



ORIGINAL RESEARCH ARTICLE

A 'Win-Win' Strategy for All? Guyana's Climate Change Strategies and Implications for Indigenous Communities

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Abstract: *In the contemporary global political context of stringent conservation policy and low carbon economies, Guyana has positioned itself between two divergent paths of development and identity: 1) its desire to entrench itself as a competitive player in the global economy, and 2) its goal to pursue a more ecologically sustainable model of development. Focusing on Guyana's controversial Low Carbon Development Strategy (LCDS) and its Reduction of Emissions through Deforestation and Degradation (REDD+) framework, this paper critically explores the increasing marketization of forest management and climate change governance and their implications for negotiating Indigenous rights and participation in national and global climate change and conservation policies and debates.*

Keywords: Guyana, Climate Change, Indigenous People, REDD+, Forest Management, Marketization

CONTEXT

The Caribbean nation of Guyana is almost iconic in its positioning between two divergent paths of development and identity: 1) its desire to entrench itself as a competitive player in the global economy, and 2) its goal to pursue a more ecologically sustainable model of development. With the intention of demonstrating to the

world that Guyana need not choose *between* national development and climate change mitigation, it is attempting to forge its divergent development paths into one ambitious course. The current Government of Guyana, led by the People's Progressive Party/Civic (PPP/C) and its international benefactors have developed a broad-based strategy framework for mitigating climate change and deforestation. Guyana's *Low Carbon Development Strategy (LCDS)* is based on the United Nations Framework Convention on Climate Change's (UNFCCC) *Reduction of Emissions through Deforestation and Degradation (REDD+)* framework and is targeted at: i) developing ecosystem monitoring and management systems, ii) low-carbon development initiatives based on mitigating deforestation and degradation of forests, iii) stimulating investment and market incentives in compensation for protecting forest and ecosystem services, and iv) strengthening institutional capacity and benefit-sharing mechanisms from market-oriented activities.

Similar to other REDD+ projects in forested nations of the global South, the LCDS in Guyana is portrayed as a relatively inexpensive and quick option for mitigating climate change and effecting transformational change in resource management and economic development models. Moreover, it allegedly represents a win-win solution for a broad spectrum of stakeholders involved with forest management and development at global, national and sub-national levels, including governments, commercial actors, Indigenous and forest peoples, donor nations and institutions; conservation NGOs, and the global community. Large, results-based funding streams from mainly international sources, and broadly defined and participatory projects are intended to contribute to protecting forests, environmental governance *and* low carbon development goals. Hence, REDD+ projects are considered innovative and markedly different from dominant climate policy which often privileges economic development goals whenever they collide with environmental conservation and local development priorities (Pielke 2010). The LCDS also aims to engage Indigenous and forest-dependent peoples and provide livelihood alternatives for them. While the broad vision and rhetorical commitments fueling the LCDS appear to be participatory, equitable and responsive, however, the differential positioning of competing stakeholder interests, endemic corruption and market ethos undermine potential benefits — particularly for Guyana's Indigenous communities.

In this paper, I critically explore the terrain of the LCDS and REDD+ framework¹, within the context of the increasing marketization of forest conservation and climate change policy. In particular, I trace their implications for affected Guyanese Indigenous communities and territories, especially with regard to negotiating Indigenous rights and participation within emergent forest governance strategies. Salient to this discussion are:

- i) climate justice for Caribbean nations and Indigenous peoples;
- ii) examination of the global REDD+ framework, Guyana's LCDS and the Norway-Guyana Agreement;
- iii) the Government of Guyana's capacity for mitigating corruption and providing forest governance within the context of the LCDS;
- iv) the implications of forest marketization and carbon markets for Indigenous peoples;
- v) foregrounding Indigenous peoples' rights, engagement and benefits within the LCDS context; and
- vi) critical challenges for ecologically sustainable development in Guyana.

Despite the high profile of climate change science and governance, there has been a systematic neglect of the effects of new climate change policies on Indigenous and other vulnerable forest-dependent communities (Salick & Byg, 2007). Hence, this paper problematizes current global and national policy discourses on climate change governance and market-oriented forestry conservation that fail to accommodate the development priorities and complex local realities of affected Indigenous and forest peoples (Adger et al. 2001). It also examines internal and external constraints on effective forest governance and meaningful engagement of Indigenous peoples' rights and participation in the Guyanese REDD+ context. While the paper focuses more on Guyana, the critique offered is germane to critical literatures on global environmental change, conservation and Indigenous peoples, marketization of forestry and development studies in Latin American and Caribbean. It also provides a cautionary tale for other heavily forested nations with Indigenous and/or forest-based populations that are pursuing REDD+, payments for ecosystem services, and other forms of global carbon offset mechanisms in an effort to balance economic and ecologically sustainable development imperatives.

NEGOTIATING CLIMATE JUSTICE FOR THE CARIBBEAN AND INDIGENOUS PEOPLES

Caribbean nations and Indigenous and forest peoples are both particularly vulnerable to the impacts of climate change. They disproportionately bear the environmental and social burdens of deforestation, mining, the oil and gas fuel production cycle, and climate change (International Climate Justice Network 2002) that cause ecological degradation of forests, habitat and biodiversity loss, pollution and carbon emissions, increased temperatures, coral reef bleaching, more intense hurricanes, rising sea levels and flooding, mud slides, changes in agricultural patterns, and epidemics. Such impacts threaten the food sovereignty, health, socio-ecological relationships, and local livelihood and economic security of Caribbean nations (Magrin et al. 2007; Mimura et al. 2007), and especially Indigenous and other vulnerable communities within them. Furthermore, in the context of the North-South divide that has been further entrenched by the global climate regime (Bishop and Payne 2010; Depledge and Yamin 2009), Caribbean nations and Indigenous peoples are disproportionately excluded from global governance discourses and policy-making related to climate change mitigation.

In response to this Important tenets have shaped the position of Guyana and other Caribbean nations in negotiating a global agreement on climate change (the Copenhagen Accord) at the COP 15 meeting, as well as subsequent rounds of negotiations at COP 16 and COP 17. Caribbean leaders and activists have pressured leaders of developed nations to commit to more aggressive mitigation of rising CO₂ emissions and greenhouse gases. Another priority has been to solicit funds from wealthier developed nations to develop enhanced response and adaptation mechanisms in Caribbean nations to deal with the impacts of climate change (Trotz, 2010). Guyana's primary adaptation challenge is flood risk, particularly along the low-lying coastal plain where the majority of the population and prime agricultural lands are located. The country's sea-defense system, a legacy of Dutch colonialism, has not been adequately maintained and is in imminent need of adequate flood abatement infrastructure including new drainage and irrigation structures (Office of Climate Change 2010; Trotz 2010). The existing vulnerability of Guyana's natural and man-made sea-defense systems have been exacerbated by the impacts of climate change such as increasing flood volume and frequency and

accelerated coastal erosion (Dalrymple & Pulwarty, 2006). For Caribbean nations like Guyana, coastal vulnerability represents a direct threat to key livelihood activities and incomes, human security, cultural identity and marine biodiversity (Bishop & Payne 2012).

