

## Sierra Leone's Gola Rainforest National Park REDD project improving livelihoods of 122 Forest Edge Communities

Nicolas Tubbs<sup>1</sup>, Jonathan Barnard<sup>1</sup>, Sheku Kamara<sup>2</sup>, William Bangura<sup>3</sup>, Michael Garbo<sup>4</sup>

<sup>1</sup>Royal Society for the Protection of Birds (BirdLife UK), [nicolas.tubbs@rspb.org.uk](mailto:nicolas.tubbs@rspb.org.uk), [jonathan.barnard@rspb.org.uk](mailto:jonathan.barnard@rspb.org.uk), RSPB, Potton Road, SG19 2DL, Bedfordshire, UK

<sup>2</sup>Conservation Society of Sierra Leone (BirdLife Sierra Leone), [shekukamara2014@gmail.com](mailto:shekukamara2014@gmail.com)

<sup>3</sup>Forestry Division, Ministry of Agriculture Forestry and Food Security, [bozolewb@yahoo.com](mailto:bozolewb@yahoo.com)

<sup>4</sup>Society for the Conservation of Nature of Liberia (Birdlife Liberia), [formicqar@yahoo.com](mailto:formicqar@yahoo.com)

---

### Abstract

Sierra Leone's Gola Rainforest National Park conserves globally important biodiversity, working with 122 Forest Edge Communities. Gola is distinctive by the nature of its long-term public-private partnership model, and because it demonstrates how to conserve unique biodiversity whilst delivering social and climate benefits despite the challenges of civil war and the world's worst Ebola outbreak. As West Africa's first REDD Project selling verified emission reduction credits, it demonstrates REDD can deliver successful conservation action for protected areas. We achieve net positive benefits for climate, communities and biodiversity by (i) strengthening the conservation strategy and effective management to demonstrate best practices for national policies, and regional and international platforms, (ii) enabling local people to become environmental stewards through education, capacity building, land-use planning and activities that enhance socio-economic benefits, (iii) developing and maintaining a comprehensive social and biodiversity monitoring system to ensure effective delivery.

A core part of our work is implementing five sets of livelihood activities that were identified and developed with communities following the principles of free-prior-informed consent: (i) Crop intensification and increased production, (ii) Improved cocoa production and post-production, (iii) Savings and Internal Lending for Communities, (iv) Co-management and land use planning, (v) Education.

Gola is also working through a landscape approach to effectively conserve and sustainably manage the Upper Guinea Forest where the National Park is a core component, relying on the close involvement of local communities and returning measurable social benefits. Gola thus demonstrates that sustainable management of tropical forests integrating socio-economic development and food security is critical to ensure conservation success.

*Keywords: Gola, REDD, Upper Guinea Forest, Resilience, Food Security*

---

### Introduction, scope and main objectives

The Gola Rainforest is one of the largest remnants of the Upper Guinean Tropical Rainforest. It is the largest remnant in Sierra Leone where 327 bird species have been recorded, 14 of which face global risk of extinction. One of the most emblematic, and of global conservation concern, is the white-necked Picathartes *Picathartes gymnocephalus* that forms the National Park's logo. These species are only a few of those that drove the international recognition of this area as a global biodiversity hotspot (Myers et al. 2001).

For the last century, unsustainable activities such as mining and timber extraction have been serious threats to Gola's biodiversity, although the main cause for current deforestation is a farm fallow agricultural system. The 1990s' civil war had major impacts in and around Gola, especially as the governance of natural resources was long argued to be at the heart of the conflict. Since then, Sierra Leone has been paving a path to recovery up to 2014, when it was faced with the worst-ever recorded Ebola epidemic. Ranked today the 5th poorest country worldwide (UNDP 2014) and with subsistence agriculture forming the basis for the livelihoods of 90% of the population in forest edge communities (Bulte et al. 2013), Gola's 122 forest edge communities could well be considered as the "poorest of the poor".

