PLAN VIVO PROJECT DESIGN DOCUMENT

Fes Enying: Communal gardens and home orchards by communities and smallholders in Adamawa, Cameroon

Image: Fes Enying, Cameroon. Credit: ClimateLab, Fes Enying, Adawama.

PLAN VIVO
For nature, climate and communities

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Fes Enying: Communal gardens and home orchards by communities and smallholders in Adamawa, Cameroon

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Contents

Overview

Project Title:	Fes Enying: communal gardens and home orchards by communities in Adamawa
Location:	Cameroon (Adamawa region, Mayo-Banyo department)
Version:	3
Project Coordinator:	Graine de Vie Luxembourg, Climate Lab & Fes Enying
Validator:	MUTU International (PT Mutuagungn Lestari) Jl. Raya Bogor No.19 KM 33, 5 Cimanggis, Depok, Jawa Barat 16453, Indonesia
Validation Date:	15/02/2024 - 18/02/2024
Project Intervention(s):	Restoration through Agroforestry Planting (see §1.1).
Project Participants:	The community and smallholders of Moinkoing and Bandam, Bankim (expanding thereafter based on community interest).
Project Area:	The project initially aims to install agroforestry system in communal gardens in Moinkoing (4.07 ha) and Bandam (2.3 ha). Furthermore, the first smallholders start with agroforestry planting activities on 9.77 ha. In total, the initial area is 16.14 ha. The project area will gradually expand over the coming years.
Project Period:	A project period of 30 years is applicable. The project started in June 2023 with baseline measurements, crediting period started in July 2024 and will end in July 2054.
Methodology:	The project follows the PM001 Agriculture and Forestry Carbon Benefit Assessment Methodology and is based on the PU001 Module for tree planting activities.
Expected Carbon Benefit:	The expected carbon benefits for the two agroforestry planting interventions are 255.4 t CO2e/ha for home orchards, and 247.1 t CO2e/ha for communal gardens. Further specifications see §3.8.
Expected Ecosystem Benefit:	Plantation of native/naturalised trees via seedlings and direct seeding increase the local biodiversity, soil fertility and water availability of this unique forest-savanna mosaic ecosystem. Further specifications see §3.4
Expected Livelihood Benefit:	Agroforestry trees provide fruits and other non-timber forest products, which increase the food security and income of smallholders. Socio-ecological challenges are tackled by community decisions using re-investments. Further specifications see §3.3.

1 General Information

1.1 Project Interventions

The commune of Bankim is situated in Mayo-Banyo, a department in the Adamawa region of Cameroon. The communities living near the transition of the Congo Basin rainforests to the Sahel savannah are vulnerable to the consequences of climate change. This Plan Vivo project aims to strengthen food security and climate resilience via sustainable agroecosystems, through agroforestry planting in the commune of Bankim. These systems will yield carbon sequestration, and sustainable agricultural, fruit and non-timber forest products of which the community will benefit.

A combination of two main activities will be implemented to create climate resilient agroecosystems and sustainable livelihood opportunities.

(i) *Home orchard planting*. The project aims to increase food security through targeted planting and establishing home orchards mixed with crops together with individual smallholder farmers. Fruit seedlings from the nurseries (one per village) will be distributed for free. In addition, the project equally wants to support valorisation of non-timber forest products and provide free agroforestry workshops to all project participants. The plants include among others: Avocados, Oranges, Lemons, Grapefruit, Mandarin, Pomelo and Mango.

The project works with the acronym RPPR (*je Reçois un arbre, je Plante, je Préserve, et je Reçois l'argent*; I receive a tree, I plant it, I preserve it, and I receive rewards) to make the project model comprehensive and accessible for everyone. The smallholders willing to join are asked what trees they would like to grow on their land and receive these for free.

As they take care for their home orchard, they receive yearly payment via a milestone-based scheme. For herders, fodder crops will be included in the project in order to minimize the risk that they need to burn areas in order to grow herbs for their zebu. As of last the smallholder farmers will be encouraged to protect their seedlings against fires via fire breaks and against livestock.

(ii) *Communal garden planting*. The aim is to plant large "communal gardens" in the community. Tree planting is done on communal ground at the edges of the village together with the community itself to establish a small food forest in the future. This would serve as an additional food source, also for those that do not have land to start their home orchard.

A mix of forestry and fruit trees will be planted to benefit both the community and the ecosystem. The nursery in each village will delivering 10 000 seedlings per year. A list of the eligible tree species in nursery can be found in table 1.0. After the initial phase of woody vegetation growth, these lands could also be used for honey production. Note that the trees from nurseries will be used in the first year for individual smallholders in home orchard planting. In the following year, these nurseries will mainly be used for communal gardens.

Table 1.0 – List of main eligible tree species

Common name	Scientific name	Benefits
Shea butter	Vitellaria paradoxa	Nutrition, medical use and skin care
Neem tree	Azadirachta indica	Extraction of neem oil, which has medical use (phytosanitary and antiseptic use)
Baobab	Adansonia digitata	Nutrition, medical use, the bark fibres are used to construct many tools and powdered leaves, and pulp are highly prized
Safoutier	Dacryodes edulis	Nutrition, medical and shade tree for coffee or cacao plantation.
Tamarin	Tamarindus indica	Fruits for nutrition and trade
Anacardier (cashew tree)	Annacardium occidentale	Cashew nuts for nutrition and trade

From the plot studies (see Annex 7) in collaboration with the National Herbarium, the project has identified tree species suitable for direct seeding. Once the seed trigger is identified, the dormancy is broken, and the seeds can be replanted the next day(s) in a few centimetres of sifted soil with a small shovel. This is a very efficient way of planting, removing the time and resources needed to grow up in nurseries, so direct seeding can already start in the first year. Examples of native or naturalised trees eligible for planting are shown in Table 1.1.

The project will equally implement a fire management strategy where relevant, to protect the freshly planted zones. In addition, the zones will be protected against animals during the first years with in a first phase a fence, while a living border around the communal garden is planted.

Table 1.1 – List of main eligible tree species

Common name	Scientific name
Gmelina	Gmelina arborea
Tali	Erythrophleum ivrorense A .Chev
Maobi	Baillonnella toxisperma
Njansang	Ricinodendron heudelotii
Doussié	Aflzelia pachyloba
Acajou	Swietenia macrophylla
Okoumé	Aucoumea klaineana
Zingana	Microberlinia bisulcata

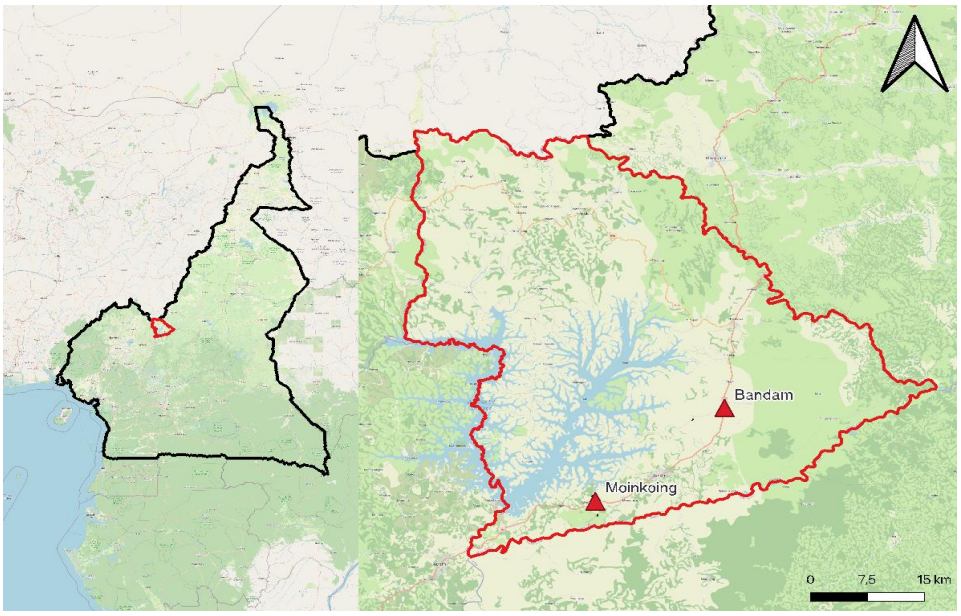
The project will start in the villages Bandam and Moinkoing. Over time, the project area will be gradually extended to scale-up the project impact.

1.2 Management Rights

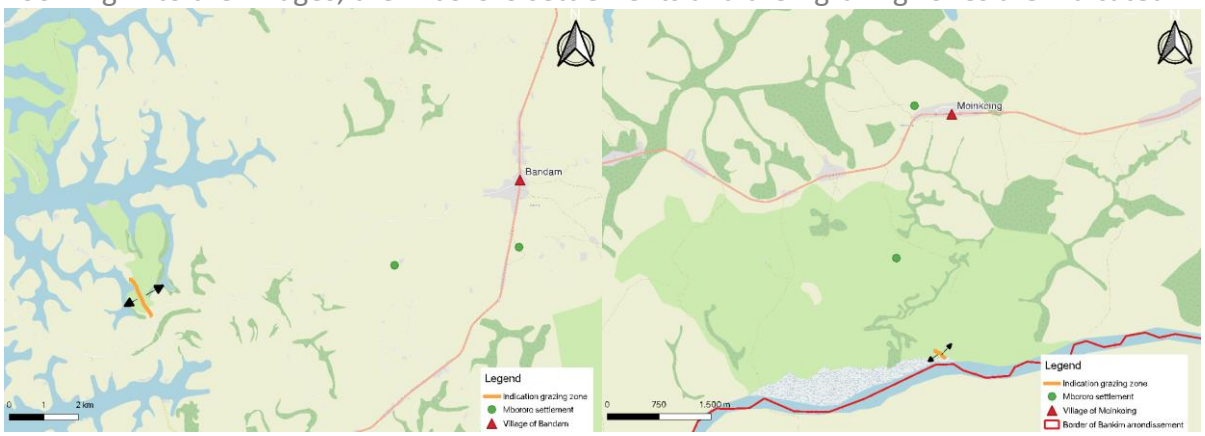
1.2.1 Project Boundaries

We provide the shapefiles showing the boundaries of the proposed project region, and initial project areas in Annex 1.

We provide some general maps below where we indicated the commune Bankim and the location of the two starting villages, Moinkoing and Bandam.



Zooming in to the villages, the Mbororo settlements and their grazing zones are indicated.



In the last pictures, the first project areas are indicated. These include the home orchards and the communal gardens in both Moinkoing and Bandam.

For details on the home orchard plots and the communal gardens, we refer to the KML files in Annex 1.

1.2.2 Land and Carbon Rights

In Cameroon, any forest that has been classified on behalf of the commune concerned or planted by the commune is considered a communal forest within the meaning of Law No. 94/01 on the regime of forests, fauna and fisheries. Communal forests belong to local authorities and are managed by them.

According to the 1994 Forestry Law which puts in place a system of different use rights in state and national forests, the owner of a forested land will by implication be a main beneficiary of any carbon rent. Consequently, the right to carbon benefits would belong to the state where it is a state forest while the right to carbon on community and private forests would belong to these owners of these forests. The carbon on council forests and national land would respectively belong to councils and to the nation managed by the state. The land tenure would thus determine the carbon benefit rights. Good practice also requires devolving carbon rights to local communities, along with other forest rights.

The legal analysis carried out in the context of Cameroon would thus allow a carbon credit to be considered as an intangible personal property that can be traded and commercialised on MDP (mécanisme développement propre) or voluntary markets. It follows that the absence of a specific legal framework in Cameroon does not in itself constitute an obstacle to the development of carbon projects. The legal system does not distinguish between trees and elements such as carbon that are stored in them. Focusing on forest land, Part I of the 1994 Forestry Law states that 'the State, municipal councils, village communities and private individuals may exercise all rights resulting from ownership over their forest'.
According to the national REDD+ strategy, pending the advent of a specific law on carbon rights, the following options have been retained:

- In the case of a state-owned forest, the carbon rights will belong to the State;
- In the case of a community forest, the carbon rights will belong to the Community;
- In the case of a communal forest, the carbon rights will belong to the Commune;
- In the case of a private land, the carbon rights will belong to the owner or Smallholder.

On the basis of this analysis, Carbon rights and benefit rights will, in principle, belong to whoever has the right to occupy the land on which the carbon-storing trees are located.