With low technological and economic capacity, most Caribbean nations lack adequate mechanisms to respond and adapt to the impacts of climate change (Magrin et al 2007). The region is also vulnerable to imperial legacies and the volatile nature of the global economy, trade, and governance systems (Colchester 1997). Caribbean leaders, activists and academics have also been pressuring developed nations to commit to an enhanced technology transfer system whereby Caribbean and other developing nations will also be able to develop their technological capacity to support response and adaptation mechanisms (Trotz 2010).

Marking the beginning of a long and tenuous journey in global climate change governance, the work of the Ad Hoc Working Group on Long-term Cooperative Action and follow-up Cancún Agreements (COP16) and Durban Platform (COP17) appear to represent a watershed in terms of REDD+ projects. In particular, they contain rhetoric related to ensuring the full and effective participation of Indigenous and forest-dependent populations in REDD+ actions; as well as setting binding targets for emissions reductions on both developed and developing nations and full implementation of the Green Climate Fund to support developing countries with adaptation. However, a string of broken promises and a lack of binding commitment by many developed nations in the past three rounds of climate negotiations have made Caribbean nations and environmental organizations skeptical about whether they will actually receive financial investments and technology resources. At COP 17, CARICOM Deputy-General, Lolita Applewhaite (2010) stated, "It is more than unacceptable that the global community should walk away from the negotiating table in Mexico, without a legally binding agreement." Thus, after the disappointment and political apathy of the past COP meetings, Guyana and other Caribbean nations have set climate change as an integral part of the political agenda for the region.

Many Indigenous peoples from Latin America and the Caribbean been particularly outspoken regarding the undemocratic and imperialistic nature of the international COP meetings and negotiations and are actively struggling to attain climate justice

(Cultural Survival 2010; Salick and Byg 2007). Pivotal to the increasingly active participation of their representatives in national and global climate change policies and debates is the growing sociopolitical mobilization of Indigenous peoples around the world (Chung Tiam Fook 2011). Indigenous leaders and allies worry that unless Indigenous peoples reassert their rights to territoriality, self-determination, informed consultations, and free, prior and informed consent (FPIC) as guaranteed under the United Nations Declaration on the Rights of Indigenous Peoples, REDD+ actions may dislocate people from their lands and livelihoods (Zueras 2010). Indigenous struggles with the Government of Guyana's LCDS and other contested forestry and natural resource management policies indicate that "new initiatives are also needed to control mining, mitigate social and environmental impacts, support alternative livelihoods and ensure that Amerindians participate meaningfully in plans for reducing emissions from deforestation and forest degradation" (Colchester and LaRose 2012, iii).

THE REDD+ FRAMEWORK

The REDD+ Governance Development Plan and Low Carbon Development Strategy (LCDS) are an integral part of Guyana's overall policy framework on development, the National Development Strategy and the National Competitiveness Strategy (Norway-Guyana MOU 2009). REDD+ is overseen by the UNFCCC's Clean Development Mechanism, which is designed to provide cooperative solutions to the problems posed by climate change. It is a system of financial incentives paid to developing nations by conservation organizations, nations and companies with the goal of preventing destruction and degradation of forests and their carbon storage properties (Office of Climate Change 2010). The current REDD+ architecture is based on a more preventative and progressive ethos and has been expanded to include i) sustainable forest management, ii) forest conservation and iii) the enhancement of forest carbon stocks. These changes reflect different sets of respective interests (Angelsen et al. 2012), such as countries with an active forest-use development approach (e.g. Guyana and Indonesia); countries with plentiful forests and low deforestation (e.g. Guyana); and countries with growing forest stocks (i.e. India and China).

Since its full integration within the global climate agenda at COP 13 in 2007, the REDD+ framework has experienced many changes, spurred by the absence of a new global climate agreement, strong “business as usual” economic interests, and divergent ideological and politico-economic agendas (Angelsen and McNeil 2012). Alongside the global political and economic interests that have largely shaped the current REDD+, varied ideological narratives also play a significant role in shaping the framework and emerging debates. These narratives reflect the disparate paradigms framing broader environmental discourses (Hiraldo and Tanner 2012), such as 1) *market liberalism*: economic development and marketization of forests, 2) *institutionalism*: good governance, strong institutions and forest management, 3) *bio-environmentalism*: preserving the ecological value of forests, and 4) *social ecology*: social well-being and more democratic, rights-based approaches to emissions reductions. REDD+ continues to be a vague and ill-defined concept that gives space for numerous and often competing interest groups and ideological positions to interpret the framework according to their own agendas. This vagueness has factually contributed to the popularity of REDD+ amongst a broad coalition of disparate groups and nations.

However, the REDD+ framework is only as good as it is practicable and it is precisely in the operationalization of projects where powerful international, national and sub-national political and commercial interests can distort or dilute REDD+ objectives to their advantage (Angelsen and McNeil 2012). Reviews of REDD+ plans in Indonesia, Bolivia, Cameroon, Vietnam and Tanzania by the Centre for International Forestry Research (CIFOR) (Angelsen 2009; Angelsen and McNeil 2012) highlight important aspects of the current REDD+ architecture that are persistent challenges for operationalizing projects: i) resolving whether funding should be directed more at Indigenous and forest-dependent communities to conserve forests, or to compensate extractive interests for not deforesting; ii) ensuring high-level government commitment; iii) strong transparency and coordination within governments and between state and non-state actors; iv) ensuring participation and benefit-sharing and v) establishment of harmonized monitoring, reporting and verification (MRV) systems.

It is important to recognize that although the REDD+ system creates a broad ideological umbrella for different actors and networks to pursue their divergent political, social and economic interests — its particular historical context affects the way

Indigenous and forest peoples are regarded within the framework. The declaration from the Latin American Indigenous Forum on Climate Change (2010) indicates that the majority of forested areas targeted by governments and NGOs for REDD+ initiatives (e.g. Bolivia, Brazil, Guyana, Indonesia, Papua New Guinea) are located in Indigenous territories due to their historical protection by the peoples who dwell in them. However, the *Global Alliance of Indigenous Peoples and Local Communities against REDD+ and for Life* highlight that Indigenous peoples have not been recognized as rights-holders in the Copenhagen Accord, nor within many national climate policy discourses in individual countries. There has been, however, increasingly explicit rhetoric on the rights and participation of Indigenous and forest peoples within subsequent global agreements (e.g. Cancún Agreement and recent REDD+ documents) guiding the REDD+ system and global forest management (Sikor et al. 2010). Such references to Indigenous rights and participation importantly acknowledge the history of dispossession, political and territorial exclusion and cultural marginalization subjected on Indigenous and forest peoples within the context of past and contemporary forest, natural resource, land and wildlife management regimes.

While REDD+ has started to address Indigenous and forest peoples' rights as well as the problematic issues of the previous REDD system, there is need to critically explore how strategies such as the LCDS will resolve key challenges facing Indigenous communities. For example, decision-making and financing processes for REDD+ projects continue to be mostly centralized and top-down, and do not provide meaningful forms of consulting and participation for Indigenous peoples and other affected populations. In response, the Coordinator of Indigenous Organizations of the Amazon River Basin's (COICA) *REDD+ Indigena Plan* was proposed by its constituent Indigenous Nations of the Amazonic region (Guyana, Suriname, Brazil, Ecuador, Peru, Colombia, and Bolivia) at the COP17 meeting (Vanguardia 01-12-12). The COICA Plan recognizes forest-dependent Indigenous peoples as having the expertise to conserve forests and protect ecosystem services such as carbon storage, as a primary strategy for climate change mitigation. It demands that critical funds for REDD+ projects be directly invested into affected Indigenous communities and their institutions to support local forest conservation and low carbon initiatives — rather than funds invested in carbon market schemes. The COICA Plan also calls for

National level climate mitigation policies related to forestry management and economic development to be collaborative with Indigenous and forest peoples and to promote adequate accountability mechanisms.