An innovative partnership began work at Gola more than 25 years ago with a rapid biodiversity survey, which indicated the importance and the unique value of this site, as well as the enormous threats that it faced, but also the great opportunities to protect the forest. A partnership agreement resulted from this in 1990 between the Forestry Division of the Government of Sierra Leone, The Conservation Society of Sierra Leone (BirdLife Sierra Leone) and the RSPB (BirdLife UK) to conserve over 71,000 hectares of remaining forest. From the time of a small-scale project to the current large-scale programme, regular biodiversity surveys have been undertaken which confirm the unique biodiversity value of this rainforest (Lindsell et al. 2011). The forest biodiversity proved to have survived relatively unscathed thanks to the partners' dedication with 518 butterfly species recorded to date for example, three of which are new to science (Safian et al. 2015). Gola also holds one of the most important populations of the elusive, and globally threatened, Pygmy Hippo (*Choeropsis liberiensis*), that is only present in this part of Africa. Many other endangered mammal species are also found in Gola, including an estimated 300 chimpanzees and 44 species of larger mammals. However, the social and economic development of the Gola region did not survive as well as the biodiversity, and a significant part of our work has gone towards supporting local communities.

Since 2003 the programme has been primarily supported by bilateral donors (i.e: the Darwin Initiative, The Global Conservation Fund, The European Union and the Fonds Français pour l'Environnement Mondial). However, such sources only provide short commitments of three to five years and are not sustainable long term funding options. It was therefore clear that this funding strategy would leave the protection of the forest vulnerable to the funding 'boom and bust' cycle that many protected areas are affected by. The conservation of this rainforest, the species it hosts but also the range of services it supports and provides, including mitigating climate change through the more than 550,000 TCO<sub>2</sub>/year stored, were the catalyst not only for the protection of this rainforest, but also for the implementation of a landscape-scale initiative covering over 140,000ha for the Gola REDD Project and the establishment of the 70,000ha Gola Rainforest National Park (GRNP). This work also led to the development of the vision jointly supported by the Presidents of Sierra Leone and Liberia for a Greater Gola Transboundary Peace Park and the conservation and management of the Greater Gola Forest Landscape covering approximately 300,000ha.

Securing sustainable financing for the GRNP is constrained due to Sierra Leone's economic situation. Despite 10 years passing since the end of the civil war, the recent Ebola outbreak has severely impacted the country's economic recovery, which is still struggling to make significant development gains, falling short of its development targets. The environment and conservation is not a specific focus of the nation's post-ebola recovery plan, rather, it is classified as an important 'cross cutting' theme. It therefore does not get a higher-level focus or priority, and is a lower priority for international development aid. Accurate data are lacking, but the Forestry Division has acutely constrained capacity both in terms of Human Resources (numbers and training) and inadequate budget for managing over 350,000 hectares spread across 48 forest reserves and two national parks. Even if this budget were to double it would still be insufficient to adequately equip and resource protection of these reserves and protected areas. There is also the issue of continuity of resourcing from year to

year. Sierra Leone therefore makes itself a textbook candidate for the establishment of sustainable financing mechanisms for its protected areas.

On the 3rd December 2011, the President of Sierra Leone launched the Gola Rainforest National Park (GRNP) with the anticipation that its financial sustainability would rely on the sale of verified carbon credits, thereby laying a tremendous milestone in the partnership. The creation of the National Park within the REDD framework is an impressive example of how a long-term vision as well as the dedication and effort of the partners can have a positive impact at both site and landscape-scale. The main objective of this article is to demonstrate the shift in our approach from a project to a landscape approach for the sustainable management of forest areas, whilst showcasing that REDD can provide success for effective tropical forest conservation.