As the project areas consist of communal/community lands, and smallholder lands in case of agroforestry, the carbon rights belong to the communes, communities and smallholders respectively. The project consequently obtained a formal approval letter of the Cameroonian government. See letter of approval Agroforestry in Annex 15.

We completed Table 1.2.2 to give an overview of the ownership, tenure, user rights of the project areas.

Table 1.2.2 Land and Carbon Rights

Project Area	Ownership and user rights status	Carbon rights	Evidence
Bankim	- *Forêt communal* (communal forest) is owned by the commune. - Private lands are owned by the smallholders, but they do not have land titles.	- The commune is the owner of the carbon rights of the interventions executed in the communal forest/land. - If trees are planted on private land the owner has the carbon rights.	See Annex 17

2 Stakeholder Engagement

2.1 Stakeholder Analysis

2.1.1 Stakeholder Identification

The start of the project is specifically in Bandam and Moinkoing, which are two of the 90 villages spread across Bankim. The society in the project area can be divided in a sedentary group composed of various ethnic groups such as Tikar, Bassa, Yamba and Mambila, and a semi-nomadic group, which are called Mbororo. They have a semi-nomadic lifestyle and move around with their herds, constantly looking for fresh herbs. The Mbororo are considered as '*Peuple autochtone*' and are a minority group in this project, with their settlements close to the villages. Furthermore, it is a men dominated society, which makes it challenging for women to speak up their mind. Important to know is that in the North of Cameroon, the authority of traditional chiefs is still strongly respected.

The community will participate at village level in the set-up of communal gardens. The participating smallholders are sedentary farmers which install home orchards on their fields. The Mbororo will benefit from the project via socio-ecological reinvestments related to their livestock, including but not limited to fodder, as this is their most important asset.

The municipality is presented by the mayor and the city council. They will support the project and subscribe the legal agreement. The state is involved as approval is needed to set up the project. The National Herbarium is an advisory body in the project. They will support the project team with their knowledge on eligible tree species, implementation of direct seeding and after care whenever the local Fes Enying team would require extra help.

The local stakeholders (community, smallholders and Mbororo) will be positively impacted by the project as co-benefits will increase their livelihoods. The fruit and non-timber forest products can be eaten or sold, adding to food security and increased income. In addition, the revenue of carbon credits will be reinvested in socio-ecological projects (water, education, ...), decided by the community. Their influence will be positive as well, as they help design the project during Plan Vivo meetings. As the project is there for the local stakeholders, it is in their interest to have a high positive influence on the project. However, the Mbororo and local smallholders have different needs, which can cause some dispute on land resources (livestock eating the harvest of farmers, fires destroying fields, and discussions about the borders of the delimited zones). The project addressed this during the risk sessions.

The secondary stakeholders (municipality, National Herbarium) are all moderately positively impacted by the project. Their benefits are rather indirect in form of an increased livelihood of the inhabitants, increased visibility and extra educational tools in the neighbourhood. Their influence on the project is considered as high positive. Without support of the municipality, a project cannot start. The scientific advice is necessary for the success of the technical part of the project. Furthermore, the project will seek cooperation with neighbouring schools in the form of help with plant activities and nursery visits. Education about the project is necessary to spread information about the project to young people and let the project live in the area.

We completed table 2.1.1 to identify and describe the main stakeholder groups that could influence or be affected by the project. We included the likely impact, influence and engagement of each stakeholder group and stated whether they are considered local stakeholders or secondary stakeholders.

Table 2.1.1 Stakeholder Analysis

Stakeholder Group	Stakeholder Type	Impact	Influence	Engagement
Participating communities (starting in Moinkoing and Bandam)	Local stakeholder	Highly positively impacted by the project as the project will result in socio-ecological reinvestments for the community.	High positive influence on the project as community decisions will lead the design of the project.	Involvement through project participation, Plan Vivo committees, community meetings, trainings in agroforestry and ecosystem awareness, and benefit sharing.
Participating smallholders	Local stakeholder	Highly positively impacted by the project as the project will result in increased food security and income.	High positive influence on the project as the smallholder will maintain the trees on his/her field.	Involvement through project participation, community meetings, trainings in agroforestry and ecosystem awareness, and benefit sharing.
Mbororo	Local stakeholder	Highly positively impacted by the project as the	High positive influence on the project as	Involvement through project participation, Plan Vivo committees,

		project will support food diversity and other relevant benefits (e.g. fodder) chosen by Mbororo.	they will be present when community decisions are taken about design of the project.	community meetings, and benefit sharing.
The municipality	Secondary stakeholder	Moderate positively impacted by the project as the project will return satisfied inhabitants with higher income and restored food security in the long run.	High positive influence on the project as they can support the project via logistics and sensitization.	Involvement through operation agreements: 'lettre d'engagement' (letter of engagement)
The state (represented by the sub prefect in Bankim)	Secondary stakeholder	Low positively impacted by the project as the state does not directly benefit from the project interventions, but the welfare of the people in the regions will rise which is beneficial for the state.	High positive influence on the project as the approval of the government ensures that the project is in alignment with all the national laws.	Involvement through operation agreements: letter of approval for agroforestry interventions.
National Herbarium	Secondary stakeholder	Moderate positively impacted by the project with increased visibility for the National Herbarium and opportunities to execute research and collect data in the field.	High positive influence on the project, as the scientific advice on direct seeding and tree species will increase the ecological value and success of the project.	Involvement through scientific advice on eligible tree species, and direct seeding approach.

2.1.2 Indigenous Peoples and Local Communities

We completed Table 2.1.2 to identify any Indigenous Peoples or local communities that have statutory or customary rights to land or resources in the project area(s) and describe their governance structure and decision-making processes, including details of the involvement of women and marginalized or vulnerable groups.

In this project, as stated in the consensus building mechanism in the project agreement, the following mechanism will be used: Each village forms a Plan Vivo committee by vote. The Plan Vivo committee needs to represent the community in the village, and it is obligatory that it consist of at least 30% women (and striving towards 50%) and at least 1 representative of each ethnic group, including the Mbororo, *peuples autochtones*[1] (if relevant[2]). Any decision on Plan Vivo investments is made in consensus. If the Plan Vivo committee cannot find a consensus, they will vote for the investment decisions. The vote is valid if 2/3 of the Plan Vivo committee votes pro, and that 2/3 should consist of representatives of different ethnic groups and at least 1 female person.

Table 2.1.2: Indigenous Peoples and Local Communities

Indigenous Peoples or local communities	**Rights to land or resources in the project area(s)**	**Governance structure**	**Involvement of women and marginalised groups**	**Engagement**
Mbororo (considered as *peuples autochtones*, a semi-nomadic group)	The Mbororo do not have land, but they have the right to create pastures for their cattle. Their national routes are defined by *Arrêté n° 02/MINEPIA du 20 juillet 1988 portant actualisation du tracé des pistes à bétail.* In Bankim, Mbororo are allocated with grazing places (see map in §1.2.1).	Local decision-making process: the chief and his key advisors take decisions together. Community level: the community forms a community council, which includes Mbororo.	Mbororo women do not have the right to speak during decision-making processes, according to the Mbororo interviewees.	Involvement through project agreements, and community meetings (if necessary, separately for the Mbororo). The key interlocutors are the 'Ardo', which are the traditional ambassadors of the Mbororo and will be included in the Plan Vivo assemblies. The inclusion of the Mbororo women is under continuous attention of the project and the project will seek the best way to establish Mbororo women participation. It is planned to held separate Mbororo meetings, visits in their settlements to create trust amongst the Mbororo women to speek with non-Mbororo people. At all time a translator will be present, so any ideas and input can be

[1] In case women are not allowed to participate in meetings, separate meetings including only women will be held and secure that all participants are included.

[2] When Mbororo settlements are close to villages or if assigned grazing land is adjacent to the village.

				given in their own language (Foulbé). See Project Agreement for consensus-building mechanism involving these minority groups: at least 1 representative of *peuples autochtones* need to be present in the Plan Vivo committees. During the project design phase, it became evident that community members positively welcomed the idea of the inclusion of women and Mbororo representatives in the Plan Vivo Committees. They recognised that this diversity would benefit the entire village. However, community members suggested modifying the consensus-building mechanism to ensure that each ethnic group within the village had direct representation on the Plan Vivo Committees.

2.1.3 Disputed Land or Resources

Bankim is a community in the Adamawa region bordering Nigeria. Within the confines of the community, indigenous inhabitants known as the Mbororo are present. They have not become fully sedentary and have long practised nomadic livestock farming. However, they have been experiencing a sedentarisation process for several decades, to the point that many of them have become semi-sedentary agro-pastoralists living in settlements near villages (they have few spots where they farm vegetables, most kids (boys) attend school, …). The Mbororo communities face several social insecurities: environmental, land, tax and criminal. As they still have their partially nomadic lifestyle, they are constantly looking for grazing land for their livestock. In order to obtain fresh herbs, they use fire to clear spaces. Although the routes are described by law, and verbal agreements are made between Ardos and chiefs of local villages, land disputes are still common. These disputes are about livestock eating the harvest of farmers, fires destroying fields, and discussions about the borders of the delimited zones.

From community meetings and risk sessions, it became clear that the key problem has always been livestock feed availability. The prospect of a project activity that incorporates the

cultivation and distribution of fodder resonates strongly with both stakeholder groups (Mbororo and farmers), offering a potential solution to this shared concern.
In addition, we refer to article §7 of the Project Agreement for the consensus-building mechanism: At least once per year, one Plan Vivo assembly will be organised. It is obligatory that at least one representative of the Mbororo *(peuples autochtones)* is present during the Assembly if relevant for the specific village. Minimum 30% of the Assembly must be female. During the Assembly, project progress will be discussed, and a decision will be made on how to invest the proceeds. Any decision on Plan Vivo investments is made in consensus, meaning that all Parties must agree with the decision in writing.

2.2 Project Coordination and Management

We refer to Annex 2 for all signed agreements between the project partners. We identified the parties responsible for each of the project coordination and management functions in Table 2.2. The project coordinators include Fes Enying, Graine de Vie Luxembourg and Climate Lab.

Fes Enying, also known as "Graine de Vie Cameroun" is an association under Cameroonian law recognised as such since 21 September 2021, the date of its official legalisation. It is a branch of the Graine de Vie network (see further). Directed by a Board of Directors of 6 people, the executive body is ensured by a technical operational team of 5 people. Fes Enying can rely on the experience and the Graine de Vie network. Within this network, exchanges are organised on a daily basis, good practices are shared, and teams from one country can be mobilised if necessary to help those from another country. In this way, the most experienced train the youngest, within the framework of workshops abroad if necessary. In addition to this network, Fes Enying can also count on the formal scientific partnership with the National Herbarium, whose collaboration allows it to benefit from proven scientific expertise throughout reforestation processes. Trees are thus planted in strict compliance with the country's requirements.

Previous projects executed by GDV in Cameroon include a project financed by the MECDD, called: "Pilot project to support communes and local communities in the rehabilitation of their natural environment following the decentralisation law in Cameroon". This is a pilot project that started in 2021 and aims to strengthen the capacity of 13 communes and communities in Cameroon in sustainable forest management and autonomy in the management of their respective forests. To date, 11 nurseries with 20,000 seedlings each have already been established and several "direct seeding" campaigns (semis-direct) have been carried out. This "direct seeding" technique was developed by Graine de Vie, with the support of the National Herbarium. Seeds of trees are collected and receive a treatment to break their dormancy after which they are immediately planted. This is a very time efficient way of tree planting; however, it cannot be done with all types of tree seeds.

Graine de Vie Luxembourg asbl is a Luxembourgian NGO managing its own ecosystem projects in collaboration with local associations or in association with other NGOs or partners. It is part of a network of 7 non-profit organisations, members of the Graine de Vie network: 3 in Europe, 4 in Africa. The projects of GDV Luxembourg have so far been financed by private Luxembourgian sponsors, by the MECDD, or developed in partnership with another

Luxembourgian NGO. Graine de Vie Luxembourg's expertise focuses on the rehabilitation of the natural environment (forests, mangroves, development of common spaces) and their livelihood benefits. It combines these two themes by linking environmental actions with direct community income generated (agroforestry/fruit/NTF production) and with the indirect socioenvironmental benefits (fight against erosion, desertification, disappearance of springs, etc.).

