



SDM PROJECT 2024
«STRENGTHENING THE RESTORATION
AND SUSTAINABLE MANAGEMENT OF
FIVE (05) SACRED FORESTS OF THE
RAMSAR 1018 SITE IN BENIN»



ACTIVITY REPORT ON THE REFORESTATION WORK IN THE
BUFFER ZONES OF THE SACRED FORESTS UNDER THE
“SDM PROJECT 2024”

“STRENGTHENING THE RESTORATION AND SUSTAINABLE
MANAGEMENT OF FIVE (05) SACRED FORESTS OF THE
RAMSAR SITE 1018 IN BENIN”

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1. Introduction

From May 1 to October 30, 2025, a reforestation campaign was carried out in the buffer zones surrounding three sacred forests in the Municipality of Zè (Assanmèzoun, Domèzoun, and Houédouzoun), located within Ramsar Site 1018 of Benin.

The main objective of this campaign was to protect the Sacred Forests (SF) from external pressures (agricultural encroachment, bushfires, grazing, etc.) while generating sustainable income for local communities through the production of fruit seedlings, particularly oil palm (*Elaeis guineensis*), whose by-products can be used by surrounding populations.

This activity was implemented under the SDM Project 2024, entitled “*Strengthening the restoration and sustainable management of five (05) Sacred Forests of the Ramsar Site 1018 in Benin*”, funded by the Institute for Global Environmental Strategies (IGES). It was carried out by the Local Management Committees of Sacred Forests (CLFS), with the technical support of the NGO Ce.Sa.Re.N, the training consultant, and the forestry administration.

This report presents the implementation process of the activity, the methods used, and the results achieved.

2. Methodology

2.1 Species selection

The choice of oil palm (*Elaeis guineensis*) as the main species for the reforestation of buffer zones by the members of the Local Management Committees of the three sacred forests concerned was motivated by several reasons:

- Its high economic value, enabling communities to generate income from fruits and by-products (oil, soap, cakes, branches used as firewood, etc.);
- Its protective function, forming a vegetative barrier against bushfires and erosion;
- Its adaptability to the ecological conditions of the Zè area;
- Its historical presence in the surrounding community lands of the sacred forests.

2.2 Sites selection and seedling supply

The selection of buffer zones to be reforested was carried out in a participatory manner with the leaders of all five (05) Sacred Forest Local Management Committees and traditional authorities. Depending on the characteristics of each site, buffer zones were established either along the immediate periphery of the sacred forests—forming a protective vegetation belt—or nearby, in order to create a complementary micro-ecosystem that supports ecological and biological flows between the reforested area and the sacred forest.

Oil palm seedlings were supplied by a local nursery grower selected based on the following criteria:

- Proven experience in oil palm production, as well as previous collaboration with the NGO Ce.Sa.Re.N. in the Municipality;
- Ability to provide vigorous and high-quality seedlings;

- Being a member of the local community of Zè.



Photo 1: Inspection of oil palm seedlings intended for the reforestation of buffer zones of the sacred forests by the facilitator of the NGO CeSaReN.

2.3 Sites preparation

Before planting, the sites were cleared to remove invasive vegetation and then pegged to mark the location of each seedling. Members of the CLFS worked under the supervision of the NGO Ce.Sa.Re.N., the training consultant, and the local forestry administration to ensure uniform planting and appropriate density.

Additionally, in some sites, seedlings were planted using the taungya system, combining the establishment of young oil palms with annual food crops. This approach helps optimize plantation maintenance while providing immediate benefits to local communities.



Photo 2: Digging of planting holes by the president of the CLFS of Assanmèzoun Sacred Forest after staking out the prepared area intended to host oil palms in the buffer zone of the forest.

2.4 Planting

The seedlings purchased were transported to the reforestation sites and distributed near the dug holes according to their size. Planting was carried out manually, respecting the recommended technical spacing (8 m × 8 m). Each seedling was carefully placed in a pre-dug hole and filled with a mixture of soil and organic matter. This step was followed by compacting the soil around each seedling to ensure proper stabilization and promote successful growth.



Photo 3: Loading of oil palm seedlings at the nursery sites



Photo 4: Transport of oil palm seedlings from the unloading point to the planting holes in the buffer zones to be reforested.



Photo 5: Planting operation of oil palm seedlings by the managers of the Houédozoun Sacred Forest



Photo 6: Soil compaction around planted oil palm seedlings by the president of the Assanmèzoun Sacred Forest

2.5 Monitoring and maintenance

The planted seedlings were regularly monitored and maintained, including the replacement of dead seedlings and weeding around the plants to reduce competition with weeds and promote their growth.

Indeed, during the short dry season (August), a follow-up inventory was carried out. This made it possible to quickly identify and replace dead seedlings during the short rainy season (September and October), thereby improving the success rate of the plantations.

Maintenance activities were carried out approximately three months after planting and consisted of circular weeding (about 2 m in diameter) around each seedling. This technique helps limit competition for water, light, and nutrients, while facilitating soil aeration and root development. It also improves the visibility of the seedlings, reducing the risk of accidental damage during future interventions.

3. Result

In total, 480 oil palm seedlings (*Elaeis guineensis*) were planted over a total area of 3 hectares of buffer zones, thereby enabling:

- Strengthening the physical protection of the sacred forests against external disturbances;

- Generating short- and medium-term income for the managers and local communities;
- Contributing to carbon sequestration and the ecological resilience of the forests.



Photo 7 : Oil palm seedlings planted in the buffer zone of the Houédozoun Sacred Forest



Photo 8: Oil palm seedlings planted in the buffer zone of the Houédozoun Sacred Forest.

The follow-up inventory conducted after planting revealed an **average survival rate of 86%**, reflecting the overall successful implementation of the reforestation operations and the active engagement of local communities.

However, seedlings that did not survive were replaced during the short rainy season (in September) to improve the final success rate of the plantations and ensure more uniform regeneration of the restored areas.

All planted seedlings were also maintained.

Table 1 : Seedling Survival Rate by Buffer Zone

Sacred Forest	<i>Survival Rate (%)</i>
Assanmèzoun	90
Domèzoun	82
Houédozoun	86
Mean	86

A second inventory will be conducted before the start of the next rainy season (in April) to assess the resilience of the seedlings after enduring the dry season. The results of this assessment will help optimally plan the gap-filling activities scheduled for the next campaign.

4. Conclusion and perspectives

The reforestation campaign of the buffer zones around the Assanmèzoun, Domèzoun, and Houédozoun Sacred Forests was successfully carried out. It helped create protective belts while laying the foundation for sustainable oil palm production for the benefit of local

communities. In the medium and long term, the exploitation of these plantations will generate income and contribute to the financial empowerment of local communities.

Moreover, it is worth noting the strong involvement and active participation of all age and gender groups (men, women, children, youth, and elders) at every stage of the activities, as illustrated by the photos above.

The next steps will include:

- Establishing firebreaks before the dry season to protect young seedlings;
- Strengthening maintenance and participatory monitoring measures;
- Gradually promoting the economic use of oil palm by-products (oil, soap, cakes) for the benefit of sacred forest managers;
- Expanding reforestation to other buffer zones in future campaigns.