## **Methodology/approach**

### **REDD & the Voluntary Market**

An active voluntary market in carbon credits is already being used to offset the CO<sub>2</sub> emissions of companies and individuals. In 2014, the Voluntary Carbon Market (VCM) transacted \$379 million worth of credits (Ecosystem Market Place 2014). The scale of funds generated depends on two main factors - the number of carbon credits generated and the price per tonne of carbon. The number of credits results from a realistic, credible and measurable scientific assessment, less deductions for buffering to take account of permanence and leakage<sup>1</sup>. The price per tonne is driven by market forces. Following current market trends, higher prices are paid to credits that can demonstrate significant 'co-benefits' (to people and biodiversity) through the adoption of recognised voluntary carbon standards.

The integrity of carbon offsets depends on assurances that they meet certain criteria. In the absence of a compliance market in Sierra Leone, the Gola REDD Project was developed for the voluntary carbon market. At present, no single standard reflects our objectives for achieving both real carbon benefits and co-benefits for biodiversity and local livelihoods. We have therefore applied the two leading internationally recognised standards available: (1) the Verified Carbon Standard (VCS 2015) which is focused on measuring and verifying carbon reductions and (2) the standard issued by the Climate, Community and Biodiversity Alliance (CCBA, 2015) that focuses on the 'co-benefits' for biodiversity and local livelihoods.

These standards, and the related methodologies, reflect the partners' desire to achieve scientific integrity and good practice. Monitoring the credits created is transparent and verified by independent third parties. Ensuring that accurate and appropriate methods are chosen required extensive collaboration between scientific, policy and field-based partners but also relied on external technical expertise. If a reliable national compliance mechanism becomes available, the intention is to ensure that the Gola REDD Project transitions to a national mechanism.

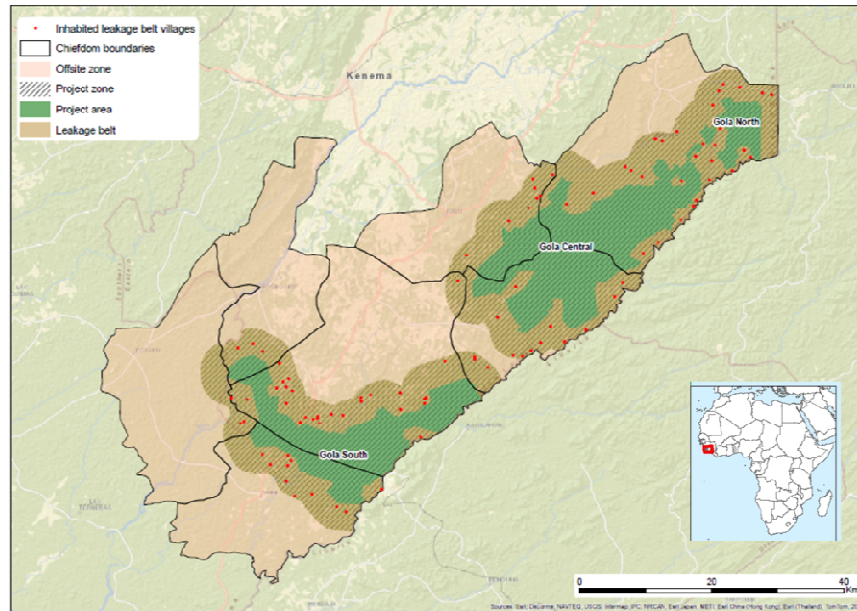
### **The Gola REDD Project**

The Gola REDD project has a 30 year lifecycle. The overall management of the project is overseen by the three historical partners and the representative of the Paramount Chiefs of the seven Gola Chiefdoms. The day to day management of the project is implemented by a team of over 160 staff based in Sierra Leone. The team works with local stakeholders and partners to implement the project as well as the 122 communities in the leakage belt and the seven Gola Chiefdoms (Fig1). The project adopted and is following the principles of Free, Prior and Informed consent (FPIC) and a stakeholder