Climate Lab is a social enterprise supporting community-driven climate projects. Climate Lab strongly believes in working directly with those most affected by climate change - smallholders and rural communities in Africa and Southern America. Climate Lab sets up value-creating ecosystem restoration and agroforestry projects together with interested communities and partner NGOs. Building on years long scientific research in Physical Geography at Ghent University, the team started with the EthioTrees project in 2016, which is Plan Vivo certified since 2017. To expand the impact, Climate Lab was established in early 2021. Climate Lab made a clear choice to work with Plan Vivo in their ecosystem restoration projects, to maximize socioecological impact. Besides the Plan Vivo project in Ethiopia and Cameroon, Climate Lab is developing new Plan Vivo projects in Bolivia, Madagascar and Mozambique.
We provide a copy of the project coordinator's registration certificates in Annex 2.

Table 2.2 Responsibility for Project Coordination and Management Functions

Project Coordination and Management Function	**Responsible Party/Parties**
Stakeholder engagement during project development and implementation	Fes Enying
Ensuring conformance with the Plan Vivo Standard and compliance with applicable policies, laws and regulations	Climate Lab
Developing technical specifications, land management plans and project agreements with project participants	Climate Lab/Fes Enying
Ensuring that the PDD is updated with any changes to the project	Climate Lab
Registration and recording of land management plans, project agreements, monitoring results, and sales agreements	Climate Lab
Managing project finances and dispersal of income to project participants as described by the benefit sharing mechanism	Graine de Vie Luxembourg / Fes Enying
Managing Plan Vivo Certificates in the Plan Vivo Registry	Climate Lab
Preparing annual reports and coordinating validation and verification events	Climate Lab
Securing certificate sales and other means of funding the project	Climate Lab
Assisting Project Participants to secure any legal or regulatory permissions required to carry out the project	Climate Lab / Graine de Vie Luxembourg / Fes Enying
Providing technical assistance and capacity building required for project participants to implement project interventions	Fes Enying / Graine de Vie Luxembourg

Monitoring progress indicators, livelihood indicators and ecosystem indicators and providing ongoing support to project participants	Fes Enying / Climate Lab
Measurement, reporting and verification of carbon benefits	Climate Lab

2.3 Project Participants

We completed Table 2.3 to identify the initial and potential project participants and describe their location of residence in relation to the project area(s) and project region, their use of land or natural resources within the project region and their typical use of labour for land or natural resource management activities.

We refer to the Ethical Charter for the measures in place to ensure that there is no discrimination based on gender, age, ethnicity, religion, or social status when selecting project participants; and to reduce potential for tensions or disputes within or between communities.

We include a full list of initial project areas in Annex 3.

There are no Type II participants involved in the project. The Type I participants or direct beneficiaries include the communities in the villages, including the Mbororo (*peuples autochtones*). Every participating community will form a Plan Vivo committee at village level that will codesign and cogovern the project, and the committee will include Mbororo (if relevant for the specific village) [3]. Next, individual smallholders will be involved in the project, specifically for the home orchards.

Partnership agreements (see letter of engagement in Annex 5) are drafted with the commune/municipality for the implementation of the project. In these agreements, the municipality and mayor undertake not only to ensure the local level of control in order to ensure the sustainability of the action, but also to accompany Fes Enying on the political and institutional levels if necessary. The communities, including Mbororo (if relevant), will develop plan vivo maps at village level and will participate in workshops, and agroforestry activities. The community will sign a project agreement (see Annex 12a). Additionally, smallholders will independently register via an individual application form, sign a smallholder project agreement (see Annex 12b), establish their own plan vivo, and participate in agroforestry workshops.

Finally, the traditional chiefs are involved in the project as well. Traditional authority is still strongly respected in North and Centre Cameroon. The village chief and his notables will be involved in the project via their presence in the Plan Vivo committees.

Table 2.3: Project Participants (grouped by village, area or region)

Project Participant	Participant Type*	Location of Residence	Typical Land Holding	Land and Natural Resource Use

[3] When Mbororo settlements are close to villages or if assigned grazing land is adjacent to the village.

The community with usufruct rights to land in the project areas: Moinkoing and Bandam	Type I*	Villages adjacent to the project area, with communal land rights.	Most households have/rent farming land with an average size of 4.2 ha.	Project participants are mostly smallholder farmers involved in slash-and burn agriculture. Most of them do have livestock and they also depend on the forest for various needs (e.g. fuel wood, fruit). For a more detailed description of the typical use of land and natural resources, we refer to §3.3.1: Social survey.
Mbororo (considered as *peuples autochtones*, a nomadic group) if relevant for the specific village.	Type I*	Grazing routes and settlements within the project area. They do not have agricultural land, but they have the right to create pastures for their cattle.	Creation of pastures for their cattle. Small gardens with vegetables.	The Mbororo use slash- and burn technique as well to produce herbs for their cattle. They use the land to install small gardens with vegetables as well. For a description of the typical use of land and natural resources, we refer to §3.3.1: Social survey.

** Type I = Project participants that do not meet the Type II definition; Type II = Project participants that are not resident within the project area, do not manage land or natural resources within the project area for small-scale production, or are structurally dependent on year-round hired labour for their land or natural resource management activities.*

2.4 Participatory Design

The commune of Bankim has already been involved in the first design phases and will continue to codesign and cogovern the project. To date, several community meetings and FPIC meetings have already been organised (well before the start of project activities).

A first meeting focused on informing on the broad project goals and seeking first feedback and general interest within the department of Mayo-Banyo. At the first meetings, communal officials, officials from decentralised state services, association leaders and other community leaders were also present. These meetings resulted in an engagement letter (see Annex 5).

Later meetings, more on a local level in the villages, focused on mapping, (dis)advantages, and requirements of the project, including land mapping, written agreement of the landowner, and first ideas on how to deal with fires and livestock control. The FPIC meeting was installed to explain the Plan Vivo approach, ask for input and seek the free consent of the community (see further section 2.6).

It was also discussed how the establishment of home orchards and communal gardens, with free distribution of fruit trees, will guarantee good use and control of the seedlings received,

as each person will ensure that his or her seedlings grow normally, with lowered risk of being cut down. The smallholders joining the project will choose the trees they want to plant (within a list of eligible tree species), which again ensures the good maintenance of the home orchards. Furthermore, the trees will be a source of direct income, and a source of food or indirect income through the benefit sharing mechanism.

Through the joint creation of 'plan vivos' in Plan Vivo committee meetings where women, men and Mbororo (if relevant) were present, stakeholder participation has been implemented beyond simply informing or consulting the communities. Not only the project design, but also the control over the generated benefits, is shared on the long term via the benefit sharing mechanism.

Indeed, after the project design phases, Plan Vivo committees at village level will be responsible for defining the policy for investing the income generated by the plan vivo revenues. These committees will also be responsible for financing and managing the ecosystem in the longer term. They are a focal point for the community, they will help spread information about the project, ensuring that every member of the community can be involved. If people could not make it to community meetings, they can reach out to the committee first to obtain information and give their input about the project to one of Plan Vivo committee members. Suggestion boxes will be installed in the villages, so people can give feedback and suggestions in an anonymous way. Each village has its village chief which forms a council together with the 'notables', which are usually the heads of families. As the traditional chiefs in villages are still strongly respected, we will encourage them to be involved in the Plan Vivo committees.

The project also performed one-to-one semi-structured interviews near the project areas in order to gain in-depth understanding of the socioenvironmental dynamics and livelihood challenges in the region. Interviewees were identified during random walks in the village and participated on a voluntarily basis. Subsequently, the project design was further shaped to fit the local context. The main challenges that the communities are facing are water, health, schools, and difficulties in their agricultural activities (related to fire and livestock).

Further community engagement meetings and surveys will take place during the project implementation. Risk sessions with the community at village level demonstrated the priority risks and how the smallholders aim to mitigate them (see Annex 10). The design of the grievance mechanism will be smoothened and the monitoring plan, considered the risks will be adapted.

We provide evidence of stakeholder involvement in the participatory design process in Annex 4.

2.5 Stakeholder Consultation

2.5.1 Design Phase Consultations

During the very first phase of the project activity, awareness and general acceptance of target communities was ensured by (i) performing interviews in the project area, as well as (ii) having several meetings with the communities. During the very first community meetings, the basic project logic is explained, and potential interest of the community is discussed, as well as the

initial feedback. Thereafter, a separate meeting was organised to explain the Plan Vivo methodology, and subsequently 'plan vivos' are created with a representative group consisting of men and women of the village (see Annex 4, Annex 11). During the establishment of 'plan vivos', members of the project team were present and provided logistical support (paper, pens) but they never steer the 'plan vivo' development. The people of the communities should have full freedom to add any element they prefer on the 'plan vivos'. The members develop a map of the present situation, and a map of the desired situation. Maps are developed in French. The 'plan vivos' are stored at Plan Vivo committees, and scans are stored on a separate drive. Examples are presented in Annex 11.

Thus, these 'plan vivos' are handwritten spatial land management plans, voluntarily produced and owned by the community, which form the basis of a project agreement. This voluntary and participatory mapping/planning process addressed the following local socio-ecological needs and priorities:

- Water shortage and sustainable water management;
- Local livelihood needs (schools) and opportunities to improve existing or diversify livelihoods and incomes such as orchards and markets;
- Fodder crops to reduce livestock entering farmer fields;
- Reduce pressure on the natural ecosystem via reforestation;
- Further addition: sport and leisure infrastructure, trees within the villages and communication network.

In addition, the project had semi-structured interviews with people during random walks in the community. At the start of the interview the project was explained and then questions about livelihood needs and reinvestments ideas were asked. From these interviews, it became clear that people were very interested in installing home orchards. Apiculture is poorly known, but support in honey production would be appreciated together with the valorisation and commercialisation of non-timber forest products. Forest fires together with livestock entering agricultural fields were often mentioned, so a fire management strategy, as well as a strategy preventing livestock entering planting areas are necessary elements in the project design.

As of last, at the start of the set-up of nurseries, individual smallholders stepping into the project can request the tree species (within the boundaries of the eligible tree species) they want to grow on their fields. Based on these lists, the tree species will be sown within the nurseries. This will be repeated every year.

2.5.2 Stakeholder Engagement Plan

As Bankim is a large commune, the Plan Vivo committees will be formed on village level and will be the basis for the long-term engagement. This committee will be responsible for the general follow up of the project, implementation of the grievance mechanism and investing the income generated by the plan vivo revenues. The composition and roles of the Plan Vivo committees can be found in Annex 19. The committee is responsible for making investment decisions in the general interest of the population, assisting with planning and executing the project activities, and representing the village's interests. It also acts as a liaison between the village and the project coordinators, facilitating communication and resolving disputes. The

Plan Vivo committee needs to represent the community in the village and should consist of at least 30% women (and striving towards 50%) and at least 1 representative of each ethnic group, including the Mbororo (if relevant for that village). Each village has its village chief which forms a council together with the 'notables', which are usually the heads of families. As the traditional chiefs in villages are still strongly respected, we will encourage them to be involved in the Plan Vivo committees. The committee should gather at least three times a year with 1 Annual General meeting. In these yearly Plan Vivo assemblies, project feedback is requested and decisions on how to invest the proceeds of the Plan Vivo sales are decided.

Figure 1: Plan Vivo Committee in Moinkoing

Figure 2: Plan Vivo Committee in Bandam

In order to maintain the communal gardens, the community as a whole is responsible and the Plan Vivo committees will play a key role in organizing this maintenance and encouraging people to take care of the communal garden. As the communal garden will result in fruits and NFTPs for the whole community, it is in their interest to take the maintenance seriously.

Within the Plan Vivo committee, two *agents de relais* (community liaison agents) can be chosen per village. This duo should be composed of a man and a woman. At a village community meeting, these people can voluntarily step forward to express their willingness to take up this function in their particular village. The community will vote democratically who they want as their agents. They will take the role as contact person, to whom every project participant can talk to. Thus, everyone can easily add suggestions or complaints about the project. In order to ensure people can give anonymous feedback, complaints and suggestion boxes can be installed at village level at several neutral places (e.g. church, mosque, hospital, etc.). The agents are responsible to gather these letters regularly. The complaints and suggestions will be kept in a book for suggestions and complaints. The agents will be present during Plan Vivo committee meetings where the notes are read out loud during the Plan Vivo meetings and kept by the reporter. Where possible, remediating actions – following complaints and suggestions – are taken. We refer to §3.17 for more information on the grievance mechanism.