TOWARDS DEVELOPING A LOW CARBON, “GREEN” ECONOMY IN GUYANA

Juxtaposed between its Amazonian bio-geographic location in South America, and its historical and cultural groundings in the Anglo-Caribbean, Guyana is unique in the Latin American and Caribbean region. Guyana’s diverse forest, mountain, wetland and savannah ecosystems comprise important features of both the Amazonian basin and the Guiana Shield bioregions in South America. In particular, its forests and non-timber forest products, wetlands, minerals, and wildlife are significant to the ecological and cultural integrity of the region. Guyana’s peoples and cultural traditions are also diverse and rich, including nine Indigenous nations and communities of Indian, African, Chinese, Portuguese, other European and mixed ancestry.

Like other countries in the region, the post-independence nation state of Guyana has inherited many of the political, economic, and cultural legacies of the colonial era; these colonial legacies are constantly being reconstituted through intensified global economic development (Black and McKenna 1995). Guyana’s ecosystems have historically experienced relatively little anthropogenic pressure due to low population densities and a minimal level of international development and investment. The past three decades have marked a period of competing national and foreign development interests over Guyana’s lands and resources and the country’s interior has been increasingly opened to extractive industries, such as logging, mining and petroleum exploration. Guyana continues to be heavily dependent upon export of unsustainable renewable exports such as timber, and non-renewable exports such as gold, bauxite and oil. Hence, the nation has succumbed to the standard development paradox of which “rising [national] incomes lead to falling standards of living” (Colchester, 2005, p. 289). This applies for the majority of Guyanese people but, in particular, for the nine Indigenous nations, who have increasingly become targets of development schemes.

In its efforts to liberalize the economy and make it attractive to foreign investment, the present Government of Guyana has been

introducing numerous waves of economic reforms (Office of Climate Change 2010). Guyana's National Development Strategy and National Competitiveness Strategy form the blueprint of the nation's economic development framework and have been retrofitted to resonate with the language of international climate change policy discourse. The government similarly purports that developing a low carbon economy in Guyana will sustain national economic growth while also strengthening local livelihoods and contributing to national and global climate security (Jagdeo 2009b). However, it remains questionable how such an ambitious low carbon development scheme will take shape, due to Guyana's firm entrenchment on disadvantageous terms within the current global economic system. Moreover, while the government has made numerous overtures regarding development of capacity building, employment and economic opportunities for Indigenous and other forest peoples, it has yet to concretely identify what those opportunities would be, or whether they would be commensurate with livelihoods culturally defined by the communities themselves.

Low Carbon Development Strategy

Guyana's LCDS represents the most ambitious and far-reaching strategy for climate change mitigation and ecosystem services-financing in the region, and Guyana is the first nation in the world to commit to national scale action on REDD+ (Office of Climate Change 2010). The Strategy uses REDD+ as its primary framework — and benefits from the UNFCCC, and numerous international state and institutional partners such as Norway, World Wildlife Fund, Conservation International and the Iwokrama International Centre for Rainforest Conservation and Development. The goals of the LCDS include contributing to global carbon abatement and climate change measures through protection of its forests; making Guyana's economy low in carbon emissions and more sustainable; developing national forest conservation policies; and uplifting Guyana's diverse communities from poverty (Office of Climate Change 2010). The LCDS also aims to incentivize Guyana to develop its economy and infrastructure in a manner that reduces carbon emissions, what the Office of the President describes as “a low deforestation, low carbon, climate-resilient economy” (Jagdeo 2009b; Office of Climate Change 2010 3).

Although development of adaptation mechanisms is of paramount importance for vulnerable nations like Guyana, particularly with respect to its sea-defense systems, there are numerous domestic challenges to adaptation, especially limited financial resources and technically skilled human resources (Hickey & Weis, 2012). With global climate governance and funding focused on mitigation, the government has focused on mitigation and infrastructural enhancement strategies like the LCDS as both a national priority and focus of global leadership on climate change mitigation. Paradoxically, Guyana contributes relatively negligible amounts of carbon and other greenhouse gas emissions into the atmosphere, yet suffers disproportionately from the threats of climate change stemming from *other* emitting nations. Furthermore, the REDD+ framework is targeted at areas with high levels of deforestation, and Guyana has a low level relative to both regional and global levels (Colchester and LaRose 2010). Hence, mitigation policies focused on a low carbon economy could be made less a priority — with more donor funds (e.g. the Norway-Guyana Agreement) invested toward adaptation capacity-building and mechanisms such as developing new models of social, economic and technological capacity (Bishop & Payne 2012).

Due to both their increased vulnerability to the impacts of deforestation and climate change, and their long-evolved environmental adaptation skills, Indigenous peoples in Guyana are at the forefront of the issue of adaptation. Adaptation technologies such as livelihood adaptation, land reclamation, water conservation, irrigation, shifting farm cultivation, rotational fishing and hunting, cultural resiliency, location and elevation of plant cultivation have been used by Indigenous peoples in Guyana to cope with biodiversity and harvest losses due to climate shifts. As climate change, deforestation and forest degradation increasingly threaten biodiversity and Indigenous people's livelihoods, they simultaneously threaten people's natural defenses against variation and change that traditionally utilize biodiversity in innovative ways (Salick & Byg 2007). The LCDS mentions that it will assist Indigenous people in adapting mitigation strategies to combat climate change (Office of Climate Change 2010), yet the only comprehensive adaptation-oriented strategy that the LCDS has designated for Indigenous communities is the Community Monitoring, Research and Verification project (C-MRV). However, the C-MRV project has been led and supported by communities

themselves, and their institutional partners, rather than by the Guyanese government.

Norway-Guyana Agreement and Carbon Trading

The LCDS has been endorsed and financed by the Norwegian Government and are enshrined within a Memorandum of Understanding (MOU) between Guyana and Norway (2009). The MOU particularly details Guyana's performance-based commitment in return for conditional payments up to US\$250 million, to be paid in annual installments by Norway to the Guyana REDD+ Investment Fund (GRIF) by 2015. These payments are based on Guyana's provision of forest climate services, performance in forest conservation and structuring of a low carbon economy based on carbon abatement strategies.