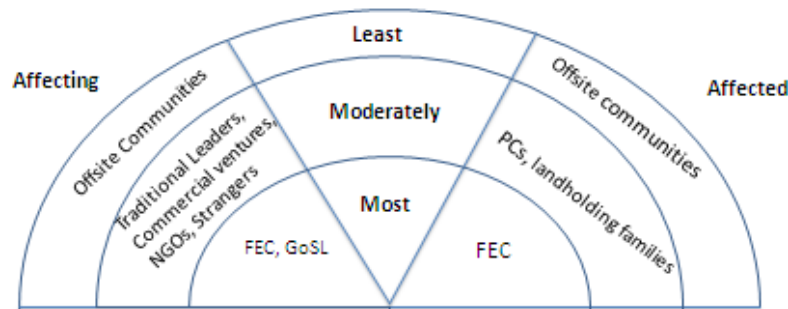
---

<sup>1</sup> Leakage arises when emissions avoided at the project site are not eliminated but are displaced to a new location. When carbon baselines are only measured at a project level, and not at a national level, there is a risk that drivers of deforestation will locate to a new area and continue with their activities.

engagement plan was developed and implemented (Fig2). Consultative meetings ranged from Paramount Chief Level to forest edge communities to develop an understanding of climate change and REDD+ to gain approval for beginning the project development process. Community engagement and consultation is a key part of the project and regular road shows, radio programs, workshops, school events as well as traditional meetings and forums all form on-going means of communicating and engaging with a full range of local stakeholders. Through carbon agreements with traditional landowners the carbon rights also reside with the Government of Sierra Leone.



**Fig1.** Map of the Gola REDD Project: boundaries of the project area (GRNP), leakage belt (which together form the project zone under the CCB standard) and offsite zone (as defined by CCB standard, here the 7 Gola Chiefdoms).



**Fig2.** Rainbow stakeholder diagram of Gola project stakeholders who may affect and be affected by project activities (PCs=Paramount Chiefs, FEC=Forest Edge Communities, GoSL=Government of Sierra Leone).