At least every 5 years, a monitoring round is performed. This assessment also includes semi-structured interviews and group discussions with the communities.

2.6 Free, Prior and Informed Consent (FPIC)

2.6.1 FPIC Legislation

We completed Table 2.6.1 to identify any national legislation or legal obligations under the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)[4], International Labour Organization Indigenous and Tribal Peoples Convention 169 (ILO 169)[5], or other FPIC legislation applicable to the project region with measures in place to ensure that the project follows these.

Table 2.6.1: National Legislation and International Standards on FPIC

Legislation/ Standard	Relevance to Project	Compliance Measures
UNDRIP	Article 8.2. One shall provide effective mechanisms for prevention of, and redress for: […] (b) Any action which has the aim or effect of dispossessing them of their lands, territories or resources; (c) Any form of forced population transfer which has the aim or effect of violating or undermining any of their rights.	The project recognizes that the participant communities have the right to the project lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired. The communities have the right to own, use, develop and control the project lands, territories and carbon benefits in line with the project agreements.
ILO 169	Article 6.1. In applying the provisions of this Convention, one shall: (a) consult the peoples concerned, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly; (b) establish means by which these peoples can freely participate, to at least the same extent as other sectors of the population, at all levels of decision-making in elective institutions and administrative and other bodies responsible for policies and programmes which concern them; (c) establish means for the full development of these peoples' own	The project recognizes that the participant communities have the right to the project lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired. The communities have the right to own, use, develop and control the project lands, territories and carbon benefits in line with the project agreements. All consultations carried out are undertaken in good faith and in a form appropriate to the circumstances, with the objective of achieving

[4] https://undocs.org/A/RES/61/295

[5] https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312314:NO

	institutions and initiatives, and in appropriate cases provide the resources necessary for this purpose.	agreement or consent to the project.

2.6.2 FPIC Process

We refer to §2.3 and §2.4 for information on the first community meetings. On these meetings, people considered, evaluated and granted consent for the project. This set-up ensures that the community meeting could make decisions that are:

▶ Free = consent is given voluntarily and without coercion, intimidation, or manipulation.
▶ Prior = consent is sought sufficiently in advance of any authorization or commencement of activities to allow time to understand, access, and analyse information on the proposed activity.
▶ Informed = information provided prior to seeking consent is accessible, objective, and complete.
▶ Consent = a collective decision ("Yes", "No", or "Yes with conditions") made by the rights-holders following their own timelines and decision-making processes with the option to reconsider if the proposed activities change or if new information relevant to the proposed activities emerges.

Besides discussing the basic project logic, it was made clear that the project recognises that the participant communities have the right to the project lands, territories, and resources which they have traditionally owned, occupied, or otherwise used or acquired. The communities and smallholders have the right to own, use, develop, and control the project lands, territories, and their benefits.

Hence, the project organised an FPIC session in the commune of Bankim in 2023. Here a first time the project was explained to the communities. After this, a separate group of volunteers made a Plan Vivo map (see Annex 11, first 2 maps) to express how they saw the future of their community. A year later new community meetings (men and women of the village, not only the chief and his *notables*) in Moinkoing and Bandam (start villages) were organised. There was also a separate FPIC session for the Mbororo with their settlements close to or in the project villages. During this session, the project was explained using 3 posters (see Annex 5). The project was explained in French and simultaneously in local languages (Foulbé and Pidgin). After explaining the project people gathered in groups to write down their feedback and questions (see Annex 5). As of last, the FPIC letter was signed. The questions and feedback raised during these sessions were gathered and answered during the risk sessions. We refer to the Annex 5 for the FPIC letter, attendance lists, presented materials and pictures.

FPIC letter summary: The document is a consent form for the Plan Vivo project, which aims to obtain carbon credits through tree planting. The signatories acknowledge that they have been informed about the project and its implications. They freely give their consent to participate in the project, understanding that Plan Vivo, Graine de Vie, Fes Enying, and Climate Lab will support them.
Attendance list: their full name, profession and signature were asked.

Presented materials: 3 posters in French were made 1) explanation of the RPPR project 2) explanation of the communal gardens 3) explanation of the payment system
Feedback forms: photographs of the written feedback from FPIC sessions of both Bandam and Moinkoing. Their concerns were incorporated in the project design, for example, the installation of fodder to avoid agropastoral conflicts.

Note that the project will continue to perform these FPIC meetings on a yearly basis.

2.6.3 Initial FPIC

We refer to §2.5.1 and the FPIC letter and evidence in Annex 5. The first phase FPIC process that was followed for the initial project areas can be summarized as follows:

- The project team organised an initial meeting with the three communities in Mayo-Banyo;
- The project team organised the first community meetings in Bankim;
- The meetings discussed on the basic project logic using schemes and potential interest of the community, as well as the initial feedback obtained;
- In a separate community meeting with a representative group of 14 people, men and women of the village, the first Plan Vivo maps were made.
- During random walks people of the community were interviewed. At the start of the interview, a brief recaption about the project was given. Then questions about livelihood needs, potential co-benefits and view on reinvestments were asked.
- Another FPIC meeting was organized by the project team in Moinkoing and Bandam, resulting in a signed FPIC letter (Annex 5). During the meeting, schemes were used to re-explain the project towards the participants (see Annex 5). Feedback was obtained by initiating small group discussions, where at least one person was able to write down the questions and feedback (see Annex 5).
- A separate FPIC meeting was organized for the Mbororo people living in settlements next to the village.
- After FPIC meetings, community risk sessions were held in both villages. Before the risk session, another explanation about the project was given, together with answers towards the questions coming from the FPIC meetings.
- After establishment of the Plan Vivo committees, Plan Vivo maps of Bandam and Moinkoing were made, closing the first phase FPIC loop.

3 Project Design

Baselines

3.1 Baseline Scenario

We refer to Annex 7 for a description of the baseline scenario based on approved methodology. Below we describe the baseline scenario from a general perspective.

The project region near Bankim basically consists of (degraded) woodland-savannah mosaic (Figure 1). Without improved management, and seedling planting, we can reasonably expect a declining forest in line with trends of the last decade (see Annex 7 for full baseline accounting). In this region, most land is mainly used for agricultural activities by the sedentary communities. They use slash-and burn methods or shifting cultivation[6,7,8], which involves clearing space from its native vegetation in the dry season. The ash of the burned vegetation fertilises the soil, which is then prepared to plant during the wet season. Cattle are an important livelihood feature, so large land fractions are also used for grazing. Next to that, nomadic communities (Mbororo) need space for their cattle to graze, and they may burn areas to improve the growth of fresh herbs for their cattle. Although the government established a zonation where nomadic people can let their cattle graze, and despite the annual meetings between Ardos (representatives of the nomads) and the chief of the villages where these temporarily zones are discussed, there can occasionally still be disputes.

Figure 1: Landscape view of project area in Bankim

Slash-and burn or shifting cultivation involves clearing the space from its native vegetation in the dry season. The ash of the burned vegetation fertilises the soil, which is then prepared to plant in the wet season. These practices may cause some environmental concern, as this type

[6] Mbiadjeu-Lawou, S. P. (2020). Mutations socio-économiques, environnementales et sécurité alimentaire au Cameroun : le cas du barrage de la Mapé dans l'arrondissement de Bankim. *MBIADJEU-LAWOU | Espace Géographique et Société Marocaine*. https://doi.org/10.34874/IMIST.PRSM/EGSM/20412

[7] CIRAD. (z.d.). Fertilité et relations agriculture-élevage en zone de savane : Actes de l'Atelier sur les flux de biomasse et la gestion de la fertilité à l'échelle des terrois, 5-6 mai 1998, Montpellier, France - Agritrop. https://agritrop.cirad.fr/263913/

[8] Nguatem, C. (2021). ENVIRONMENT AND RURAL DEVELOPMENT FOUNDATION, ESTABLISHING THE CASE FOR ECOSYSTEM RESTORATION IN THE ADAMAWA PLATEAU AND A NEED FOR A WATER FUND. [Scriptie]. EUI Center for GIS and Remote Sensing, EUIABS.

of farming can cause soil erosion leading to leaching of nutrients, deforestation, and biodiversity loss[9]. Another drawback of shifting cultivation is the release of greenhouse gasses (CO_2, CO, CH_4, NO_x) into the atmosphere[10]. However, these practices still exist as they are a cost-effective way of preparing agricultural land[11].

According to the socioecological survey, all farmers use slash-and burn practices in order to create agricultural land or to create pastures. This phenomenon occurs once a year. The burning occurs in the dry season (December – February). The harvested area is left behind, with no efforts to reforest or enhance natural regeneration. This is consistent with the findings of van Vliet et al. (2012), who states that one of the drivers of slash-and burn agriculture is "the pressure to make a living particularly under conditions of inadequate resources often faced by farmers in the remote regions of the world". Often, they lack the manpower and machinery for this land clearing, what was confirmed during the interviews as people answered often with 'machinery' on the question what investment would help them. Along Tang et al. (2020)[12] it is likely that they will continue to practice the slash-and burn method until they encounter other sources of income.

Shifting cultivation has a direct impact on the biodiversity and soil. The fallow period is crucial for the minimisation of the soil degradation after burning. When the period is shortened, the soil does not have sufficient time to replenish with carbon and nutrients[4]. This again leads to soil degradation and consequently to lower agricultural yield and in addition a demand for more agricultural land. Complaints about the agricultural yield were common during the interviews in the project zone and even some of the farmers indicated a bad soil quality, which make them go further into the forest to create fields. In addition, studies show a decline in biodiversity in areas impacted by slash-and burn activities. As of last, this way of farming is not without health issues, as it contributes to air pollution and so can raise a public health concern.

It is important to highlight that slash-and-burn agricultural practices may not necessarily result in significant environmental damage. Typically, a limited area is cleared and subjected

[9] van Vliet, N., Mertz, O., Heinimann, A., Langanke, T., Pascual, U., Schmook, B., Adams, C., Schmidt-Vogt, D., Messerli, P., Leisz, S., and Castella, J. C., 2012, Trends, drivers and impacts of changes in swidden cultivation in tropical forest-agriculture frontiers: A global assessment. Global Environmental Change, 22(2), 418–429. doi: https://doi.org/10.1016/j.gloenvcha.2011.10.009.

[10] Silva, J. M. N., Carreiras, J. M. B., Rosa, I., and Pereira, J. M. C., 2011, Greenhouse gas emissions from shifting cultivation in the tropics, including uncertainty and sensitivity analysis. Journal of Geophysical Research: Atmospheres, 116(D20). doi: 10.1029/2011JD016056.

[11] Ziegler, A. D., Bruun, T. B., Guardiola-Claramonte, M., Giambelluca, T. W., Lawrence, D., and Lam, N. T., 2009, Environmental consequences of the demise in swidden cultivation in montane mainland Southeast Asia: Hydrology and geomorphology, Human Ecology, 37(3), 361–373. doi: 10.1007/s10745-009-9258-x.

[12] Tang, K. H. D., & Yap, P. S. (2020, September). A systematic review of slash-and-burn agriculture as an obstacle to future-proofing climate change. In The Proceedings of The International Conference on Climate Change (Vol. 4, No. 1, pp. 1-19).

to controlled burning, often leaving some trees intact within the cleared space. Subsequently, during the cropping cycle, competitive perennial crops like bananas are cultivated, becoming the pioneer vegetation after the fields are eventually abandoned. Over a span of approximately two decades, these abandoned fields naturally transition into secondary forests. As time progresses, these secondary forests become indistinguishable from the primary forests[5].

Brown., (2006)[13] has indicated that slash-and-burn agriculture can be deemed sustainable when practiced within areas of low population density. This system is characterized by minimal inputs, as it necessitates no fertilizers and relies solely on manual tools for cultivation. However, as population density increases, the sustainability of this system becomes compromised due to shortened fallow periods. Although slash-and-burn practices are often viewed negatively, it is essential to recognize that this method actually expedites the conversion from primary forests to secondary forests without surpassing the regenerative capacity of the ecosystem. Lamb., (1997)[14] has even argued that the discontinuation of this system could potentially lead to a decline in biodiversity.