In an effort to become the first nation to achieve carbon neutrality (a net zero carbon footprint)², Norway's International Climate and Forest Initiative works closely with developing country governments and NGOs to reduce emissions from deforestation and forest degradation and has forged similar bilateral REDD+ agreements and financial investments with Brazil, Indonesia, Democratic Republic of Congo and Tanzania (Norway Ministry of the Environment 2012). Although there continues to be no progress by global parties to establish a standardized forest carbon market (as of COP 17), the carbon market is already becoming a multi-billion-dollar global industry in the marketization of climate change and ecosystem services (Schapiro 2009). A study conducted by the McKinsey Group consulting firm concludes that a poor country like Guyana would need to be compensated between US\$430 million and US\$2.3 billion from international donors to not degrade its forests for the sake of economic development (Colchester & La Rose 2010; Zoltan 2010). Hence, to conserve Guyana's forests and ecosystem services for the benefit of Guyana and the rest of the world, the government expects annuity payments -- called Economic Value to the Nation (EVN) -- from Norway and other developed countries, of US\$580 million (Office of Climate Change 2009).

The basic premise of carbon markets is this: highly emitting nations (like Norway) and industrial firms (like General Motors) cultivate an 'environmentally clean' public image by offsetting their 'unavoidable' carbon emissions produced through industrial and energy production and transportation through investment in

carbon emissions reduction initiatives or the purchase of credit-trading rights to an area of forest (also called ‘avoided deforestation’) in heavily forested developing countries such as Guyana and Brazil. In documented cases from other REDD+ countries (Angelsen 2009; Schapiro 2009; redd-monitor.org), many Indigenous and forest-dependent populations have become increasingly vulnerable and, in some countries, have been dispossessed from their lands and livelihoods. Rather than industry actors from developed nations investing in ecologically sustainable technologies and carbon mitigation strategies to reduce localized and aggregate carbon levels, they can instead support conservation and REDD+ initiatives in countries like Guyana where emissions are already very low. As Marina Silva, Presidential candidate for Brazil’s Green Party states, “America needs to reduce its own emissions first, before Brazilian forests are put on the table. Otherwise, we are going to transfer the problem one more time to the developing countries. And the developed countries are going to continue their same practices. The problem is not going to stop” (In Schapiro 2009). There is also concern by Indigenous and other critics of REDD+ and global carbon trading schemes that Guyana’s cooperation with Norway on the LCDS amounts to a form of “green imperialism” by wealthier developed nations to take control of Guyana’s forests and ecosystem services (Jagdeo 2009; Lohmann 2012).

Addressing the Government’s Capacity for Forest Governance and Mitigating Corruption

The Government of Guyana has been ideologically and politically motivated by a mixture of the market liberalism and institutionalism paradigms underpinning REDD+ (Angelsen and McNeil 2012) in its design and institutional preparation for the LCDS framework. It seems to vacillate between intensely prioritizing economic development and forest marketization on one hand, and on the other, rhetorical commitments to providing good governance, and strong transparency and anti-corruption institutions related to forest management and low carbon economic development. However, liberalizing the economy, privileging development based on extractive industries (that often lead to deforestation and degradation), and top-down institutions of power appear to win out over developing more democratic, transparent and sustainable forest governance institutions.

Despite the Norway-Guyana MOU's stipulation to strengthen transparency and credibility of forest management practices and authorities by establishing an Independent Forest Monitoring (IFP) mechanism in Guyana (Braatskar & Stub p.c. 2011), there has been no IFP of the government's proposed LCDS projects, or public outreach and consultation actions to validate whether Guyana is eligible for further payments from Norway. Furthermore, the government has not provided any forum for public participation or debate on the GRIF project proposals or concept notes that have been submitted to the GRIF Steering Committee. Most of the GRIF funds continue to be retained in trust by the World Bank until appropriate projects adhering to the environmental, social and anti-corruption safeguards and procedures of Partner Entities are approved by a GRIF Steering Committee comprised of representatives of the Governments of Norway and Guyana. To date, the only LCDS projects that have been approved are the *Institutional Strengthening* project to enhance national institutional capacity in Guyana including Monitoring, Research and Verification (MRV), and the *Amerindian Development Fund* (Multi-Stakeholder Steering Committee August, 2012). The *Amerindian Land Titling* project; *Micro and Small Enterprise Development and Building Alternative Livelihoods for Vulnerable Groups* project and *Cunha Canal Rehabilitation* adaptation project are being reviewed and awaiting approval. All other project documents are under development, negotiation or internal review.

Guyana's Readiness Preparation Proposal (RPP) was prepared in by the government in 2009 to persuade the World Bank's Forest Carbon Partnership Facility³ that it had adequate economic and political systems in place for restructuring a low carbon economy and national development strategy to achieve emissions reductions. A briefing compiled by the Forest Peoples Programme (2009), however, highlights numerous shortcomings including a lack of i) targeted independent consultation with Indigenous peoples, ii) effective public participation mechanisms, and iii) rigorous measures to clarify and respect Indigenous peoples' rights to lands, resources, livelihoods, and free, prior and informed consent (FPIC).

An important conditionality that Norway has specified, and one that appears to be particularly challenging for the current Government of Guyana is the implementation of robust anti-corruption measures to ensure transparency and accountability (Norway-Guyana MOU 2009). An integral element of the LCDS and

the *Institutional Strengthening* project is strengthening the capacity of the regulatory agencies vested with providing good governance in forest management and implementation of the LCDS: the Guyana Forestry Commission, Guyana Geology and Mines Commission and the Environmental Protection Agency. Furthermore, the European Union (EU) has demanded that Guyana comply with international regulations that ensure only legally harvested lumber and products are produced and exported if it is to continue selling its forestry products to the European market.

However, Guyana's forestry sector is characterized by centralized and poorly enforced forestry laws; constrained financial and technical resources; unfettered state forest access given to transnational extractive companies; badly managed and illegal logging and mining activities; and the long-term absence of accountability mechanisms (Bulkan and Palmer 2007; Colchester 1997; Colchester and LaRose 2010). Widespread unsustainable and illegal logging practices, and abuse of foreign direct investment incentives by Guyana's largest logging company and concessionaire, Barama Company Limited reveal that the "government's long-term lack of action on the illegalities suggests strongly that weaknesses in governance include deep and widespread corruption" (Bulkan and Palmer 2007, 13). Many of the government's forestry policies and laws are either not applied or are applied selectively, depending on the nature of politico-economic interests at stake. While national forestry management policies under the National Forest Policy (1997) and National Forest Plan (2001) exist to promote in-country, value-added processing of lumber, illegal logging and trade in unprocessed logs to Asia, and gold mining in forested areas continue unabated in Guyana (Bulkan and Palmer 2007). Such political and economic constraints and mismanagement in forest governance by the Government of Guyana have led to systemic corruption and misuse of forest revenues by political and corporate elites, and contributed to the degradation of forest ecology and the social welfare of Indigenous and forest-dependent communities (Abraham et al. March 24, 2011; Amerindian Peoples' Association 2010; Kaieteur News July 26, 2011). This scenario, consequently, presents significant risks for corruption in REDD+ financing and could compromise the ability of the government to carry out the LCDS and fulfill its forest conservation, emissions reduction and economic development targets.

The government's preoccupation with "greening" its global image through climate change strategies and "offering" Guyana's forests to the world as a natural form of carbon abatement — appears to be an attempt to gloss over the persistence of corruption, lack of accountability and poor governance within the forestry, natural resource and mining sectors (Chene 2010). It claims that the low rate of deforestation in Guyana "is largely due to the strong forest management practices that are in place" (Guyana Ministry of Natural Resources and the Environment, 2012). However, in light of the government's weak forestry and natural resource management performance, more probable sources for the low-level of deforestation in Guyana appear to be i) low commercial demand for conversion of forest to agriculture due to the low fertility level of rainforest soils and ii) the poor road infrastructure into forested areas which has made forestry and mining activity costs prohibitive for many domestic and transnational firms (Palmer p.c. 2012).