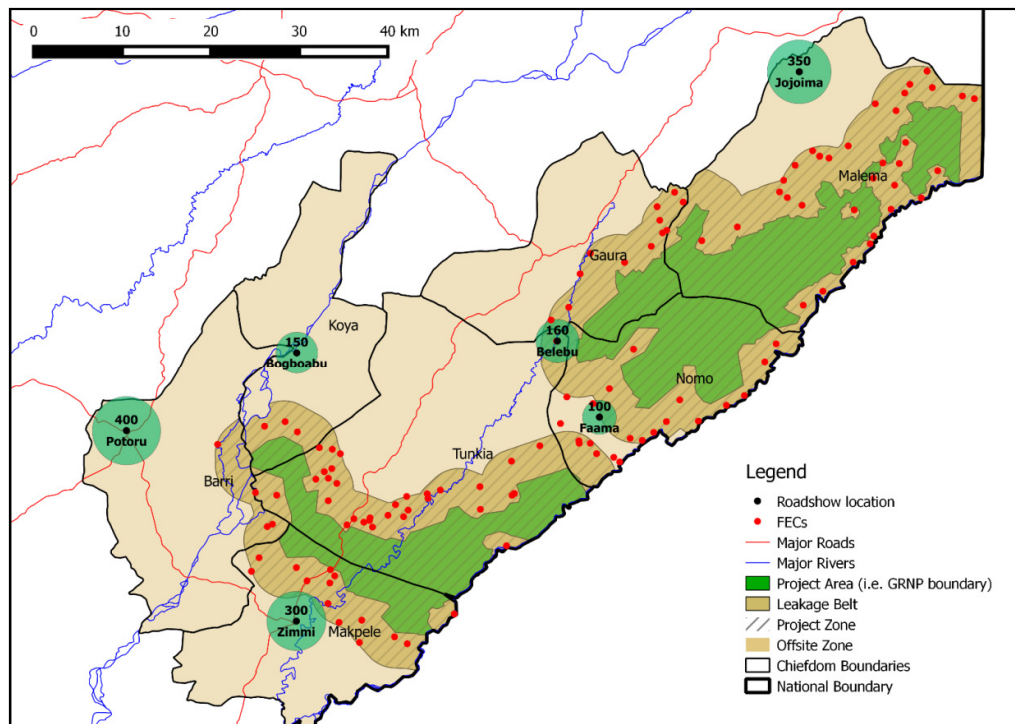
## Results

Since 2012, the Gola REDD project for the GRNP has been working to achieve net positive benefits for climate, communities and biodiversity by (i) strengthening the conservation strategy and effective management to demonstrate best practices for national policies, and regional and international platforms, (ii) enabling local people to become environmental stewards through education, capacity

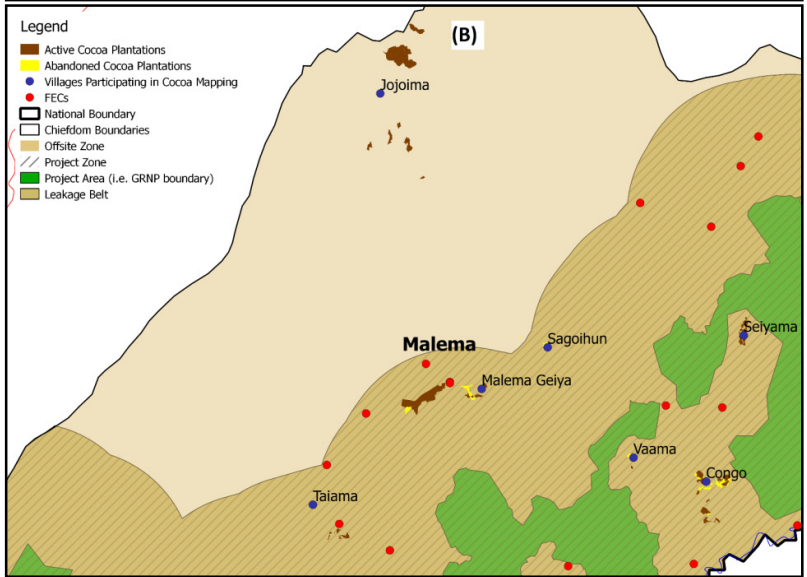
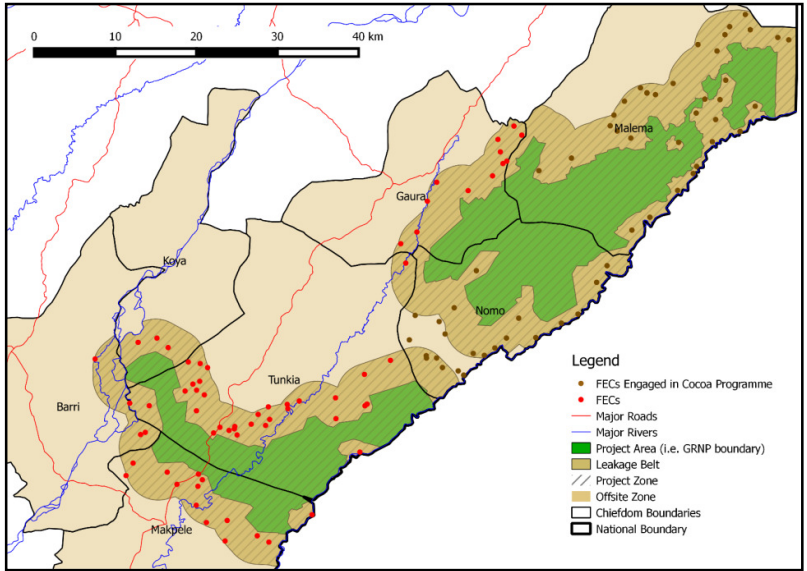
building, land-use planning and activities that enhance socio-economic benefits, (iii) developing and maintaining a comprehensive social and biodiversity monitoring system to ensure effective delivery.

