

**CASE STUDY ON THE UPPER ESSEQUIBO  
CONSERVATION CONCESSION (UECC) - AS AN  
INNOVATIVE LEGAL MECHANISM FOR BIODIVERSITY  
CONSERVATION AND A VIABLE OPTION FOR  
AVOIDING FOREST DEGRADATION/DEFORESTATION****EUSTACE ALEXANDER<sup>1</sup>**<sup>1</sup> Conservation International Guyana

**ABSTRACT:** Deforestation/forest degradation due to logging and agricultural clearing is one of the main causes of increased emissions of atmospheric carbon. Many developing countries (including Guyana) are traditionally dependent on commercial timber production for national economic development. As such, these countries continued to harvest their timber resources but without generating any significant economic benefits. Until recently, few alternatives have existed that would allow countries to benefit from their forests other than through the extraction of timber. One such alternative is the conservation concession- an approach that offers a sustainable and cost effective alternative for developing countries to achieve forest based economic development without incurring forest degradation. The Upper Essequibo Conservation Concession (UECC) is approximately 200,000 acres of relatively pristine tropical rainforests in a watershed area of the Upper Essequibo River within Guyana's Forestry Zone. The site is being managed by CI-Guyana for biodiversity conservation rather than timber production. Though this innovative mechanism of forestry management operates under the principles of a standard timber concession, the difference is rather than log the trees, CI-Guyana pays the Government of Guyana (GOG) royalty and fees equivalent to those of a logging concession to keep the trees intact. Additionally, a Voluntary Community Investment Fund was established to ensure nearby stakeholder communities receive tangible socio-economic benefits for choosing to forego logging of their forests for the achievement of biodiversity conservation and the prevention of forest degradation. The UECC has successfully proven that there are markets for conservation and it provides an excellent strategy for avoiding forest degradation while providing economic development without the need for new legislation or giving up of national sovereignty.

**Keywords:** conservation, concession, forest degradation, adaptation to climate change

## **1. Introduction**

Deforestation, forest degradation and land clearing for agriculture are among the leading man-induced causes of global climate change and destroy about 9 million hectares of tropical rainforests annually (Niesten and Rice, 2004). Currently, it is estimated that approximately 20%-25% of global discharge of greenhouse gases emerge from land use changes in tropical rainforests. Though deforestation is apparently negligible in Guyana, there are conspicuous signs of forest degradation within the forestry sector. It is estimated that the country's timber industry destroys approximately 49,000 hectares of forests annually – a figure that does not include forest destruction due to road expansion and the mining (gold and diamond) industry. Due to the country's traditional dependence upon natural resources extraction (for example, timber and mineral mining) for national economic development, the rates of forest degradation in Guyana are

therefore likely to accelerate and consequently, result in the destruction of biodiversity and the plundering of crucial environmental services (for example, clean air, carbon sequestration and climate regulation) associated with standing tropical rainforests.

Despite years of international efforts to increase global awareness on the effects of environmental destruction and to develop national policies and institutions for sustainable forest management, many developing countries are still inadequately equipped to avoid deforestation/forest degradation. Furthermore, these developing countries lack mechanisms to capture and commercialize environmental services, which possess the characteristics of public goods but have yet to receive an economic value in the market place. This economic conundrum results in wasteful forest destruction and contributes significantly to global emissions of GHG, due to logging. Therefore the provision of incentives for developing countries to conserve their rainforest, its biodiversity and environmental services will allow for compensation of the opportunity costs for forgoing logging and will also present cost effective and sustainable options to adapt forestry management to avoid deforestation and/or degradation and mitigate against climate change.

To create market mechanisms for conservation and to institutionalize conservation incentives, Conservation International (CI) developed and introduced the concept of a “conservation concession,” an innovative approach that utilizes the principles of a standard timber concession to achieve biodiversity conservation outcomes, but also provides an option for the avoidance of deforestation/forest degradation, while pursuing forest-based national economic development. To implement this novel conservation approach, CI through its Field Office in Guyana (CI-Guyana) applied to the Guyana Forestry Commission (GFC) for a concession Lease License, held widespread consultations to garner informed consensus of stakeholders, built the required capacity, and formulated and implemented a Forest Resources Management Plan (FRMP). This participatory and transparent approach empowered stakeholders for their direct involvement in collaborative management of the site.

### ■ Concept description

The concept of a *conservation concession* refers to the idea of choosing not to exercise the rights acquired to the forests, biodiversity or other forms of natural resources. A conservation concession may take several forms, but the UECC is modeled after a standard timber concession where the logging concessionaire pays the Government of Guyana (GOG) for the right to extract timber from an area within the State’s Forest Zone and other areas of country. The difference is

that while the logging concessionaire will log the area, the conservation concessionaire pays the GOG for the forest to remain intact. In other words, rather than paying duties, acreage fees, royalty, etc for the extraction of timber within the State's Forest, CI-Guyana is paying similar fees to the GOG through the Guyana Forestry Commission (GFC) to keep the trees standing.