Extractive industries like mining, logging and oil exploration in Guyana result in deforestation and ecological degradation and are particularly inimical to REDD+. A recent consultant's interim report on Guyana's REDD+ Monitoring Reporting and Verification System (MRVS) (Pöyry Forest Industry 2011), found that during the first year of the LCDS (2009-2010), the rate of deforestation tripled relative to the mean rate of deforestation during the benchmark period of 1990-2009. The report also confirmed that mining continues to be the primary driver for deforestation in Guyana (91%), with logging a relatively minor contribution (Pöyry Forest Industry 2011). With the intention of assuring the public that the LCDS does not commit all of Guyana's forests, the government has stated that lands under concession to transnational companies, Indigenous lands (that have not been opted in), privately owned lands and ten percent of other forests will be excluded from the LCDS (Office of Climate Change 2010). Since mining, logging and oil and gas exploration occurring on lands under concessions are already major sources of carbon emissions, however, this scenario seems contradictory.

There is thus considerable reason to question the Office of the President's claim that they are departing from the "business as usual" approach to development they equate with richer developed nations' "high-carbon development path" (Office of Climate Change, 3). The government's stated commitment to bypassing the high-carbon development path of already-industrialized nations, and

providing leadership for a global coalition of developing nations seeking a more sustainable and innovation low carbon path, speaks to the potential for transformational change. As argued above, the government continues to engage in business as usual development policies that directly or indirectly support deforestation and forest degradation. These status quo policies include i) forest industry policies, selective concessions and other incentives that favour unsustainable industry and political interests and ii) undemocratic and inequitable economic, regulatory and governance frameworks that do not devolve rights to Indigenous or local stakeholders and are evident in other REDD+ countries (Angelsen et al. 2012). Furthermore, the government's claims that sustainable forest management policies are enforced and generally practiced (Guyana Ministry of Natural Resources and the Environment 2012) are not only questionable, but they raise serious concerns as to the government's ability to provide transparent and democratic governance on the LCDS.

ABSORBING INDIGENOUS PEOPLES INTO FOREST MARKETIZATION

Climate change mitigation policies like REDD+ have attempted to open spaces for more participatory approaches that include Indigenous peoples while, paradoxically, increasingly entangling Indigenous peoples within market-oriented approaches (Berkes, 1999; Madzwamuse, 2010). The policy thrust of global climate regimes, international conservation organizations and national governments is to insert Indigenous peoples within market-oriented conservation networks as conservation business partners. In particular, the government has sought to engage Indigenous actors into the LCDS by using an overtly economic discourse focused on the "business of climate change" (Jagdeo 2010) and the government's important partnership with Indigenous communities to protect the carbon abatement value of their forests and to advance the economic development of Guyana.

Although the new REDD+ system is not considered exclusively market-based (Angelsen and McNeil 2012), the LCDS is entrenched in a more market-oriented orthodoxy and oriented toward forest-based economic growth that aims at protecting natural environments and reducing poverty, while providing economic incentives through business frameworks and the creation of global markets for environmental goods and services (Chung Tiam Fook

2011). Indigenous peoples comprise 9% of the population and communities whose titled lands consist of forests and wetlands are particularly important to the viability of the LCDS and REDD+ projects such as payments for ecosystem services (PES). Hence, there is political pressure to ensure full Indigenous cooperation and support for PES and Indigenous actors are being sought as key stakeholders in this process. With an increasing global recognition that tropical forests and the ecosystem services (e.g. carbon storage and maintaining biodiversity) they provide are life-sustaining and thus extremely valuable to human survival and development, numerous markets have emerged, both voluntary and legally mandated (Thomas 2009).

A defining feature of REDD+ has been the use of financial incentives like payments for ecosystem service (PES) to change the behaviour of forest owners and users: by making forest conservation and sustainable use more profitable than overharvesting or cutting down forests (Angelsen & McNeil 2012; Sunderlin and Atmadja 2009). PES is a market and performance-based approach to forest conservation and climate change mitigation, and has become a central feature of both Guyana's LCDS, and the multi-country sustainable development and integrated eco-regional management *Guiana Shield Initiative* (EuropeAid 2006). The PES system values Guyana's forest services, particularly carbon storage and abatement, as public goods to both Guyana and to the world in that they benefit everyone when they are healthy; and harm everyone when they are degraded or destroyed (EuropeAid 2009). Some of the emerging markets for Guyana's environmental and ecosystem services are: ecosystem-based carbon offsets and carbon trading, water quality trading, wetlands banking, biodiversity credit trading programs, ecotourism, and payments for hydrological services (Thomas 2009).

However, it is very difficult to marketize ecosystem services, or to incentivize forest managers and users to factor the value of these services into their management decisions because they are less tangibly defined there are, therefore, less commodifiable (Angelsen and McNeil 2012). Creating a market for forest and other ecosystem services in Guyana requires four critical elements: 1) the existence of a quantifiable commodity or service, 2) service providers/sellers who have the rights to sell the service, 3) service buyers and 4) established market institutions with associated regulations (Angelsen and McNeil 2012). Few of these elements are

in place in Guyana or other REDD+ countries. Furthermore, service providers are not well-defined and the issue of rights is nebulous and highly contested, particularly where Indigenous land rights are concerned. Buyers of REDD+ credits (mainly public funding and development aid in a performance-based system like the Norway-Guyana Agreement) are often precarious; and the rules of the global market institutions are not well-established. Since the PES system and markets for ecosystem services have yet to develop, the current REDD+ system aims at transformational movement beyond the forestry sector and a strictly market-based, PES approach toward a more broad-based framework that also examines REDD impacts from sectors such as mining and agriculture (Angelsen et al. 2012).

The privatization and marketing of forests as products and services according to external economic values and accounting principles for the purpose of conserving them and mitigating climate change, has been ideologically questioned by many critics of the REDD+ system (Lohmann 2012), market-oriented conservation (Brockington et al. 2008) and privatization of the commons (Ostrom and Nagendra 2006). Moreover, the marketization of nature is a fairly incomprehensible concept for many Indigenous people in Guyana and elsewhere. Indigenous people do not *customarily* perceive ecosystems, animals and plants as commodities with a market value, nor the life-sustaining processes and functions of ecosystems as marketable services. Tom Goldtooth, Director of the Indigenous Environmental Network captures Indigenous people's contentions:

What's happening is that in this whole market system is that it's put a market value on traditional people and traditional teachings — those things that we hold sacred to our people...They're trading air that is sacred. We're looking at some spiritually profound values that people of industrial society really have a difficult time grasping (Lang, 2009).

Critical Challenges for Indigenous Peoples

However, for REDD+ projects to *practicably* redress the historical exclusion of Indigenous peoples, arrangements such as ensuring: peoples' participation in political decision-making, equitable distribution of forest benefits, and recognition of people's environmental and cultural identities (Sikor et al. 2010) must be central to the functioning of the framework.