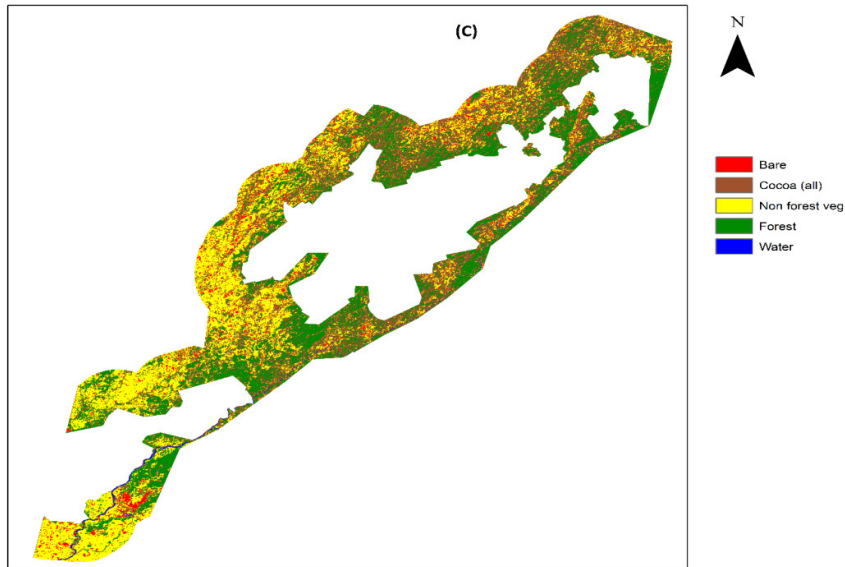
The project completed its validation in June 2014, achieving double gold under the CCBA for Biodiversity and Climate Change Adaptation, pending final creation of the local project entity. This entity is a public-private partnership in the form of a non-profit company managed by the three historical partners and a community representative. The Ebola outbreak which ravaged the country delayed the establishment of the company, though it will be completed in early 2015.

The Gola REDD Project will result in emission reductions of 550,000T CO<sub>2</sub> per year whilst protecting 60 globally threatened species and providing direct social benefits to 122 forest edge communities (~24,000 people). Resulting from extensive consultations with stakeholders, the objectives for the latter benefits are to (1) establish sustainable farming practices in forest edge communities that improve productivity on existing crop fallow land, (2) improve productivity and farmer income from cocoa production and other diversified sustainable income generating activities, (3) enable forest edge communities to achieve financial independence, (4) improve the well-being and resource governance capacity of forest edge communities whilst maintaining a biodiverse forest and finally (5) enhance environmental awareness and promote community participation in the management of the GRNP. As a few examples to demonstrate our impact against these objectives over the last two years: we provide 700 scholarships/yr for secondary education, 2,000 community members per year are engaged in road shows (Fig3), 29 farmer field schools have been established with 450 registered members (including 309 women) for crop intensification, 42 cocoa farmer groups with a total of 1,075 registered members (Fig4) and 29 Savings and Internal Lending groups have been established with 293 registered members.



**Fig3.** Location of road shows. The size of green circles and the text within indicate the location and number of participants for each roadshow.





**Fig4.** Location of FECs currently participating in Cocoa Programme, (B) mapped cocoa plantations in Malema chiefdom (C) estimated land cover in the leakage belt.

Finally, the monitoring and evaluation plan of the Gola REDD project resulted in 138 indicators which are being rigorously monitored and documented by the project, and assessed by third parties at each verification to ensure that the project genuinely prevents deforestation and generates the emission reductions, whilst providing direct biodiversity and social benefits.

## Discussion

We recognise that the accounting of emission reductions from REDD projects is a relatively new and rapidly evolving field, and international negotiations at the UNFCCC have been slow. Methods are in-effect being developed and tested by the voluntary carbon market in preparation for a future compliance market.