Though a conservation concession is currently not recognized as an official protected area in Guyana, it nevertheless functions like a standard protected area by safeguarding the forests and its resources from the pressures of extractive economic development. In Guyana, the UECC serves the additional function of buying time for the protection of an area of intact and biologically important rainforests until it becomes a legally declared protected area. This mechanism therefore not only offers an alternative to logging in countries endowed with large areas of intact high biodiversity forests of importance to conservation, but also provides a vehicle for establishing "anchors" for biodiversity conservation corridors.

## 2. The Problem

Logging is one of the root causes of deforestation and forest degradation in Latin America. Guyana and nearby countries are endowed with large expanses of relatively untouched tropical rainforests, but have traditionally focused on extraction of its timber resources for economic development. However, low prices on the domestic and global timber markets, low yields per hectare and relatively high production costs, have contributed to a poor financial performance within the timber industry. In spite of this, parcels of State Forests continue to be allocated to logging companies that remove the most valuable timber species, without any generation of significant profits. Simultaneously, there has been an increasing willingness to pay for conservation in the international community. Unfortunately, prior to the UECC, the international donors did not have a clear market mechanism that could allow them to directly invest financial resources for biodiversity conservation. As such, the GFC did not have any alternative to the allocation of the State Forests for commercial timber production. The UECC therefore provided an innovative and creative way to harness market forces to achieve biodiversity conservation and presented itself as an option to avoid forest degradation within Guyana's Forestry Sector.

## 3. Project Implementation

At the time of project implementation, conservation concessions and perhaps, biodiversity conservation as a whole were relatively new concepts to Guyana.

The GFC had just adopted and implemented the principle of Sustainable Forest Management (SFM) and incorporated it into the National Forest Policy. Simultaneously, Dr. Richard Rice and a group of researchers from CI's Centre for Applied Biodiversity Sciences (CI-CABS) were on a visit and recognized that SFM in Guyana will at best allow for long-term timber supply but with limited economic and ecological benefits. To address this problem, they proposed the idea of conservation concession to the Government and it was accepted. This led to a series of actions as described below:

■ **Initial Consultation with all stakeholders to evaluate the feasibility of the idea**

After garnering the required policy support to initiate activities, CI-Guyana consulted with a wide range of potential stakeholders to ascertain the acceptability of the idea of a conservation concession. Through this comprehensive stakeholder management strategy, CI-Guyana was able to identify, inform and receive feedback from a wide range of national, regional and local stakeholders (including communities, Government organizations, NGOs, etc). Discussions were held with the Guyana Geology and Mines Commission (GGMC), the Guyana Environmental Protection Agency (EPA), Fisheries Department and the Ministry of Agriculture. This was needed because though the Concession focuses mainly on trees and non-timber forest products (NTFP) it contains a wide range of resources (for example, wildlife and minerals) that are of interest to these State Sector Agencies and are not covered by rights under the Forestry Regulations. Consultations with the Regional Advisory Committee (RAC) of the Region Nine (Upper Takatu – Upper Essequibo) Administration Unit guided the selection of Apoteri, Rewa and CrashWater (hereafter referred to as ARC communities) as the key stakeholder communities. The sixteen communities (including the ARC communities) in the North Rupununi Region are all represented by an umbrella community-based NGO registered as the North Rupununi District Development Board (NRDDB). Hence, the NRDDB automatically became the principal regional stakeholder.

For each stage of project development, CI-Guyana sought and gained the informed consensus of the principal stakeholders through the combination of consultation meetings (Figure 1) with education and awareness programmes. Upon garnering of the support framework for project implementation, a Guyanese Lawyer was hired to determine the compatibility of the project with existing national legislations on natural resource management.



**FIGURE 1**

Community-based stakeholder consultation meeting.

### ■ Applied to GFC for a State Forest Exploratory Permit

As is required under the national Forest Regulations, an application made to the GFC for a State Forest Exploratory Permit (SFEP) in May 2000 was accepted five months later, but only one-fifth (approximately 200,000 acres) of the area applied for was received. This permit allows a prospective timber concessionaire to execute feasibility studies and baseline analyses, all of which must be completed within three years in order to receive the lease agreement – Timber Sales Agreement (TSA).

### ■ Established formal partnerships with Government Agencies

CI-Guyana entered into a formal Memorandum of Understanding with the GOG for the sharing and wide distribution of any information that may be generated from research activities undertaken at the site. A commitment for a closer work relationship was also formalized through a MOU with the University of Guyana (UG).

