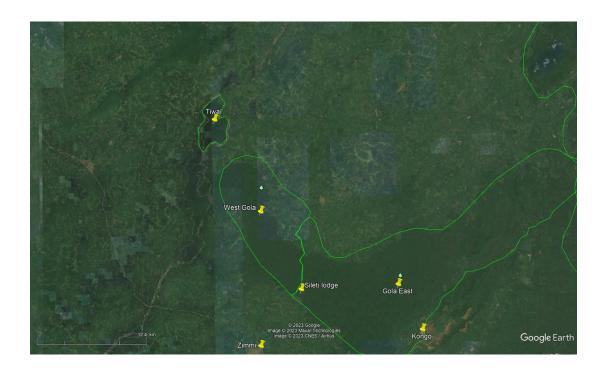


Programme d'Appui pour la Préservation des Ecosystèmes Forestiers en Afrique de l'Ouest



PAPFor - Coordination Régionale

Short technical note on the issue of loss of connectivity between Tiwai Island and Gola Rainforest NP (Gola-Foya Landscape, Sierra Leone) and on the need for a dedicated forest restoration initiative



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Context

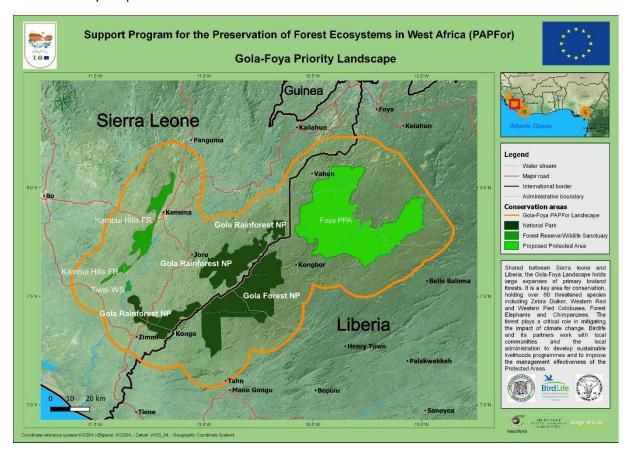
The EU-funded PAPFor programme operates across six landscapes in West Africa and aims at conserving the remaining Guinean Forests, while ensuring a sustainable development of local communities.

Across these Landscapes, PAPFor has three main objectives of which one is to maintain the forest cover outside Protected Areas, with a specific focus to maintain forest connectivity between Protected Areas (securing or restoring forest corridors).

Besides contributing to bringing the deforestation rate close to zero, the rationale is that maintaining connectivity is essential for the survival of many species. Not only many species require a home range that goes beyond the boundaries of Protected Areas, but even if individuals can survive in isolated forest patches, the genetic flow between different populations must be maintained for their long-term survival.

Gola-Foya Landscape

The block of expansive upper Guinean Forest that transverses the boundaries of Sierra Leone and Liberia along the Mano River and associated tributaries constitutes the Gola Landscape. The vegetation is tropical rainforest and comprises relatively flat to slightly undulating terrain with an altitude range between 50-600m asl. The Greater Gola Landscape is highly rich in biodiversity, supporting viable populations of flagship, endemic and globally threatened species. In 2011, the Sierra Leone and Liberian governments signed a Peace Park Agreement to protect the Landscape leading to transboundary cooperation between the two countries.



The Gola Foya Landscape includes five different Protected Areas or Proposed Protected Areas:

| LIB | Gola Forest National Park | National Park | 88000 ha |
|-----|------------------------------------|--------------------|-----------|
| SL | Gola Rainforest National Park | National Park | 77000 ha |
| SL | Kambui Hills Forest Reserve | Forest Reserve | 21228 ha |
| SL | Tiwai Island Wildlife Sanctuary | Wildlife Sanctuary | 1200ha |
| LIB | Foya Proposed Protected Area | Ungazetted | 164 000ha |

Protected Areas of Gola Landscape

Among these five areas, and situated in the SW corner of the Landscape, Tiwai Island is by far the smallest one. Yet, it boosts an impressive biodiversity and is a research and tourist site that brings important revenues to local communities. A key biodiversity value of Tiwai is the large number of primates, with 11 species. The site is also renown for its population of Pygmy Hippopotamuses *Choeropsis liberiensis*, a species in danger of extinction, also found in the nearby Gola Rainforest National Park.

Connectivity between Tiwai and Gola Rainforest NP.