There is much more work to be done by government and other LCDS institutional partners in terms of on-the-ground engagement with Indigenous actors to: i) communicate how projects work, and the opportunities, risks and responsibilities involved; ii) meaningfully engage Indigenous peoples' knowledge and informed decision-making in the design and implementation of projects; iii) balance forest protection, ecologically and socially sustainable economic development opportunities, local priorities and social welfare and iv) promote democratic mechanisms for negotiation, decision-making, benefit-sharing and power-sharing (Resosudarmo et al. 2012).

The LCDS could have local, national and global benefits in terms of promoting and protecting the ecological integrity and health of tropical forests, contributing significantly toward abatement of global carbon emissions, and promoting internationally recognized 'best forestry practices' (Trotz 2010). However, in addition to important adaptation and Indigenous community development projects, the LCDS also includes investment into mega infrastructural plans for roads, large dams like the Amalia Falls Dam (the flagship LCDS project), 'high-end' industrial agriculture, and more "sustainably" managed logging and mining activities "which risk undermining indigenous livelihood systems, fragmenting Amerindian territories and opening up traditional lands to large-scale development" (Griffiths & Anselmo 2010, 4).

As highlighted by the existence of the REDD+ *Indigena plan*, the REDD+ approach needs to be transparent, collaborative, consultative and participatory – particularly with relation to Indigenous and other forest-dependent communities. Moreover, the REDD+ approach is expected to move beyond the hollow rhetoric and non-binding promises that have unfortunately come to typify many United Nations regulatory and negotiations frameworks. The think tank *redd-monitor*, which acts as a critical forum on global REDD+ actions and their implications for developing countries and Indigenous and forest peoples, identifies a number of systemic challenges facing the REDD+ plan's aims to mitigate climate change through global cooperative and economic mechanisms. These include: "monitoring the state of forests and the volumes of carbon either being emitted or stored; preventing 'avoided deforestation' efforts in one location simply shifting the problem elsewhere; and finding ways that funding can be distributed to the people living in the forests – who should

ultimately make the decisions about whether their forests stand or fall” (redd-monitor 2010).

Foregrounding Indigenous Rights within the LCDS

Within the contexts of the LCDS framework and international dialogues on climate change, the Government of Guyana has reformulated its rhetoric on Indigenous Peoples to be much more inclusive of their rights to land title, consultation and participation. Moreover, the government identifies protecting Indigenous peoples’ rights as one of the principles to be enshrined within the framework (Office of Climate Change 2010) and purports to recognize: i) extant Indigenous land demarcation and titling rights and mechanisms under the amended Amerindian Act of 2006; ii) Indigenous peoples as traditional managers of Guyana’s forests; iii) developing a benefit-sharing mechanism for participant communities; and iv) Indigenous rights to FPIC. This rhetoric reflects the government’s strategic interest in engaging Indigenous peoples as important stakeholders within the LCDS. However, the government’s acknowledgment of Indigenous rights at the policy and public relations levels of the LCDS process can only become meaningful if Indigenous peoples have the space and recognition to actively participate in political decision-making regarding their own lands, forest management, local development and governance affairs (Ribot et al., 2008). As Andrew da Silva from Arakumai Village states, “There can be no REDD without rights” (APA Press Release 2010).

Although supportive of the LCDS and its potential benefits, Indigenous leaders in Guyana have petitioned recognition of their rights to: actively and fully participate within planning, decision-making and other management processes related to forestry conservation and local economic development; and equally benefit from the social and economic incentives derived from conservation activities. Participants from an information workshop on LCDS, REDD+ and safeguarding Indigenous rights held in June, 2009, collectively affirm “Recognizing that the indigenous peoples of Guyana are the historical guardians of the forest, we in principle support proposals that aim to protect standing forests where these initiatives fully respect and secure our rights and value our traditional knowledge and practices” (APA 2009).

Three years later into the LCDS process, however, many Indigenous leaders and actors continue to seek concrete answers

from the government in response to questions such as: i) Can the LCDS address direct and underlying causes of forest loss in Guyana (i.e. mining and forestry); ii) How will a fair market value for carbon be developed? iii) Will Indigenous rights to lands and territories, with their associated vegetation and carbon stores, be recognized – and in accordance with the Amerindian Act and national legal frameworks? iv) How will Indigenous peoples benefit from any revenues that will flow to Guyana under these projects and how would it be assured that benefits are distributed equitably? (Colchester & La Rose 2010).

For REDD+ projects like the LCDS to practicably redress the historical exclusion of Indigenous peoples, arrangements such as ensuring: peoples' participation in political decision-making, equitable distribution of forest benefits, and recognition of people's identities (Sikor et al. 2010) must be central to the functioning of the framework. Participation of Guyana's Indigenous peoples in LCDS decision-making regarding local capacity development, land tenure, forest management, ecologically and socially sustainable economic development and climate governance needs to happen at multiple levels (community, regional, national and international) for genuine forest rights and benefits to be accorded to Indigenous peoples. The LCDS requires complementary decision-making; monitoring, research and verification; and implementation processes at the local level as well at the national level because the community level is where Indigenous and forest actors determine the particular clusters of rights, roles, responsibilities, risks and benefits — as well as their distribution — that make sense for their communities (Sikor et al. 2010). Acknowledgment of Indigenous rights and participation within the LCDS also implies government and institutional recognition of Indigenous peoples' particular environmental, cultural and social identities; historical experiences of political, territorial and social exclusion; contemporary realities; and visions for the future (Sikor et al. 2010). Most Indigenous peoples have been rendered outside of the political and cultural mainstream and find their own cultures and histories devalued, essentialized or hybridized by the state and mainstream society in Guyana (Chung Tiam Fook 2011). Due to their long histories, socio-ecological relationships, and customary forestry and environmental management practices, Indigenous peoples and their institutions are crucial to the implementation and viability of the LCDS -- and any other environmental policy that affects their livelihoods, communities and territories (Chung Tiam Fook 2011).

Recognition of land rights, particularly formalization of land demarcation and titling, is a significant and controversial issue to Indigenous peoples in Guyana. Land rights refer to rights of tenure and/or use of land (inasmuch as these may be different) and with respect to Indigenous and traditional communities in Guyana, they may be recognized under legal treaties or titling grants by the government or as *de facto* customary rights. Derivative entitlements from territorial rights are collectively categorized as customary rights such as: cultural rights, decision-making rights, environmental management and self-governance rights, spiritual and ceremonial rights (David et al. 2006). Griffiths & Anselmo's (2010) study on Indigenous sustainable livelihoods in Guyana highlights community members' concerns that many national and international development and environmental management programs are often based on inappropriate and imposed models "and often fail to understand Indigenous land and resource use" (2010, p. 5).

One of the featured objectives and investment priorities of the LCDS is to facilitate and expedite the process of granting communal land tenure rights to Indigenous communities -- including demarcation, titling and issuance of village extensions for villages and territories. By the end of 2011, the Ministry of Amerindian Affairs aims to demarcate twelve titled Amerindian villages, title thirteen untitled villages, and address ten requests for village extensions. Further titling and demarcation of outstanding requests will be rolled out by 2014. However, there are discrepancies between promises made by the national Government and the Ministry of Amerindian Affairs, and what many Indigenous leaders and activists see happening on the ground. Furthermore, there is no neutral forum for resolving discrepancies or for Amerindian communities to articulate their own priorities and rights free of government pressure and influence -- other than the colonial and ineffective Amerindian Lands Commission (Palmer, p.c. 2011).