However, there is an urgent need to sustainably finance efforts to conserve critical ecosystems, such as the Upper Guinean forest, and the services they provide. All too often, the burden of conservation measures falls on local, often marginalized people who are least able to cope with the restrictions imposed on their livelihoods. It is therefore both a moral and practical imperative that the benefits derived from conservation initiatives are shared in an equitable, transparent manner that respects community rights and builds the capacity of local institutions to manage their resources. The Gola REDD project was designed to address this issue, ensuring the sustainable management of an internationally recognised biodiversity hotspot, as well as delivering tangible benefits for local communities. The Gola REDD Project is the first REDD project in Sierra Leone and in West Africa, the first public-private partnership for conservation in the country, is protecting the largest remnant of the Upper Guinean Rainforest in Sierra Leone, and is creating critical wildlife corridors to the Gola Forest National Park in Liberia.

## Conclusions/outlook

The development of the Gola REDD Project has needed a change in perspective for the management of the forest, so that the activities extend far beyond the core biodiversity conservation area (now National Park) boundaries, so that the project is now working in twice the area of initial conservation imperative. Furthermore, GRNP forms a cornerstone of the Greater Gola Forest ILandscape which spreads across

more than 300,000ha and includes the proposed Gola Forest National Park in Liberia (which is planned to be gazetted in 2015).

The Gola REDD project is informing, guiding and advising efforts to sustainably manage Liberia's share of the Gola forest. The Society for the Conservation of Nature of Liberia (BirdLife Liberia) and the RSPB (BirdLife UK) are already partnering with the Forestry Development Authority of Liberia on several initiatives, including the development of a sustainable financial plan for a critical corridor between the two National Parks through community forest management agreements funded by the European Union. The partners are also working towards a plan for the Greater Gola Forest Landscape, which when realised will represent the largest protected portion of the remaining Upper Guinean Forest.

## Acknowledgements

We hereby wish to thank all the stakeholders involved in the Gola REDD Project, particularly the GRNP staff including Mr Alusine Fofanah, the Gola communities and the National Protected Areas Authority through Dr Kolleh Bangura and Mrs Kate Garnett's continued support. This work was funded in part by the European Union, the Critical Ecosystem Partnership Fund and the Darwin Initiative.

---

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

## References

- Bulte, E., Kontoleon A., List J., Mokuwa E., Richards P., Turley T. and Voors M. 2013. REDD+ socio-economic descriptive analysis Sierra Leone. Cambridge-Wageningen social science group.
- CCBA, Climate, Community and Biodiversity Alliance, 2015. Available at: <http://www.climate-standards.org/> [accessed April 2015]
- Ecosystem Market Place, 2014. Sharing the Stage, State of the Voluntary Markets 2014. Available at: [http://www.forest-trends.org/documents/files/doc\\_4841.pdf](http://www.forest-trends.org/documents/files/doc_4841.pdf)
- Gola REDD Project, 2014. CCBA and VCS Project Documents. Available at: <http://www.golarainforest.org/our-work>
- Lindsell, J.A, Klop E., Siaka A.M. 2011. The impact of civil war on forest wildlife in West Africa: mammals in Gola Forest, Sierra Leone. *Oryx*, 45 (1): 69-77
- Myers, N., Mittermeier R.A, Mittermeier C.G, da Fonseca G.A.B and Kent J. 2000. Biodiversity hotspots for conservation priorities. *Nature*, 403: 853-858.
- Safian, S., Collins S.C., Libert M. 2015. Two new species in the genus *Geritola* Libert, 1999 (Lepidoptera: Lycaenidae, Eptoloni). *Zootaxa*, 3931 (2): 286-292.
- UNDP, 2014. Human Development Report. Available at: <https://unp.un.org/hdr/>
- VCS, Verified Carbon Standard, 2015. Available at: <http://www.v-c-s.org/> [accessed April 2015]