Tiwai Island and Gola Rainforest NP are very close to each other, with a minimal distance of just over two kilometers between the two borders (see figure below).

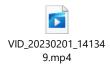
Yet, the area between the two PA is largely deforested and Oil Palm plantations can readily be seen on Google Earth images of 2017 at 07°31′00″N;11°20′35″W.





Zoom in of the area highlighted in the previous image, showing Oil Palm plantations.

No diachronic analysis has been made to determine when the forest loss occurred. However, a quick look at the deforestation dynamics through Global Forest Watch interactive map -from 2001 to 2021-clearly indicates an acceleration of forest loss (minimal 30% canopy) in the past few years, while no forest loss is observed within Tiwai and Gola RNP.





Forest (over 30% forest canopy) loss after 2000 (in pink). ©GFW

While only ground truthing would confirm this, it is clear that most of the affected area has been clearcut and the forest replaced by some form of mosaic of bushes and farms, with a few plots of tall trees here and there. The area in itself is about 1,000ha in size.

It is difficult to ascertain to what extend wildlife, in particular the Pygmy Hippos and the arboreal primates, are still able to connect between the two Protected areas through the affected area. But they are likely to be forced, and still able, to use the forest along the river south of Tiwai and from there the Gola RNP. The dynamics however is not favorable and needs immediate attention to maintain a larger corridor between the PAs, noting that the rivers are heavily used by local communities for various activities ranging from fishing to washing clothes or collecting NTFP.

Restoring the connectivity between Tiwai and Gola RNP east (left bank) of the River Moa.

With a clear objective to maintain forest cover across the Landscapes (and thus beyond PAs) and with the critical importance, from a long-term conservation perspective, to maintain a good connectivity, it is crucial that the PAPFor programme actively works on this issue, so as to prevent further loss of forest but also to restore forest connectivity.

It is worth noting that another key argument is that surrounding communities benefit from significant tourism activities in Tiwai, which itself almost entirely relies on the long-term survival of primates and pygmy hippos.

Recommendations and Opportunities

- 1. It is highly recommended that PAPFor focuses on this issue before it goes out of hand and the damages become irreversible and/or too difficult to solve.
- 2. A proper analysis of the deforestation dynamics should be undertaken through analysis of various satellite images.
- 3. A field mission to document the degree of degradation and do some proper ground-truthing should be done. This would also represent an opportunity to discuss with the local community to better understand the situation.
- 4. A dedicated set of activities, with proper planning, budget and leadership should be developed; failing this, there is a high risk that the issue slips again.

Among the different opportunities to work on maintaining and restoring the forest cover between Tiwai and Gola RNP, at least three are worth pursuing.

From a Tiwai Island angle

Tiwai Island is shared by 8 communities and administered through the Tiwai Administrative Committee. As they benefit from tourism revenues, there is a tacit understanding that communities commit to the preservation of forest and wildlife of Tiwai Island. As outlined above, it is in the direct interest of communities situated between Tiwai and Gola that the connectivity remains, so that the prime tourism potential remains too. It would be worth engaging TAC to see whether the small village is ready to contribute to stop clearing the forest and starts a restoration programme, through an assisted regeneration initiative or any other suitable solution. PAPFor is active in Tiwai through TAC, so that this issue can easily be tabled.

From a Gola RNP angle

GRCLG has a REDD project running that focuses on Gola RNP. The coverage actually encompasses the entire park but also a "leakage belt". The area of focus in this technical note entirely falls within this belt, hence the REDD project. From that perspective, any deforestation in that area must be of prime concern. The REDD project certainly should focus on, at the very least, avoiding any further deforestation but certainly on restoring carbon stock. Approaching the REDD project seems a good way forward. As both RSPB and CSSL are in the board of GRCLG, the connection is easy to make from a PAPFor perspective.

From a forest restoration perspective

The GEF-IUCN/MRU project invested important funds to identify forest restoration potential around four PAPFor Landscape, including Gola-Foya. Remote-sensing analyses clearly show that the buffer zone around the PAs within the Landscape is much more degraded in Sierra Leone than in Liberia. It is not yet clear what means will be made available to move from studies to on-the-ground activities but it would be expected that forest restoration funding mechanisms will be identified. The area around Tiwai should certainly be identified as a top priority. The forthcoming workshop in Kenema in on 8-9 February 2023 will be a golden opportunity to discuss this further.