The 2006 revised Amerindian Act called attention to the government's antiquated Amerindian Lands Commission land titling mechanisms and has facilitated the land demarcation and titling resolutions processes in many outstanding cases. While 104 out of 169 Amerindian communities (inclusive of satellites, settlements and villages) in Guyana have been granted legal title to the lands they occupy and use, communities in many regions throughout Guyana (including Regions 1, 2, 7, 8 and 9)⁴ continue to

be in limbo regarding fair resolution of land claims and title extension (see Table 2). Until their land claims and extension discrepancies are resolved, the remaining untitled communities are left without a voice or opt-in opportunity for the LCDS and its implications for Indigenous peoples. The LCDS framework automatically includes Guyana's state forest estates, but not forests on Indigenous *titled* lands. However, since titled lands are under the jurisdiction of Indigenous communities, the government has stated that *only* titled communities will be given the right to opt in, or out, as stakeholders in the LCDS. Hence, untitled communities with pending demarcation and/or title requests have no right to decide on whether they want low carbon economic schemes rolled out on their lands -- as their territories are considered state lands.

The UNFCCC outlines a clear provision for free, prior and informed consent and the LCDS also implies the need for a committed and inclusive consultation and partnership-building process that requires cooperation by all relevant and affected peoples (Office of Climate Change 2010). FPIC speaks directly to Indigenous people's rights to self-determination and to make decisions regarding their lands and communities that will be affected by development and conservation interventions. As fundamental as FPIC is to Indigenous communities and to the implementation process of a framework like the LCDS in Guyana, enforcement has been unclear and problematic in practice because Indigenous peoples and institutional agents hold different standards and criteria as to what constitutes FPIC (Tauli-Corpuz 2003).

Indigenous communities already have a history of struggling to assert their rights to FPIC in many cases in which government institutions and foreign extractive companies have failed to implement communities' rights to prior notice for extractive concessions and permits, or prior consent for mining, logging or drilling activities on both titled and untitled Indigenous lands. In Guyana, numerous communities from regions where foreign large-scale mining companies have installed their activities under approval from the government have been struggling against both the companies and the Guyana Geology and Mines Commission (GGMC) (Colchester 1997). Mining companies and the GGMC have repeatedly failed to adhere to the laws requiring prior notice to affected communities for concessions and permits, or obtain prior consent for mining activities affecting titled Amerindian Lands under the 2006 Amerindian Act.

The International Institute for Environmental Development (IIED) was commissioned by the Governments of Guyana and Norway to monitor the entire consultations process with Indigenous communities in 2009. While the government claims that the IIED report (Dow et al. 2009) concluded that the LCDS consultations process had so far safeguarded Indigenous peoples' right to FPIC, the Amerindian Peoples' Association (APA) highlighted that the IIED report found systematic problems in the consultations process. The report cites: i) adequate information and policy documents were not distributed to communities in advance of meetings, ii) meetings did not adequately explain the proposed strategies and their underpinning concepts, and iii) feedback mechanisms for community concerns, issues and how recommendations would be included in the final LCDS agreement were not well-defined (Dow et al. 2009, 6).

Benefit-Sharing

In terms of equitable distribution of forest resources and benefits, and community development possibilities for Indigenous communities that are forecasted to emerge from the LCDS strategies and Norway's GRIF payments, 'benefits' are interpreted as both economic and non-economic. Economic benefits include community investment funds earmarked for socioeconomic and infrastructural development, payments for environmental services, profits generated through community-company partnerships, shares in logging receipts and capital inputs. Non-economic benefits include capacity development and income-generation opportunities, business partnerships and joint ventures, and co-management of natural resources and environmental services. The LCDS framework make many assurances (Jagdeo 2009b, Office of Climate Change 2010) that the prospective revenues from most of the GRIF investment initiatives and a new low carbon economy will go toward developing and strengthening local and Indigenous communities throughout Guyana, as well as building important physical and social infrastructure.

The *Amerindian Development Fund* (ADF) under the LCDS framework is a newer version of the previous a previous program that has been administered through the Ministry of Amerindian Affairs since 2007, and the Office of the President prior to 2007. The newly formalized ADF is an agreement between the government and UNDP and is oriented to support the socio-economic development of Indigenous communities through the

implementation of community-identified Community Development Plans (CDPs). CDPs outline projects to enhance the social and material well-being, and ecological integrity of the community and village lands. They are developed and agreed upon by village consensus as priorities according to *community-defined* social, economic and environmental development objectives that address challenges such as restoring and conserving lands, watersheds and natural resources; enhancing food security; cultural revitalization; creating livelihood, employment and capacity development opportunities; and promoting equality (Office of Climate Change 2010). Emphasis from the Amerindian Development Fund is placed on CDP projects targeted at low carbon local economic and infrastructural development, preservation of cultural heritage, and sustainable use of natural resources.

The Hinterland Electrification Project aims at outfitting every Indigenous household (that has not yet received one through a previous initiative), with solar energy systems. Approximately 10,500 households are estimated to require solar home systems. The Small and Micro Enterprise Development project aims to address two major constraints for the ability of Indigenous and other economically marginalized populations in Guyana to create alternative livelihoods through the development of small and micro enterprises (SMEs), which are i) limited access to finance; and ii) limited technical and business skills. A granting program and mutual guarantee fund will be set up to enable Indigenous and local small and micro enterprises to obtain loans at affordable rates. Relevant training opportunities for SME operators will be provisioned through existing institutions.

Although such investment areas appear to be responsive to Indigenous land and livelihood security and capacity development priorities, LCDS Multi-Stakeholder Steering Committee meetings (August 13 & June 9 2011) reveal that there continues to be no strategic discussion on how funds, and capacity-building and local development resources will be distributed through equitable and transparent benefit-sharing mechanisms. The 2012 National Toshaos Council Meeting entitled “Establishing Strategic Approaches and Alliances for Sustaining Amerindian Development” assembled Indigenous leaders from 190 villages throughout Guyana, most of whom remain hopeful that LCDS investment areas targeted at demarcating and developing Indigenous communities, and government promises of benefit-sharing and capacity development will eventually materialize. However, they

emphasized that they continue to wait without knowing when or how their Community Development plans will be supported by the LCDS (Stabroek News August 13, 2012; Bina Hill Institute p.c. 2012). Although benefit- and power-sharing possibilities are replete within the LCDS framework and government interactions with Indigenous peoples, the present scenario of government constraints and mismanagement indicate that provisions of power, control, access, and benefits are far from equal for Indigenous and forest-dependent communities (Brockington et al. 2008; Griffiths & Anselmo 2010; Lang 2009 & 2011).