There are some alternatives to the slash-and burn activities among which agroforestry. Along Verchot et al. (2007)[15] this could be a good alternative due to its sustainability factors and adaptation capacity to climate change. Agroforestry systems contain many advantages such as improved water usage, increased soil productivity and nutrient usage, pest control and minimisation of diseases, enhanced crop yield, increased income, and carbon sequestration[16]. Kotto-Same et al. (1997) states that agroforestry as alternative land use could reduce carbon loss by 75 t C ha $^{-1}$ and in addition add to biodiversity protection, poverty alleviation and deforestation deflection. However, there is a need for incentives and intervention to help farmers in adopting agroforestry practices[6] deflection. However, there is a need for incentives and intervention to help farmers in adopting agroforestry practices[6].

The figures below visualize the baseline scenario in the Bankim project areas.

[13] Brown, D. R. (2006). Personal preferences and intensification of land use: their impact on southern Cameroonian slash-and-burn agroforestry systems. *Agroforestry systems*, 68, 53-67.
[14] Eyong, C. T. (2007). Indigenous knowledge and sustainable development in Africa: Case study on Central Africa. *Tribes and tribals*, *1*(1), 121-139.
[15] Verchot, L. V., Van Noordwijk, M., Kandji, S., Tomich, T., Ong, C., Albrecht, A., Mackensen, J., Bantilan, C., Anupama, K.V . and Palm, C., 2007, Climate change: linking adaptation and mitigation through agroforestry. Mitigation and Adaptation Strategies for Global Change, 12(5), 901-918
[16] Tang, K. H. D., & Yap, P. S. (2020, September). A systematic review of slash-and-burn agriculture as an obstacle to future-proofing climate change. In The Proceedings of The International Conference on Climate Change (Vol. 4, No. 1, pp. 1-19).

Grazing zone in Moinkoing

Grazing zone in Bandam

Baseline farmer land

Baseline communal garden Moinkoing

Baseline communal garden Bandam

3.2 Carbon Baseline

We refer to Annex 7 for the description of the baseline scenarios based on Plan Vivo approved methodology (PM001 Agriculture & Forestry Carbon Benefit Assessment Methodology). Without active nurseries, distribution of seedlings, investment funding, planting and training on management techniques, we can expect a stable baseline where future carbon stocks will not increase and even decrease. It is highly unlikely that farmers will voluntarily plant trees on the plots without the support of the project (nurseries, free seedlings, trainings, …), as they do not have the capital to install this themselves. Overall, we can reasonably assume that

there is no change in carbon stock in the baseline scenario as compared to the initial carbon stock: **ΔCbaseline = 0**. Given the negative trends in tree coverage (see Annex 7 for baseline accounting), this is a conservative assumption.

Following the Plan Vivo PU001 module, there is "no change in woody biomass carbon stocks if the conditions in AR-TOOL14 v4.2 section 5 are met". This tool states 'conditions under which carbon stock and change in carbon stock may be estimated as zero', which are the following:

1. The pre-project trees are neither harvested, nor cleared, nor removed throughout the crediting period of the project activity;
2. The pre-project trees do not suffer mortality because of competition from trees planted in the project, or damage because of implementation of the project activity, at any time during the crediting period of the project activity;
3. The pre-project trees are not inventoried along with the project trees in monitoring of carbon stocks but their continued existence, consistent with the baseline scenario, is monitored throughout the crediting period of the project activity.

The above conditions are met in all project zones and in addition:
"Changes in carbon stocks in trees and shrubs in the baseline may be accounted as zero for those lands for which the project participants can demonstrate, through documentary evidence or through participatory rural appraisal (PRA), that one or more of the following indicators apply:

- Observed reduction in topsoil depth (e.g. as shown by root exposure, presence of pedestals, exposed sub-soil horizons);
- Presence of gully, sheet or rill erosion; or landslides, or other forms of mass movement erosion;
- Presence of plant species locally known to be indicators of infertile land;
- Land comprises of bare sand dunes, or other bare lands;
- Land contains contaminated soils, mine spoils, or highly alkaline or saline soils;
- Land is subjected to periodic cycles (e.g. slash-and-burn or clearing regrowing cycles [or periodic burning]) so that the biomass oscillates between a minimum and a maximum value in the baseline.

We note that the above underlined conditions are valid and safeguarded as project applicability conditions.

We provide details of the calculations for each intervention in Section 3.8 and Annex 6.

3.3 Livelihood Baseline

3.3.1 Initial Livelihood Status

The project performed individual semi-structured interviews near the project areas in order to gain in-depth understanding of the socio environmental dynamics and livelihood challenges in the region. Interviewees were identified during visits in the neighbourhood of project areas, and interviewed on a voluntary basis. Part of the information of the livelihood consists of the analysis of these interviews.

Mayo-Banyo is a department of Cameroon located in the Adamawa region, bordered to the west by the Federal Republic of Nigeria. Its chief town is Banyo, and it is made up of 3 Communes: Bankim (start of the project), Mayo-Darlé and Banyo. Bankim includes about 2,700 km² with 70,132 inhabitants in 279 villages. The semi-structured interviews highlighted the difference between two key types of livelihoods in the area: those who lived sedentary in the villages (ethnicity: Tikar, Yamba, and Bassa, 15 participants) and those who have a semi-nomadic lifestyle (ethnicity: Mbororo, 5 participants). Among the 20 participants, there were four women, but none were from the minority group Mbororo. However, in later interviews (2024), Mbororo women in Moinkoing were present during project meetings. In Bandam, the local team was invited into the house of the oldest Mbororo women. The Tikar, Yamba, and Bassa indicated that women can give their opinion, although the man stays the head of the family, meaning that the end decisions lie in male hands. Four people (all men) indicated that men and women are equal. Furthermore, interviewees indicated that separate tasks for both genders exist, but that they also work together. One Mbororo man stated that only boys until the age of 10 – 15 attend school. Girls did not, but a change would be coming, as some parents send their daughters to school, but only to learn to read and write. All interviewees indicated that especially secondary school is difficult as it is far away. The youth is active in the village and on the fields, and migration is not uncommon. For instance, one respondent mentioned that about 50% of youngsters leave to search for a better future.

The Mayo-Banyo department struggles with several difficulties, including the relative isolation, the inadequacy of the transport network, the limited strength of macro-economic fabric (factories and medium-sized enterprises), the inadequacy of health structures and personnel, an absence of urban planning documents (Urban Summary Plan, Sector Plan and Land Use Plan), the non-existence of a sustainable natural resource management policy, and the lack of structures offering credit to businesses. These difficulties were mentioned as a synthesis of a workshop organised in Mayo-Darlé by Fes Enying for the preparation of this project.

Malnutrition is quite persistent in the Mayo-Banyo department. The Ministry of Agriculture and Rural Development (MINADER) conducted a National Food Security and Nutrition Survey (ENSAN) in September 2020. The data from this survey, collected from 9,959 households in the 10 regions of Cameroon, show geographical and nutritional inequality, in addition to the health crisis linked to the COVID-19 pandemic. Approximately 2.7 million people are acutely food insecure (Harmonised Framework (HF), Phases 3 to 5) in Cameroon for the current phase of October-December 2020 and 2.3 million (9%) in the projected phase (June-August 2021). The vast majority of these people are in the Far North, North and Adamawa regions (Republic of Cameroon: National Food and Nutritional Security Survey, April 2021 – September 2020 data – Cameroon | ReliefWeb).

In a survey conducted in 2017 in this region by the NGO Solidarités International (SI), about two thirds of the households surveyed (68%) had used at least one “stress coping strategy” in the month preceding the survey. 43% of households used one or more stress strategies such as borrowing money to buy food, 14% used one or more crisis strategies such as reducing expenditure on health or schooling, and 11% used one or more emergency strategies such as selling breeding animals at low prices.

Several ethnic communities live in the selected area, with the Tikar being in the majority, along with minorities, namely the Mbororo. These minorities are the most precarious and marginalised and live well below the indicators identified in the SI survey. Several other causes of food insecurity were mentioned during the first project workshops, namely: difficulties in agricultural transport and connectivity (reduced mobility due to lack of means of transport), lack of agricultural inputs and agricultural credits, agropastoral conflicts and non-functioning of existing Common Initiative Groups (*Groupe d'Initiative Commune, GIC*).

According to all respondents, a significant proportion of the rural population is dependent on the forest for various needs, including fuelwood, timber, food (fruits, meat, fish), fibre and medicinal plants and bark. Sedentary participants indicated mangue sauvage, djansang, and noisettes, next to many others as essential forest products. Furthermore, the forest is important for its shadow and also their well-being. Also, 13 people indicated that the forest has specific sacred places, which makes it even more important. So, access to the forest remains a priority in rural areas. Any initiative restricting this access must therefore take these needs into account and provide adequate compensation measures.

At the same time, support and marketing channels for non-timber forest products remain limited, although every participant (sedentary and nomadic) indicated that this was necessary. Remarkably, Mbororo indicated that they were less dependent on the forests, as none of the Mbororo interviewees could name an important forest product; as an advantage of the forest, they only indicated fish and wood.

During another workshop with the mayors of Mayo-Banyo department, the analysis of the problems mentioned above led to the conclusion that only focusing on reforestation, without tackling the problem of food security, would not guarantee the achievement of the results of this project. Hence the decision to retain different axes of the present project (food security, and agroforestry).

Agriculture is important for the communities, but in contrast with the South of the country, mixed fields are a minority and agroforestry is not known among the interviewees. The sedentary interviewees farm coffee (40% of the sedentary interviewees, average field size of 4.9 ha), maize (53%, average field size of 2.56 ha), and manioc (60%, average field size of 0.89ha). Few have soja, arachide, bean, macabo, taro and pistache. In contrast, the Mbororo focus on livestock, although 4 have a small garden where they farm vegetables such as gombo and chillies. According to 6 of the respondents, the sedentary people use slash- and burn tactics to clear their fields once per year. The Mbororo use the fires to have fresh herbs for their cattle. An important note is that those having coffee fields already perform a type of agroforestry as it is always a mixture of coffee plants and trees as the coffee needs shadow.

Coffee is produced to sell on the spot; other crops are for consumption and sale. None of the interviewees could provide a good estimation of their harvest. The price for coffee ranges between 60 and 200cfa/kg. The price for maize lies between 100 and 333cfa/L and that of manioc depends on how it is sold. Manioc in couscous could deliver 120 – 250cfa /kg and water fufu can be sold for 200 – 270cfa/kg.

Associations (legal and illegal) where people come together and save money to help each other out when necessary, were known by every participant. GICs, such as PAM OIL, were known by 50%, and agricultural cooperatives only by 30%. The Mbororo respondents indicated to know none of these initiatives.

Most participants (65%) have animals, but a clear distinction between the Mbororo (5p) and the sedentary people (8p) can be made. The sedentary have chickens (100%, average of 18), pigs (25%, average of 4), goats (25%, average of 3), and ducks (25%, average of 10). These animals are often only raised for autoconsumption, and in case of need, they are sold. The Mbororo hold chickens (40%, average of 30), cows (80%, average of 110), sheep (80%, average of 43), and ducks (40%, average of 24). These animals are for consumption, sale, and ceremonies. Besides that, the Mbororo sell animal products such as cow and sheep skin, milk, and eggs. Their animals feed themselves with fresh herbs on pastures. They do not use stable feed as fodder for their animals. Apiculture is rare, although 2 participants indicated that they started honey production, but the yield was poor. Hunting activities are less important in the region, as only 1 participant indicated that he hunts. Fishing is a more frequent activity, as 6 participants stated that they fish.

As mentioned before, the remnant forests are crucial for the people of Bankim, but all respondents indicated that they were aware of deforestation. All of the interviewees pinpoint forest fires in the dry season as a cause of deforestation. All sedentary people said that the nomads set fire to the fields. Next to that, 14 of the 15 sedentary participants stated that the creation of cropping fields was a cause as well, but only six mentioned that those responsible for fires were farmers as well. Legal and illegal logging was only mentioned once.

The sedentary interviewees had quite similar ideas about what would help their village the most. They were all enthusiastic about family orchards and commercialising the NTFP, where mangue sauvage and djansang were often marked as the best products to commercialise. Besides that, electricity (60%), formation centres (50%), schools (40%), and health centres (30%) were the most popular answers. Other social investment ideas concerned agricultural formation/equipment, roads, water, and the commercialisation of products. The Mbororo had other thoughts. An orchard is not interesting for them due to their nomadic lifestyle, but they are not against the commercialisation of the NTFP. The main thing that would help their community is creation of more pastures for their cattle, according to all Mbororo interviewees.