### ■ Baseline Analyses

A Social Impact Assessment (SIA) was conducted in the ARC communities to determine socio-economic impacts of the concession. Because the project is not intended to have any negative environmental affects, the Guyana Environmental Protection Agency (EPA) waived the need for an Environmental Impacts Assessment (EIA). The draft SIA report was submitted to EPA and the communities for feedback before being finalized. Upon approval of the report, copies were widely distributed among all stakeholders and partners.

Other initial analyses conducted were:

- A preliminary reconnaissance and geo-referencing of the proposed site; and
- A vegetation classification based on video graphic surveys.

### ■ Built local capacity for co-management

Management of the UECC required active participation of the stakeholder communities, including a core team for long-term monitoring. To build the relevant local capacity CI-Guyana entered into an Agreement with the Iwokrama Centre for Research and Training (ICRT) to train four residents of the ARC communities for two years. Under the Agreement CI-Guyana was both a sponsor (contributing one-third of total cost of training programme) and client to the Ranger Training Programme.

### ■ Preparation of a FRMP for first five years of management

Data emerging from the baseline analyses and from regional and community consultations were used to guide the development of the first five-year FRMP. The draft FRMP was presented for feedback at national, regional and local consultation meetings. Many of the State Sector Agencies, NGOs and other partners including the EPA were also asked to review and comment on its contents. After receipt of widespread feedback, the final draft was presented at another National Consultation Workshop in the capital city of Georgetown. GFC's approval of the FRMP was received in 2002 March and discussed with the ARC communities a few weeks later.

### ■ Applied to GFC for a Timber Sales Agreement (TSA) and the EPA for an Environmental Permit

Application to the GFC for the TSA was made in March 2002 and soon after, negotiations commenced on the types and magnitude of payments to be made for the UECC. CI-Guyana and the GFC reached a negotiated agreement on the annual royalty fees, but as stipulated in the national forestry Regulations - the acreage fees remained at 0.15 USD per acre. The GFC also requested a one-off payment of a Performance Bond. Additionally, the EPA requested an annual Environmental Permit Fee as a safeguard for the project.

On the 17<sup>th</sup> July 2002, CI-Guyana and the GOG signed the Lease Agreement for approximately 200,000 acres of relatively pristine rainforest thereby establishing the world's first conservation concession. The TSA provides CI-Guyana with a 30-year lease to a portion of State Forest within a watershed area of the upper Essequibo River for conservation management rather than timber production. This historic signing ceremony occurred at the Office of the President and

signaled the implementation of an innovative mechanism for forest management that will not only allow for biodiversity conservation and socio-economic development, but will also avoid forest degradation and contribute to the reduction of climate change.

#### ■ Conducted an inventory of timber stocks in the concession

Soon after receipt of the TSA, an inventory of the commercial timber species was conducted at the site. The aims of the inventory were to upgrade the national forest resources map and to receive information required to guide the development of a valuation model to achieve a more realistic value of the timber resources at the site. At that time, the development of a valuation model to accurately determine royalty payments was being considered, but as stated in the previous paragraph, CI-Guyana and the GFC opted for negotiated and mutually agreed royalty payments.

The fact that royalty payments were negotiated, it infers that the GFC is probably receiving more than the actual value of standing timber at the UECC.

#### ■ Implemented a Voluntary Community Investment Fund (VCIF)

In 2002 August, a Voluntary Community Investment Fund (VCIF) was implemented to provide for socio-economic development to the ARC communities for forgoing employment and other benefits that might have existed if logging was being done at the site. Because the NRDDDB represents the interest of the stakeholder communities, an MOU was signed between CI-Guyana and the NRDDDB for co-management of the VCIF.

## 4. Results

The experience so far provided by the UECC has confirmed that the idea of using "conservation concession" as an option to avoid forest degradation/deforestation is quite viable. The UECC provides the GOG with a win-win opportunity to retain sovereignty of its forests and exercise a national responsibility to conserve its natural resources, while at the same time generating financial benefits to support national development programmes. The UECC is also another demonstration of Guyana's commitment to the Convention of Biological Diversity (CBD) for the promotion of biodiversity conservation. This is a significant achievement for the country, which is still in the process of developing legislation for a national protected areas system. Therefore, in the absence of national legal mechanisms for protected areas, the UECC resulted in structured and effective conservation of 200,000 acres of intact (Figure 2) and biological important rainforest.



**FIGURE 2**

Aerial view of section of UECC.

