from implementing CarBi activities in one country inform activities in the other.

From its inception, CarBi has conducted joint meetings, workshops and activities to ensure that efforts to conserve and restore forests and their biodiversity are working in the same way towards the same targets.

Uniting CarBi activity in Laos and Vietnam

- Trans Boundary Inception Workshops to promote CarBi philosophy and expose staff in both countries to planned activities
- Regular CarBi Trans Boundary Family Management meetings ensure consistency in approach and standards
- Trans Boundary Protected Area and Timber Trade Technical Workshops
- REDD Trans Boundary and REDD Feasibility workshops involving international experts and government staff from both Laos and Vietnam
- Standardized online monitoring and evaluation and reporting system for both countries ensures consistency at appropriate levels of quality
- Consistent strategies, standard operating procedures and guiding principals developed to ensure consistent approach according to specification and quality standards at country and province level
- CarBi website is a shared platform for communications in Laos and Vietnam
- Four Provincial Timber and Wildlife Trade Action Plans will culminate in a Trans Boundary Timber and Wildlife Trade Action Plan backed by an International MOU between Laos and Vietnam
- Lessons learned in Vietnam will inform PFES capacity building for government staff in Laos

Conclusion

CarBi's successes have all been enabled by a remarkable degree of cooperation – from international to local level – between funding and partner organizations, national governments, law enforcement agencies and villagers, and a "CarBi Family" passionately pursuing its vision to conserve and restore the unique biodiversity of this wonderful part of the world, for the benefit and well-being of all its current and future inhabitants.

To date, the CarBi project has benefitted more than 3,700 people, creating in excess of 70,000 person days of work, and generating more than \$1,000,000 of income. Some 12,552 capacity building opportunities have also been established thus far in the CarBi planning domain. As new initiatives involving local communities, including forest restoration and protection intervention begin to flourish, these figures will quickly increase – indicating strengthened livelihoods among the population most dependent on the forest.

The CarBi project has proved – through the appropriate use of technology, allied with practical, on-the-ground conservation management action – that the

biodiversity of the Annamite Mountains is of extraordinary importance and that it must be preserved – now and forever. The very positive Mid Term Review (MTR), which was recently conducted by two experienced independent review consultants, also reconfirms that CarBi is well on track to grow its value offering and to leave a significant array of legacies, which should sustain the significant gains made thus far. The following quotes from the MTR Report are relevant in this regard.

"Within two years the Project made remarkable progress to implement these Components in two neighbouring countries." The Report also highlighted the complexity as well as the very short implementation timeframe of 4 years. "WWF and partners have embarked on one of the most ambitious projects in the history of involvement in the Greater Mekong sub-region, aiming at halting deforestation and forest degradation, through forest protection and sustainable use of forest resources, and preserving the unique species diversity. Whilst the Carbi Project is important for species and forest conservation, it will also enhance the income of the area's culturally diverse people who also depend on forests for their livelihoods. The Project is complex in its scope and ambitious in its targets and short in its time to implement the numerous activities stretched over two different countries with a different ethnic, socio-economic, economic and cultural background. Carbi's scope touches the most difficult issues in development work and covers, among others: timber trade, poverty aspects, environmental protection, biodiversity conservation, enhancement of livelihoods, good governance, and law enforcement, to name the most important ones."

Special mention was also made of CarBi's progressive approach towards:

- Conservation Economy Strategy towards enhanced livelihoods
- Sound framework of systems, procedures and strategies to guide structured operationalization according to appropriate quality standards
- Good staff management and low turnover
- Sound Catch up Planning and adaptive management strategy
- · Solid Trans Boundary management approach
- Very good public relations results

The CarBi Family approach which promotes staff motivation, strong coherence/synergy and corporate identity, including counterparts, also attracted some comment from the reviewers: "The good and professional human resource management has been noted during the entire MTR. In this connection staff sees themselves as 'the Carbi family' and develop some sort of corporate identity and convey this message to counterpart staff. This will have impacts also on their attitude and behavior. The author of the report experienced the first time in his professional life such an explicit approach to staff management in a development project."

For any enquiries/comments, please contact Fanie Bekker: Trans Boundary Director for CarBi: WWF Greater Mekong: fanie.bekker@wwf.panda.org