3.3.2 Expected Livelihood Change

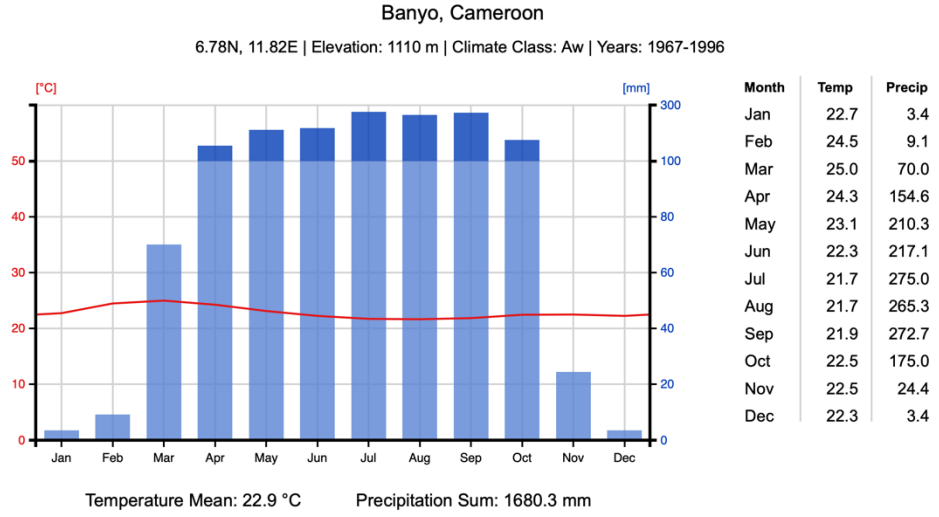
The respondents indicate that the climate is changing. In most descriptions, the seasons are no longer the same. In the dry season, one does not expect rain, but the rain recently appeared, and in the wet season, one has to wait for a long time before the rain comes (and if the rain arrives, it is less than back in the days). Even if the rain comes, it can stop abruptly, ruining the freshly planted crops. The interviewees indicate that these changes appeared in the last decade. The main trouble they face is a yield reduction, according to the interviews. But they also talk about diseases or insects attacking the plants. Interviewees even indicate that the soil is less fertile than before, which is the reason they have to cut or burn down more trees to create more field.

Overall, respondents point to agricultural stress due to the recent hydroclimatic changes. Such statements are corroborated by scientific studies. Indeed, rainfed agriculture depends heavily on the West African Monsoon. As summarised by Monerie et al. (2021) in their paper in Nature, climate change will drive major perturbations of the West African Monsoon. The authors predict heterogenous impacts on agriculture, occurrence of precipitation extreme events, and modification of monsoon onset and monsoon withdrawal dates. For instance, the (Guinean) High Savannah Zone is considered suitable for maize production. However, under a high emission scenario (SSP3 – RCP7.0), 70% of the suitable areas will be negatively affected towards 2050 and 2090. Specifically for het Guinean High Savannah Zone, this means that this scenario will result in a 70% relative yield decline by 2090. Simulations of the manioc yield shows a decline over 15% under low and high emission scenarios by 2090[17]. These numbers show the vulnerability of smallholder farmers in this ecological area.

3.4 Ecosystem Baseline

3.4.1 Initial Ecological Conditions

The mean annual temperature in the Adamawa region is 22.9°C, with the lowest in July and August (22.7°C) and the highest in March (25°C) (Figure 3). The total rainfall is 1680.3mm, which mainly falls in the period between March and October. It has a tropical savannah climate (class Aw).



Month	Temp	Precip
Jan	22.7	3.4
Feb	24.5	9.1
Mar	25.0	70.0
Apr	24.3	154.6
May	23.1	210.3
Jun	22.3	217.1
Jul	21.7	275.0
Aug	21.7	265.3
Sep	21.9	272.7
Oct	22.5	175.0
Nov	22.5	24.4
Dec	22.3	3.4

Figure 3: Climatogram Banyo based on (https://climatecharts.net)

[17] Gloy, N., Kephe, P., Jansen, L., Ostberg, S., Kaufmann, J., Staubach, L., Tchindjang, M., Romanovska, P., Vetter, R., Tomalka, J., Kagonbé, T., Anaba, M., Zouh, I., Amougou, J.A., Cronauer, C. and Gornott, C. (2023). *Climate risk analysis for adaptation planning in Cameroon's agricultural sector.* A report prepared by the Potsdam Institute for Climate Impact Research (PIK) in cooperation with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), DOI: 10.48485/pik.2023.023

Bushfires are still practiced in the area since these help to renew the pastures of herders. However, these fires are sometimes unstoppable and spread into the forests or community gardens. Forests are also increasingly under pressure from loggers, especially informal loggers. Adamawas proximity to the large block of the Centre on the one hand exposes it to logging activities. On the other hand, its proximity to Nigeria may motivate agricultural expansions aiming to deliver food resources to this African consumer giant (intense economic activity, strong demand from Nigeria).

The department of Mayo-Banyo was selected for this project because of its crucial location in an ecological transition zone. It may be the first department in the “great north” of Cameroon that is strongly affected by the effects of climate change, while bordering the centre of the country, which is characterised by forests and a more temperate climate. Climate change in this area is characterised by increased rainfall instability, which is an important factor in agricultural, wildlife and plant production.

This state of affairs not only results in the instability of the agricultural calendar, the drying up of water points, and the disappearance of certain species of flora and fauna, but also has harmful consequences for household incomes. Hydroclimatic unpredictability is in part responsible for the price instability of agricultural products on the market.

The Adamawa region borders the large centre of Cameroon, and constitutes the beginning of the large northern block (septentrion): the Sahelian zone of the country. Adamawa still contains the only forests in this large northern block (Adamawa, North and Far North), the other two regions having suffered from significant desertification.

3.4.2 Expected Ecosystem Change

We refer to Annex 7 for a description of how ecological conditions are expected to change under the baseline scenario. A brief summary:

According to the socioecological survey, all farmers use slash-and burn practices in order to create agricultural land or to create pastures. This phenomenon occurs once a year. The burning occurs in the dry season (December – February). The harvested area is left behind, with no direct efforts to reforest or enhance natural regeneration. Often, they lack the manpower and machinery for this land clearing, what was confirmed during the interviews as interviewees answered often with ‘machinery’ on the question what investment would help them. Along Tang et al. (2020)[18] it is likely that they will continue to practice the slash-and burn method until they encounter other sources of income.

The slash -and burn practices can be very efficient, but sometimes can have negative impact on the ecosystem. The fallow period is crucial for the minimisation of the soil degradation after burning. When the period is shortened, the soil does not have sufficient time to replenish with carbon and nutrients. This again leads to soil degradation and consequently to lower agricultural yield and in addition a demand for more agricultural land. Complaints

[18] Tang, K. H. D., & Yap, P. S. (2020, September). A systematic review of slash-and-burn agriculture as an obstacle to future-proofing climate change. In The Proceedings of The International Conference on Climate Change (Vol. 4, No. 1, pp. 1-19).

about the agricultural yield were common during the interviews in the project zone and even some of the farmers indicated a bad soil quality, which make them go further into the remnant forest to create fields. In addition, studies show a decline in biodiversity in areas impacted by slash-and burn activities.

Theory of Change

3.5 Project Logic

We completed table 3.5 to provide a summary of the causal links between project activities and expected outcomes, key assumptions and risks.

Table 3.5 Project Logic

Aim Setup of climate resilient agroforestry systems and communal gardens using high quality tree nurseries and direct seeding, to support food security and valorisation of agroforest resources in and beyond the Adamawa region, Cameroon.		
	Description	**Assumptions/Risks**
Outcomes – Intended overall project aim		
Carbon Benefit	Planting 10 000 agroforestry trees per year per community in home orchards with a stand density of ~200 trees/ha and use direct seeding completed with excess of tree nurseries to set up communal gardens with a stand density of ~200 trees/hectare. The project will equally protect the planted areas against uncontrolled fires and damage due to livestock. The project may later expand to adjacent areas and add smallholders and communities to scale-up the project impact.	● Political stability and political/ legislative non-amendments are assumed. ● The climatic conditions are assumed not to change significantly (as compared to today) ● Strong involvement of communities as project designers and involvement of the Mbororo in project activities will build a strong project support base.
Livelihood Benefit	Set up of home orchards, with an average of 200 agroforestry trees per ha provides an additional income for smallholder farmers. Set up of communal gardens with 200 agroforestry trees/ha providing fruit and other non-timber forest products for the community. Support the production of apiculture and other NTFPs and the possible establishment of local cooperatives.	● Political stability is assumed. ● Fruits and other NFTPs from agroforestry can be sold at local markets. ● Agricultural production improves through increased soil fertility (agroforestry). ● Activate community re-investments to tackle socio-ecological challenges.

	Ensure livestock feed by installing fodder crop system for the Mbororo. Socio-ecological challenges are tackled by community decisions using re-investments. Improve gender equality by supporting women participation in community decision.	
Ecosystem Benefit	Plantation of native/naturalised trees via seedlings and direct seeding will increase the local biodiversity of the Adamawa forest-savannah mosaic. We see this system as a mosaic of habitats, including woodlands, grassland, and agricultural areas. Given the high degree of fragmentation, communal gardens can form key landscape ecological stepping stones.	● The climatic conditions are assumed not to change significantly (as compared to today) ● Community members are assumed to engage in taking care of the newly planted areas.
Outputs		
Output 1	The food security of communities of Bankim is improved through communal gardens, serving as small food forests,-planting on community lands via direct seeding, completed with fruit/forest trees from nurseries (density of ~200trees/ha).	● Community members help to plant, protect and observe (monitor) the agroforestry areas, to strengthen the longevity of the sowed and planted species. ● Community members show interest for the agroforestry practices.
Activity 1.1	A1.1 Collection and treatment of seeds of appropriate trees for direct seeding.	Seeds are collected in woods, but in case of shortness they are purchased on the market.
Activity 1.2	A1.2 Direct seeding of communal garden (with density of 100trees/ha) and completion with trees from nurseries to 200 trees/ha.	● The project must establish fire management to protect sprouts against fires. ● Animal management need to be established to protect sprouts from being eaten.

		• Community members help to protect and observe (monitor) the agroforestry areas, to strengthen the longevity of the sowed species
Activity 1.3	A1.3 Establishment of fire management plan, including firebreaks to protect seedlings from runaway fire (where appropriate).	The risk is there that firebreaks are not effective, so evaluation after each dry season of the fire management plan will help mitigate this risk.
Activity 1.4	A1.4 Establishment of an artificial and a living fence to protect sprouts from being eaten.	The risk is there that fences are not effective, so evaluation of the installment and adaptation where needed is necessary.
Activity 1.5	A1.5 Long-term management and monitoring of the communal garden plots in line with the techspec protocol by the community led by Plan Vivo committees.	Community members effectively manage agroforestry trees with the assistance of the project team in following the techspec protocol.
Activity 1.6	A1.6 Establishment of fodder crops for Mbororo in order to prevent livestock to eat sprouts and increase feed security for livestock.	As in the first-year fodder crops are not yet established, increased livestock management (fences) will be required.
Output 2	The food security of smallholders and their families, is improved through the establishment of home orchards.	• Smallholder farmers plant and effectively manage agroforestry trees. • Smallholder farmers show interest for the agroforestry practices.
Activity 2.1	A2.1 Establish 1 nursery per participating community/village, delivering 10 000 native/naturalised seedlings each year for agroforestry planting.	New nurseries are to be established at flat locations where water is easily available, and the nursery is visible for people.
Activity 2.2	A2.2 Interspersed agroforestry tree planting in home orchards at around 200 trees/ha.	When trees die off, the smallholder farmers replant trees, so the density of 200 trees/ha is maintained.
Activity 2.3	A2.3 Providing training in agroforestry practices for smallholder farmers and community members.	To mitigate the risk that one would not show up, the date, time and place should be announced well in advance. The place should be easily accessible for everyone.
Activity 2.4	A2.4 Long-term management and monitoring of the agroforestry home	Smallholder farmers effectively manage agroforestry trees with the