Some Indigenous communities are already using the institutional strengthening and adaptation opportunities promised by the LCDS to build on their leadership capacities in forest management and monitoring, research and verification at the community level. The North Rupununi District Development Board's (NRDDB)⁵ sixteen constituent villages, for example, have recently been recruited by the Government of Guyana to support a community-level MRV (C-MRV) project as a strategy to show the international community that the Guyanese state is committed to leadership in sustainable forestry conservation and producing research that will help in global climate change mitigation. A key component of Guyana's REDD+ Readiness Preparation Proposal to the World Bank's Forest Carbon Partnership Facility is the Monitoring, Reporting and Verification (MRV) project, a plan for Indigenous communities and other forest stakeholders to contribute to monitoring forests, land use, and ecosystem services. As part of its LCDS Institutional Strengthening Project, the government has set out a national MRV plan which details goals for the establishment of a national forest inventory and a satellite-based remote sensing system, as well as institutional strengthening and capacity-building.

Successful MRV relies on dialogue and the harmonization of information across local, national and international levels of forest monitoring — domestically linking the monitoring projects of communities like the North Rupununi to the national monitoring systems and databases in Georgetown (Angelsen et al. 2012). Effective integration of diverse sources and scales of information can only occur if unified and participatory frameworks for mapping, gathering and interpreting data on indicators such as carbon, biodiversity, social welfare and environmental governance are supported by the government and its institutional partners (Global Canopy Programme 2012). Also important is that

information and capacity building resources flow from the national level to stakeholder communities so that communities have the necessary knowledge, resources and technologies to make critical decisions and to implement projects.

Preparation and implementation of the national MRV project for REDD+ readiness has moved very slowly and the level of information-sharing and capacity building provided by the government to partner communities like the North Rupununi has been minimal. In the meantime, the NRDDDB and its constituent communities have taken up a leadership role in implementing forest monitoring, research and data verification at the community-level and have teamed up with conservation NGO partners, Global Canopy and the Iwokrama International Centre. Much of the literature assessing how REDD+ and other forest management strategies can be effective, efficient and equitable on the ground (Agrawal and Angelsen 2009; Resosudarmo et al. 2012; Sikor et al 2010), highlight the need for active involvement of Indigenous and forest peoples into the design, implementation, monitoring and reporting on the carbon, environmental, social welfare and governance impacts of REDD+ activities. The COP13 Bali Action Plan and recent REDD+ documents also include safeguards related to the full and effective participation, and respect for the rights and particular knowledge of Indigenous and forest peoples (Amazon Environmental Research Institute et al 2010). Community forest monitoring actions provide a methodology for assessing whether REDD+ projects are in fact recognizing FPIC and supporting the conservation, community development and local governance aspirations (Global Canopy Programme 2012). Different from the national MRV plan, the C-MRV project in the North Rupununi focuses on integrating local participation, knowledge and skills in *on the ground* actions. These include: i) developing knowledge and technological capacity and supporting decision-making related to REDD+ and forest conservation at the community level, and ii) providing an Indigenous perspective on forest management and climate change, based on local monitoring and research data and traditional knowledge of Indigenous titled lands. Community forest monitoring has also proven to be a potential way for Indigenous communities in the North Rupununi and other REDD+ countries to prioritize and monitor the processes of FPIC and local engagement that are necessary to guide the design and operationalization of LCDS projects in Indigenous territories (Global Canopy Programme, 2012).

IMPLICATIONS FOR THE DEVELOPMENT PATHS OF GUYANA AND ITS INDIGENOUS PEOPLES

In light of the problems related to democracy and overall effectiveness in frameworks for global climate change governance and debate, and the lack of political will and leadership amongst many of the highly emitting developed nations, it is significant that a small and underdeveloped nation like Guyana has proactively set climate change and deforestation mitigation strategies as core to its political agenda. Climate change mitigation strategies, such as the REDD+ system, purport to offer Guyana and other Caribbean nations sustainable approaches to development that have the potential to protect valuable forests, and stimulate national and local economies. The LCDS framework attempts to address significant issues related to global leadership on forest and ecosystem service conservation and carbon abatement; developing credible institutional strengthening, monitoring and adaptation systems; transforming the national economy to be more ecologically and socially sustainable; and supporting Indigenous land title and sustainable development priorities and promoting the provision of equitable benefit-sharing from market-oriented conservation for the people of Guyana. However, the mitigation of climate change and unsustainable development strategies require not only new technologies and financial incentives, but rather, strong and democratic governance that can balance forest protection, ecologically and socially sustainable economic development opportunities, local priorities and social welfare. Although the framework purports to be a win-win strategy for all (including Guyana's forests, Indigenous and forest-dependent communities, national population and the global community) closer analysis reveals that endemic corruption, political contradictions, poor governance within the forestry and natural resource sectors, and disregard for public debate and Indigenous peoples' rights to meaningful consultation and participation, combine to erode the democratic and performance-based premises of the LCDS framework. This contradiction between global rhetoric and local realities is consistent with Adger et al's (2001) observation that the grand claims of global environmental discourses often fall apart when put to the test in specific place-based empirical case studies.

Indigenous peoples in Guyana have been particularly sought by the government as ‘partners’ in the business of climate change and commodifying Guyana’s forests, compelling communities and their institutions to grapple with an often disparate combination of local livelihood development priorities, and national forest management and economic development agendas related to their lands and resources. Sustained engagement with the market-oriented strategies of government agencies, institutional partners and global climate regimes has reconfigured local institutions and knowledges, and influenced local socio-ecological relationships in profound ways. However, the ways in which Indigenous actors mobilize their diverse forms of environmental agency and political engagement within global climate change and forest management domains reveal the resiliency and embeddedness of their specific knowledges and lifeways (Chung Tiam Fook 2011). Guyana’s Indigenous peoples and institutions are thus caught between government investment promises of local community development and infrastructural support via the LCDS, and their struggle to protect their forests and attain climate justice. With Indigenous forests poised to become the new carbon credit frontiers in Guyana’s proposed low carbon economy, issues such as i) mitigating the unequal ecological and social impacts of deforestation and climate change facing Indigenous communities, ii) asserting their participation within climate change and forest conservation debates and governance, and iii) protecting their rights to land title, benefit-sharing and the principle of FPIC have become an increasing priority for Indigenous peoples in Guyana. As primary forest users and the ancestral rights-holders to many of the lands and resources that are of increasing interest to climate regimes, governments and conservationists, Indigenous peoples are the best situated to guide Guyana and other REDD+ countries in sustainably managing forests, adapting to climate change and pursuing a low carbon development path.

NOTES

1. For simplicity, the *Low Carbon Development Strategy (LCDS)* will be used henceforth to include both the LCDS and the framework and principles of the REDD+ system.
2. Carbon neutrality refers to achieving net zero carbon emissions by balancing the amount of unavoidable carbon emissions a country produces by offsetting it with an equivalent amount of carbon sequestration or buying enough carbon credits to account for the difference.
3. The Forest Carbon Partnership Facility (FCPF) was set up by the World Bank to

assist developing countries like Guyana to prepare national strategies for reducing emissions from deforestation and land degradation (REDD).

4. Guyana is divided into 10 different administrative regions, each one governed by a Regional Democratic Council.
5. The North Rupununi District Development Board is an Indigenous-led institution created in 1996 to represent the rights and conservation and development interests of its sixteen constituent North Rupununi communities in Region 9. NRDDDB is also an independent watchdog of and mediator between government, conservation, development and commercial institutions active in Indigenous communities in the region.

NOTES ON CONTRIBUTOR

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