

MID-TERM PROJECT UPDATE: JULY 2022

Life will be virtually impossible for local people without natural habitats that represent reservoirs of Non-Timber Forest Products (NTFPs) such as leaves, wild fruits and wild edible fungi (WEF), which are harvested from natural habitats (Malaysia 2010). Despite this socioeconomic importance, natural habitats continue to suffer enormous degradation from human activities (agriculture, logging, etc.) which have the direct consequence of the fragmentation of natural habitats and the indirect disappearance of certain useful forest species. Therefore, their restoration through reforestation by endangered useful forest species remains urgent and essential to answer the questions of sustainable conservation of biodiversity in the Wari-Maró region. The objective of our report is to: (a) train farmers on nursery cultivation techniques for forest species and (b) reforest natural habitats in the Wari-Maró Forest reserve in Benin.

METHODOLOGY

ESTABLISHMENT OF A LOCAL COMMITTEE

The local monitoring and evaluation committee has been set up (Photo 1). It is made up of farmers, land chiefs, village chiefs, forest administrations and myself. Its mission is to ensure the strict application of the various measures for the conservation and sustainable management of natural environments. In addition, they ensure the monitoring and maintenance of reforested seedlings in natural habitats in the Wari-Maró Forest reserve.



Photo 1. Member of the monitoring and evaluation committee of reforested plants in the Wari-Maró Forest reserve

COLLECTING SEEDS FROM NATURAL HABITATS

We looked for seeds under *Azelia africana* Smith ex Pers. and *Isoberlinia* spp. and also from the forest administration (Photo 2).



Photo 2. Harvesting seeds under trees in the forest

TRAINING AND PRODUCTION OF SEEDLINGS FOR REFORESTATION

For this activity, 60 volunteer farmers from 4 four villages (Wari-Marou, Kpawa, Terou and Wanou) at a rate of 15 farmers per village in the Wari-Marou village were trained on the cultivation of forest species in nurseries (Photo 3).



Photo 3. Training session for farmers on nursery cultivation of forest species

REFORESTATION OF NATURAL HABITATS

The reforestation of the seedlings was done with the help of farmers trained in the natural habitats of the Wari-Maró Forest reserve.

RESULTS

We trained 60 farmers on the different stages of nursery cultivation of forest species such as *A. africana*, *Isobertinia* spp, etc. in the village of Wari-Maró. 3000 plants of *A. africana*; 1,000 plants of *Isobertinia doka* Craib & Stapf.; 1,000 plants of *Isobertinia tomentosa* (Harms) Craib & Stapf. and 2,000 plants of *Khaya senegalensis* (Desr.) A.Juss.

Below are photos 4 A, B; 5 C, D, E, F; 6; 7 G, H, I, J; 8 K, L; 9 M, N; 10 O, P, Q, R, T; 11; 12 U, V; 13 W, Y; 14; 15; 16; 17; 18 of reforestation activities in the natural habitats of the Wari-Maró Forest Reserve

(<https://www.facebook.com/765197430295377/posts/pfbid021j8K8MNBK7sQB5rbeVKC5PwEVmbjjEtaN5wZAff8GuJZxCBvDtJXYvqEKz3iVBTel/> and

<https://www.facebook.com/765197430295377/posts/pfbid0wjVWCVaCEX8MntUWe2ddVCJWSVXb1oDLy6i4oTjS8NwnkibKPSHon7CgNDYydvk2l/>).

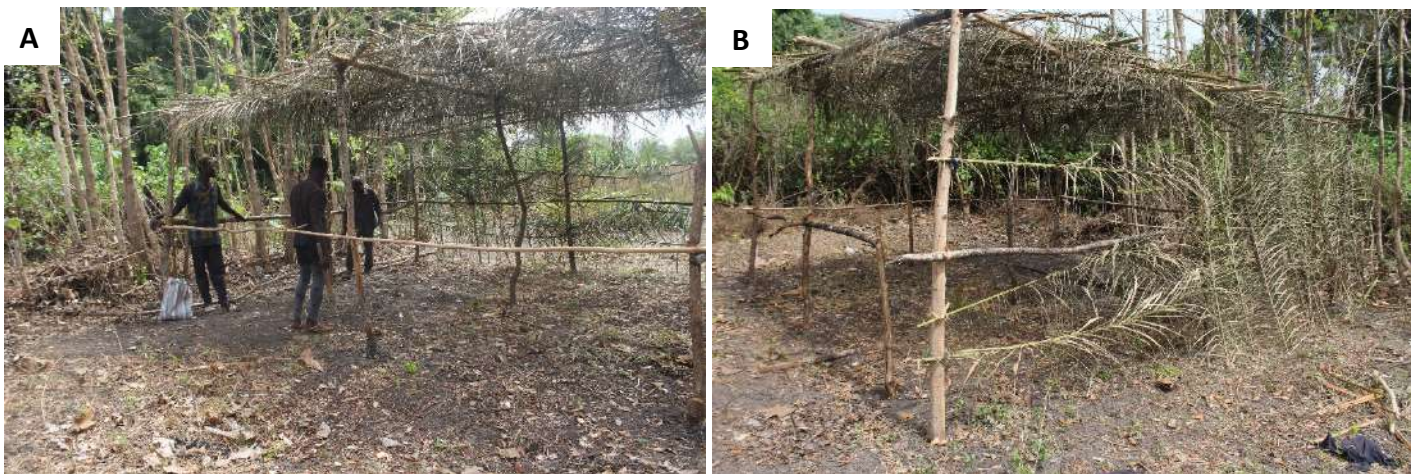


Photo 4. (A and B) Installation of the straw hut with young farmers from the Wari-Maró region who will house the plant





Photo 5. (C, E and F) cleaning the site and (D) preparing the soil for potting



Photo 6. Farmers in training can water in the river to water the soil





Photo 7. (G H I J) watering the soil to make it homogeneous



Photo 8. (K, L) Preparation of the bags to receive the potting soil



Photo 9. (M, N) soil treatment by farmers



Photo 10. (O, P, Q, R and T) filling of bags (pots) by farmers to receive the seeds of forest seedlings



Photo 11. Seeds ready for sowing



Photo 12. (U and V) sowing seeds in pots filled with soil by trained farmers



Photo 13. (W and Y) Here are the seeds in germination



Photo 14. Here are the plants after 3 months spent in the nursery and ready to be reforested in natural habitats



Photo 15. Transport of seedlings for reforestation with the help of farmers



Photo 16. Natural habitats in which the plants have been reforested.



Photo 17. Actual reforestation of plants in the natural habitats of the Wari-Maró Forest Reserve



Photo 18. The Village Chief of Wari-Maró planting a tree in the forest



Photo 18. Dr. Sylvestre A. BADOU (Project Manager) planting a tree in the natural habitats of the Wari-Maró Forest Reserve.

ACKNOWLEDGMENTS

We thank the Rufford Foundation for granting us funding and giving us the opportunity to carry out these activities, which are of great ecological and socio-economic value for the Wari-Maró region in Benin. We thank the Research Unit in Tropical Mycology and Plant- Soil Fungi Interaction (UR/MyTIPS) our home institution for providing us with field materials and assistance. We also thank the NGO SOS BIODIVERSITY for having co-financed this project. Likewise, we thank the farmers, village chiefs, loggers, forest agents and local authorities of the Wari-Maró region for accepting the project and facilitating the activities related to the training of farmers on nursery crops forest species and their reforestation in the natural habitats of the Wari-Maró Forest Reserve.