	orchard plots in line with the techspec protocol	assistance of the project team in following the techspec protocol.
Activity 2.5	A2.5 Implementing fire and animal protection strategies such as firebreaks, and branches from trees to protect the trees from livestock	In the individual agreement there is written that a farmer should protect the trees against fires and animals.
Output 3	Support the production of apiculture and other NTFPs and the establishment of marketing channels and local cooperatives to improve income of smallholder farmers and community members.	Honey and other NFTPs from can be sold at local markets
Activity 3.1	A3.1 Providing technical training on valorisation of non-timber forest products and honey (appropriate processing and preservation techniques).	To mitigate the risk that one would not show up, the date, time and place should be announced well in advance. The place should be easily accessible for everyone.
Activity 3.2	A3.2 Providing training on economic value of NTFPs, and the market options and support in the set-up of cooperatives when there is interest.	To mitigate the risk that one would not show up, the date, time and place should be announced well in advance. The place should be easily accessible for everyone.
Activity 3.3	A3.3 Enhance peer-to-peer learning and knowledge sharing within and across communities between smallholders.	To mitigate the risk that one would not show up, the date, time and place should be announced well in advance. The place should be easily accessible for everyone.
Output 4	The community members are implementing the socio-environmental changes they envisaged, using the proceeds of the Plan Vivo funds.	● Smallholder farmers and community members show interest for the environment and ecosystem benefits. ● Strong involvement of communities as project designers and involvement of the Mbororo in project activities will build a strong project support base.
Activity 4.1	A4.1. At least 1 participative workshop or training session per year on awareness raising and the ecosystem benefits of environmental restoration and agroforestry is provided.	To mitigate the risk that one would not show up, the date, time and place should be announced well in advance. The place should be easily accessible for everyone.
Activity 4.2	A4.2. Setting up community-based Plan Vivo committees representing the community, including women and	In statutes of Plan Vivo committees it is written that at least 30% women and all ethnic groups

	ensure the involvement of the all ethnic groups including Mbororo minority (if relevant for the village).	(including Mbororo) should be represented. We refer to the consensus building mechanism in §7 of the project agreement and to the grievance mechanism in case of complaints.
Activity 4.3	A4.3. Activation of socio-environmental re-investments based on Plan Vivo committee decisions.	Risk that there would be disputes during decision making is mitigated by the consensus building mechanism in the project agreement.
Activity 4.4	A4.4 Community (annually) and Plan Vivo meetings (at least 3x/y) are organized in order to follow up on the project and the project investments.	To mitigate the risk that one would not show up, the date, time and place should be announced well in advance. The place should be easily accessible for everyone.

Technical Specifications

We completed the technical specification template in Annex 7. where we provide the details on the agroforestry activities (tree planting in home orchards, communal garden, and woodlands).

3.6 Project Activities

We completed Table 3.6 to provide a summary of the main project activities and inputs for the project intervention. We also refer to Table 3.5 and the separate technical specifications in Annex 7.

Table 3.6 Project Activity Summary

Project Intervention	**Project Activities**	**Inputs**
Output 1	Activities A1	Means/Resources
	A1.1 Collection and treatment of seeds of appropriate trees for direct seeding.	● Scientific partners will assist in case of seed collection and treatment. ● Little equipment is needed
	A1.2 Direct sowing of woodlots (density of ~100trees/ha) and completion with trees from nurseries (to a density of ~200trees/ha)	● The community is directly engaged in communal garden planting. ● Shovels
	A1.3 Establishment of fire, including firebreaks management strategy to protect seedlings from runaway fire (where appropriate).	Strong community involvement in set up and maintenance of firebreaks

	A1.4 Establishment of an artificial and a living fence to protect sprouts from being eaten.	● Barbed wire ● Seeds for living fence ● Strong community involvement.
	A1.5 Long-term management and monitoring of the communal garden plots in line with the tech spec protocol by the community led by Plan Vivo committees.	Q field app will be used to collect and manage the field data
	A1.6 Establishment of fodder crop system for Mbororo in order to prevent livestock to eat sprouts and increase feed security for livestock.	● Mbororo involvement ● Seeds for growing fodder crops
Output 2	Activities A2	Means/Resources
	A2.1 Establish 1 nursery per participating community/village, delivering 10 000 native/naturalised seedlings each year for agroforestry planting.	● Seeds for the nurseries are provided by the project team and are collected in the woods or purchased on markets with assistance of scientific partners. ● The nurseries will need garden tools (wheelbarrow, rakes, watering cans, …), Soil (1 lorry/bed), potting and nursery keepers (1/village).
	A2.2 Interspersed agroforestry tree planting in home orchards at around 200 trees/ha.	● The smallholder farmers are directly engaged in home orchard planting. ● Shovels
	A2.3 Providing training in agroforestry practices for smallholder farmers and community members.	● Expert (technical assistant of Fes Enying) in agroforestry will give the training. ● Place accessible to everyone will be provided
	A2.4 Long-term management and monitoring of the agroforestry home orchard plots in line with the tech spec protocol	Q field app will be used to collect and manage the field data.
	A2.5 Implementing fire and animal protection strategies such as firebreaks, and branches from trees to protect the trees from livestock	● Branches of trees to make individual cages for trees ● Technical advice on dimensions of firebreaks
Output 3	Activities A3	Means/Resources

	A3.1 Providing technical training on valorisation of non-timber forest products and honey (appropriate processing and preservation techniques).	● Plan Vivo revenues may be used to strengthen valorisation of NTFP. ● Technical trainings by the project staff and local experts to valorise non-timber forest products. ● Materials needed for processing and preservation will be provided by the project
	A3.2 Providing training on economic value of NFTPs, and the market options and support in the set-up of cooperatives when there is interest.	Economic trainings by the project staff and local experts to valorise non-timber forest products.
	A3.3 Enhance peer-to-peer learning and knowledge sharing within and across communities between smallholders.	Smallholder involvement in sharing of knowledge.
Output 4	Activities A4	Means/Resources
	A4.1. At least 1 participative workshop or training session per year on awareness raising and the ecosystem benefits of environmental restoration and agroforestry is provided.	● Scientific partners will assist in workshops and training sessions.
	A4.2. Setting up community-based Plan Vivo committees representing the community, including women and ensure the involvement of all the ethnic groups including Mbororo minority (if relevant for the village).	● Strong involvement of the communities in the project design. Activities are the result of a joint effort by the project team and community members.
	A4.3. Activation of socio-environmental re-investments based on Plan Vivo committee decisions	● Strong involvement of the communities in the project design. Activities are the result of a joint effort by the project team and community members.
	A4.4 Community (annually) and Plan Vivo meetings (at least 3x/y) are organized in order to follow up on the project and the project investments.	● Strong involvement of the communities in the project design. Activities are the result of a joint effort by the project team and community members.

3.7 Additionality

We completed Table 3.7 to provide a summary of the main barriers to project implementation and how they will be overcome for each project intervention. Full details of the additionality assessment, following an approved methodology, are provided in a separate technical specification for each project intervention in Annex 7.

Table 3.7 Additionality Assessment Summary

Intervention Aspect	Main Barriers	Activities to Overcome Barriers
Financial/ Economic	- Limited funds - Lack of governmental or other nurseries - Other priorities - Limited public and private credit availabilities	- Start-up capital secured via Luxembourg Climate Fund; benefit sharing scheme supported by Plan Vivo - High-quality nursery established by the project - Free distribution of seedlings
Technical	-Semis-direct not applied in Cameroon before -Lack of governmental or other nurseries -Lack of fruit trees - Few trainings on agroforestry	Skilled local coordinator; academic input of environmental scientists; link with National Herbarium; installation of (agroforestry) nurseries and application of semis-direct
Institutional	"Top-down approach", although room is given for local initiatives	Bottom-up approach with first consultation rounds, continued workshops, strengthening of social cohesion via Plan Vivo assemblies, and benefit sharing for participating communities
Ecological	- Bushfires can affect tree growth - Livestock could possibly eat freshly planted trees	Plan Vivo maps as basis for community-based land management, fire management plan, livestock control and enrichment planting of native and fruit species

3.8 Carbon Benefits

We refer to Tables 3.8a and 3.8b to provide a summary of the expected carbon benefits from each project intervention over the first crediting period. Full details of procedures for estimating carbon benefits, following an approved methodology are provided in a separate technical specification for each project intervention in Annex 7. The calculations are to be found in Annex 6.

Table 3.8a Expected Carbon Benefits Summary

Project Intervention	Initial carbon stock (tCO2e/ha)	Baseline Emissions (t CO2e/ha)	Project Emissions (t CO2e/ha)	Leakage Emissions (t CO2e/ha)	Carbon Benefit (t CO2e/ha)
Home orchard Bankim	0	0	-255.4	0	255.4
Communal garden Bankim	0	0	-247.10	0	247.10

Table 3.8b Plan Vivo Certificate Potential

Project Intervention	Carbon Benefit (t CO2e/ha)	Project Area (ha)	Total Carbon Benefit (t CO2e)	Risk Buffer (t CO2e/ha)	Potential PVCs (t CO2e)
Home orchard Bankim	255.4	9.77	2 495.3	51.1	1 996
Communal garden Bankim	247.10	6.4	1 573.9	49.4	1 259
TOTAL	**502.5**	**16.17**	**5 643.1**	**100.5**	**3 255**

Risk Management

3.9 Environmental and Social Safeguards

3.9.1 Exclusion List

The project does not include any activities listed in the Plan Vivo Exclusion List (see Annex 8).

3.9.2 Environmental and Social Screening

We completed Table 3.9.2 to provide a summary of the potential risks and impacts identified in the environmental and social risk screening.

An environmental and social management plan is required and is included in Annex 10.
We include the complete environmental and social screening report in Annex 9.

Table 3.9.2 Environmental and Social Risks

Risk Area	Likelihood (1-5)	Magnitude (1-5)	Significance (low, moderate, severe, high)
Vulnerable Groups	3	3	**Moderate** risks mainly related with perpetuation of income-related inequality and indigenous people (Mbororo).
Gender Equality	2	3	**Moderate** risks mainly related with perpetuation of gender-related inequality.

Human Rights	1	4	**Low** risk mainly related to individuals not being present during decision-making by community meetings.
Community, Health, Safety & Security	2	2	**Low** risk mainly related to social conflicts with the Mbororo.
Labour and Working Conditions	2	2	**Low** risk, as the project will at all time align with national labour laws.
Resource Efficiency, Pollution, Wastes, Chemicals and GHG emissions	1	3	**Low** risk, as no pollutants are used, and project GHG emissions are negligible.
Access Restrictions and Livelihoods	3	3	**Moderate** risks mainly related to disputes around the issue of fire and its management.
Cultural Heritage	1	2	**Low** risk as consultations with the community have already been implemented and sacred sites within the project area identified and not interfered with via project activities.
Indigenous Peoples	3	3	**Moderate** risks mainly related to involving Mbororo peoples and their participation in the project design and activities.
Biodiversity and Sustainable Use of Natural Resources	2	2	**Low** risk mainly related to introducing non-"native", although "naturalised" trees.
Land Tenure Conflicts	2	3	**Moderate** risks mainly related with the issue of fire, and land tenure disputes by Mbororo.
Risk of Not Accounting for Climate Change	2	2	**Low** risks mainly related to potential droughts and floods within the project area.
Other – e.g. Cumulative Impacts	2	2	**Low** risks mainly related to potential leakage from displaced wood cutting. The risk has been identified pre-project design phase and will be well managed throughout the project period.

3.9.3 Environmental and Social Assessment

We include a full environmental and social assessment report in Annex 10. Risks rated 'moderate' or higher as part of the E&S screening review have been given more detailed consideration, and corresponding management plans added (see section 3.9.4).

In January 2024, village meetings on risks were held in Moinkoing and Bandam. The main risk areas were discussed, and mitigation measures were suggested and decided. The risk session started with a brief recapitulation of the project, to remind people what activities will take place. Secondly, questions of people that were written or asked at the FPIC meetings were answered. As of last, the potential risks were discussed in group. Note that the questions were asked in French, after which they were translated in Pidgin (people in Moinkoing) and Foulbé (Mbororo), so everybody could participate in their own mother tongue. The most important topics were fires, potential damage from cattle and incorporation of various groups (Mbororo, women) into the project.