Through the UECC a platform is now created for Guyana to become a beneficiary of carbon credits and/or other payment schemes for the provision of ecological goods and services such as clean air, quality freshwater and climate regulation. While countries (like Guyana) with negligible rates of deforestation and intact high biodiversity-value rainforests wait upon the proposed modifications to the Kyoto Protocol, the conservation concession presents opportunities for benefits from other forms of conservation incentive schemes. The remote location and management regime allowed the UECC to provide niche refugia for many species shy of the more accessible and impacted places. Though the biodiversity of the UECC is not yet fully understood, many species either endemic to Guyana or globally endangered are supported by the site, for example, the giant river otter (*Pteronura brasiliensis*), giant armadillo (*Priodontes maximus*), black caiman (*Melanosuchus niger*), jaguar (*Panthera onca*), and giant anteater (*Myrmecophaga tridactyla*). There is also a unique reef of the endemic greenheart (*Cholorcardium rodiei*) - Guyana's most valuable commercial timber species. According to the GFC, this reef is probably the limits of the greenheart distribution in Guyana.

Through the UECC the image of Guyana's forestry sector has also been enhanced. In fact, the GFC globally advertises the project to illustrate its commitment to SFM and to demonstrate that economic and ecological gains can



be accrued through the avoidance of destructive forest development. At present, the UECC allows Guyana (through the GFC) to receive a steady flow of revenue for the protection of standing forests rather than from the extraction of trees for lumber.

The local communities have also demonstrated strong support for the UECC - mainly because of their dependence on its resources for their livelihoods and their desire to secure their nearby forests from the perils of destructive development and still receive socio-economic benefits. Since implementation, the local communities have expressed satisfaction with the project, which allows them to keep the trees standing rather than being logged, conserve their food resources, maintain traditional practices and still receive employment, training and community development. To date, funds disbursed under VCIF have contributed significantly to their welfare and livelihoods. For instance, a vibrant sheep and mutton production project was established at Apoteri, eco-lodges were constructed for Rewa (Figure 3) and CrashWater received a sewing and craft centre. These communities collaborated with the NRDDDB to identify and conduct feasibility analyses of the projects prior to submission of proposals to the VCIF Steering Committee. In addition to employment received through the VCIF, the communities also benefit annually from temporary sources of employment (on average 20 persons per year) for the implementation of on-site project activities. The four graduated Rangers (who are residents of the ARC



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**FIGURE 3**  
Edward's Eco-lodges at Rewa Village.

communities) are permanently employed by CI-Guyana. Collectively, they manage the Field Base at Apoteri and routinely monitor the site to ensure its biological integrity is not being jeopardized.

Since its implementation, the UECC has influenced similar initiatives in other countries such as Peru, Guatemala, Democratic Republic of Congo and Sierra Leone.

## 5. Conclusion

The UECC has successfully proven that conservation concessions could be modeled after standard timber concessions to safeguard pristine high biodiversity value rainforest from forest degradation and deforestation. Thus, it is an excellent strategy to achieve biodiversity conservation, avoid forest degradation and promote economic development at both national and local levels. It presents a win-win opportunity for the GOG to enter into transactions with a willing buyer of forest conservation without the need to alter existing legislation or surrender sovereignty over the country's natural resources.

Successful implementation was due to a well structured stakeholder management strategy that included the combination of conservation education and awareness programmes with consultation meetings. This approach allowed for transparency and total participation thereby giving all stakeholders a direct stake in conservation management of the site

At present a few limitations/constraints to Guyana's model of a conservation concession are as follows:

- The current national Forest Act under which the UECC was allocated only provides the concessionaire rights to "forest produce," that is, timber and other botanical non-timber forest products. So far, CI-Guyana has received the assurance and support of these State Institutions to withdraw any interest in land uses that are incompatible to the goals and objectives of the UECC;
- Due to an unexpected decrease in the availability of funds for project management CI as a not-for-profit NGO was compelled to aggressively fundraise to sustain the payments of annual acreage fees and royalty. To date, the UECC has been financed by the Global Conservation Fund and Save Your World, an American-based company that specializes in organic cosmetics and donates a percentage of each product sold to finance the concession fees;
- The current global principles of the Kyoto Protocol inhibit the UECC from receiving real cash benefits for reduced emissions of carbon due to avoided

deforestation/forest degradation (RED/D). To counter, CI has adopted and institutionalized a policy on climate change that includes avoided deforestation. Simultaneously, CI through CI-Guyana is collaborating with the GOG on global policy initiatives to ensure that the UECC and Guyana as a whole benefit from carbon trading through the avoidance of forest degradation.

Though there are constraints, the benefits of the UECC outweigh the limitations. In conclusion, the project allows conservation outcomes to be achieved, provides an option for the avoidance of forest degradation to reduce emissions of atmospheric carbon, promotes socio-economic development and will ultimately contribute to the prevention of global climate change.

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