3.9.4 Environmental and Social Management Plan

We refer to Annex 10 where the mitigation measures to address the main environmental and social risks and impacts are described. The table below is the full synthesis of both the risk sessions and the mitigation measures in Bandam and Moinkoing.

E&S risks and impacts and mitigation measures					
Environmental and social risks and impacts	Mitigation measures	Feasibility, effectiveness and sustainability	Cost	Implementation	Follow-up indicator
Gender equality, vulnerable groups & indigenous people: If we ask to work together, men, women, other ethnic groups, in a Plan Vivo committee, is there a risk that this will not work?	Women participation in Plan Vivo committee is at least 30%, with a role as president or vice-president. In Plan Vivo committees every ethnic group in the village should have a representation. M: if a person in the Plan Vivo committee is not working together with the others, we will change him/her, see rules for PV committees are written down (Annex 19).	The target for women participation is 30%. Keep track of women participation in every meeting (Plan Vivo or village meeting). Keep track of every ethnic group has their represents in Plan Vivo and village meetings (attendance list). People in Plan Vivo committees are volunteers and do know how a Plan Vivo committee will look like: they have an intrinsic motivation to be part of the committee.	No cost	Annually, GDV M&B	L1 P15
Vulnerable groups & indigenous people: Is there a risk that the minority group, the Mbororo, will not be included in the project?	In Plan Vivo committees every ethnic group should have a representative.	Keep track of every ethnic group has their represents in Plan Vivo and village meetings (attendance list).	No cost	Annually, M&B, GDV	L1 P15

Vulnerable groups & indigenous people: Is there a risk that the project will have a negative impact on the Mbororo	The project should include fodder in the project activities. The future investments should take into account water availability for the zebu of the Mbororo.	Feasible as fodder was foreseen in the project budget. There is a Mbororo representation in the Plan Vivo committees, so future investments in favour of the Mbororo are secured.	Cost of fod-der	Annually, GDV, M&B	P13, P15
Human rights: As the way of farming now is based on the slash-and burn method, but when planting trees, fire can no longer be used. Does that hold a risk for your livelihood?	Milestone based payment scheme (15y) giving the farmer a larger share of the carbon credit revenues at the start of the project to compensate for the fact trees are not yet producing fruits. B: Establishing fodder, so the need to burn to find food for the cows is reduced.	The payment scheme is included in the individual project agreement. Feasible as fodder was foreseen in the project budget.	Cost of fod-der	Annually, GDV	P5, P11

Community, Health, Safety & Security; land tenure conflicts: Is there a risk the project will lead to territorial conflicts?	Village chiefs or landowners cosign the individual project agreements in order to avoid territorial conflicts. Fodder will be installed to help reducing the need of burning on the fields of farmers. M & B: The emplacement of the communal garden should be in agreement with chief and his *notables.*	The village chiefs are easily accessible, and are considered as the gardeners of the land. Their decision is also respected by the population. Feasible as fodder was foreseen in the project budget. The village chief will also sign the project agreement, confirming the emplacement of the communal garden	Cost of fod-der	Signing contracts before start of planting activities (2024), fodder activities M&B	P1, P8
Resource efficiency, pollution, wastes, chemicals and GHG emissions :Is there a risk towards the usage of chemical products in the fields?	Following the advice given by trainings and workshops via GDV.	There are workshops and trainings foreseen by GDV.	Cost of work shop s	Annually, GDV	P9, P12, P14
Access restrictions and livelihoods & land tenure conflicts: Is there a risk that people renting a field will lose their field due to the project.	Project agreements need a section explaining the payment and follow- up procedure in case of renting a field. The landowner should co-sign the contract.	As farmers need to sign an individual agreement, it is easy and necessary that the owner of the field signs as well.	No cost	Before signing project agreeme nts, CL	NA

Cultural heritage: Is there a risk that the communal gardens will be close to sacred sites?	M & B: The emplacement of the communal garden should be in agreement with chief and his *notables.*	The village chiefs are easily accessible, and are considered as the gardeners of the land.	No cost	Before signing project agreement, GDV, M&B	NA
Other: Is there a risk that bush fires will destroy the planted trees? If so, how can we solve this?	Implementation of fire management plan including activities for individual farmer (fire breaks, sensitization towards cleaning their fields, communication towards neighbours), village people (sensitization: disadvantages of fire) and protection of communal gardens (i.e. fire breaks)	Knowledge about fire breaks is already common among farmers, but not everyone uses the same dimensions. Sensibilization is necessary. Farmers are aware that fires are not desirable.	Cost for installing firebreaks, sensitization meetings	Annually, GDV, M & B	P3
Other: Is there a risk that animals, like zebu, will destroy the trees?	Instalment of fodder for shepherds Communal gardens could be used as grazing zone when trees are mature (silvopastoral use). Individual farmers can protect young trees using branches of trees around the young plants.	Effectiveness: Mbororo themselves answered that this could help reducing the need of fire. Feasible: Fodder was foreseen in the project budget. Easy, affordable and effective solution to avoid that cows would eat the young trees.	Cost of fodder	Annually, GDV, M&B	P4

Other: Is there any other risk that is not discussed, but that could cause the project to fail?	M: in the contract it should be clear what will happen with the field in case a renter dies.	An addition in the project agreement is possible as these are not yet signed.	No cost	Before signing individual contract (2024 or 2025), CL	NA
Safeguard provisions					
Stakeholder Engagement & consultation	2 to 3 village meetings before project start Separate village meeting with Mbororo represents if relevant for village Yearly Plan Vivo assembly per village for the coming 30 years. Involve village chief and his *notables* in the project design	Feasible, since the project has a local team near the project regions. Sustainable on the long term (annually during 2023 – 2053)	No cost	Annually (2023 – 2053)	P15
Grievance Redress Mechanism	Complaint and suggestion book *Agents de relais,* duo in every village to collect complaints and suggestions Suggestion boxes within the village Community satisfaction survey	See §3.17	No cost	Annually (2023 – 2053), GDV, CL, Plan Vivo committees	NA

Free, Prior and Informed Consent	About 2 to 3 village meetings before project start Separate village meeting with Mbororo represents if relevant for village. Yearly Plan Vivo assembly per village for the coming 30 years. Involve village chief and his notables in the project design	Feasible, since the project has a local team near the project regions. Sustainable on the long term (annually during 2023 – 2053)	No cost	Annually (2023 – 2053), GDV, CL	P15

The table below gives a short overview of the most important risks identified in the environmental and social risk screening, and how the project aims to manage and/or mitigate these risks through specific project activities.

Table 3.9.4 Environmental and Social Risk and Impact Mitigation Measures

Risk/Impact	Mitigation Measures	Project Activity
Vulnerable groups (women, Mbororo) would be left out of the project	● Women participation target in Plan Vivo committees (30%) ● All ethnic groups should be represented in Plan Vivo committees	A4.2
Cultural heritage: communal gardens would be close to sacred sites.	Emplacement of the communal garden should be in agreement with chief and his *notables.*	A1.2
Gender equality: women could be left out of the decision process	Women participation target in Plan Vivo committees (30%)	A4.2
Indigenous People: risk of negative project impact on the livestock of Mbororo	The project should include fodder in the project activities in close consultation with the Mbororo.	A1.6

3.9.5 Native Species

We completed Table 3.9.5 to identify any non-native tree species that will be planted or other non-native plant or animal species that will be introduced to the project (Based on the Kew Botanical Gardens Database Plants of the World, 2023). For each non-native species, we describe the livelihood or ecosystem benefits that justify their inclusion in the project in lieu of alternative native species, and provide an assessment and evidence that they pose no environmental risk or threat.

Table 3.9.5: Non-Native Species Overview

Project Intervention	Non-Native Species Planted/ Introduced	Justification	Risk Assessment and Management
Agroforestry	Azadirachta indica (neem tree)	Neem oil is considered highly valuable. Furthermore, the tree has medicinal value as well.	Not proliferating, though moderately toxic. It is not native to Cameroon, but introduced, likely in the 1800s. Bingelli (1999) describes A. indica as a moderately invasive species.[19]
Agroforestry	Tamarindus indica	It is cultivated in home gardens, on farmlands, along roadsides and on common lands in most tropical countries. The tender pods and (un)ripe fruit can be eaten.	T. indica is generally believed to be indigenous to the drier savannas of tropical Africa. It has become naturalized in tropical Asia. So, despites his name, this is a native species in Cameroon[20].
Agroforestry	Anacardium occidentale (cashew tree)	A. occidentale is cultivated for its cashew nuts. The cashew apple is also important; it is eaten fresh.	Not proliferating but should be planted in a biodiverse mix. The cashew tree, a tropical tree native from Brazil, was introduced to Asia and Africa by European explorers in the sixteenth century.
Agroforestry	Persea Americana	Avocado is widely established across Cameroon and is a useful plant to many communities who use the fruit as a source of food. It is not an invasive species, although it can be easily germinated in nursery conditions. Seedlings grow quickly and continuously under warm, moist conditions.	Low risk species – seed quickly loses viability and should be sown within 7 days (PROSEA, 2023). Will be used in agroforestry areas only. Already naturalised in Cameroon. There is mentioning of avocado in Mauritius in 1780 (Schaffer, 2013).
Agroforestry	Citrus sinensis	The fruits are a good source of vitamin C. In	Sweet orange is not known anywhere as a wild plant but

[19] Rojas-Sandoval, J., & Acevedo-Rodríguez, P. (2022). Azadirachta Indica (Neem tree) [Dataset]. In CABI Compendium. https://doi.org/10.1079/cabicompendium.8112
[20] Rojas-Sandoval, J. (2022). Tamarindus Indica (Tamarind) [Dataset]. In *CABI Compendium*. https://doi.org/10.1079/cabicompendium.54073

		addition, the plants are also highly valued for beekeepers.[21]	must have originated near the border between China and Vietnam. The Portuguese introduced C. sinensis to the forest regions of West Africa, where it is extensively cultivated. Will be used in agroforestry areas only (Prota4u).
Agroforestry	Citrus reticulata	The fruits are a good source of vitamin C.	It is an exotic species, but no records of invasive behavior was found. Will be used in agroforestry areas only.
Agroforestry	Citrus limon	The fruits are a good source of vitamin C.	It is thought that the lemon originates from Southeast Asia.[22] Will be used in agroforestry areas only.
Agroforestry	Mangifera indica	Mango is widely established and naturalised right across Cameroon. It is an important food source. It will be used in agroforestry plots with some grafted and improved varieties. It can be moderately invasive but is a useful plant already present in the area and provides economic and environmental benefit.	Slight risk of spreading but will be planted amongst native species. Will be used in agroforestry areas only. Already naturalised in Cameroon: The mango spread throughout South-East Asia about 1500 years ago and to the east coast of Africa about 1000 years ago (PROSEA, 2013), possibly together with the Austronesian migrations.
Agroforestry	Annona muricata	Corosol or Soursop bears fruits full of vitamin B & C, and has medicinal oils	Although the tree is native to Sought America, the tree is widely spread across Africa. It is widely planted and naturalized in the tropical regions and in western Africa (Prota4u).

[21] Orwa. (2009). Citrus sinensis: Sweet orange [Dataset]. In *Agroforestry Database 4.0*.
[22] The BRAHMS Project, University of Oxford, Department of Plant Sciences. (z.d.). Oxford University Plants 400: Citrus limon. https://herbaria.plants.ox.ac.uk/bol/plants400/Profiles/CD/Citrusl

3.10 Achievement of Carbon Benefits

The project will generate fPVCs (to be transformed to vPVCs after every verification cycle), so a 10% proportion of carbon benefits will be held as insurance against non-achievement of carbon benefits. Table 3.10 shows the potential fPVCs after deduction of the achievement reserve.

Table 3.10 Plan Vivo Certificate Potential

Project Intervention	Potential PVCs (t CO2e)	10% achievement reserve	Potential fPVCs (t CO2e)
Home orchard Bankim	1 996	199.6	1 796.4
Communal garden Bankim	1 259	125.9	1 133.1
TOTAL	**3 255**	**325.5**	**2 929.5**

3.11 Reversal of Carbon Benefits

We completed Table 3.11 to describe and provide supporting evidence for the impact and likelihood of risks to the long-term maintenance of Carbon Benefits from the project.
In the Impact column we enter a score of 0, 1, 2, or 3 where 0 = none, 1 = low, 2 = moderate and 3 = high, and provide a description supported by evidence of the potential impact of the risk factor on the Carbon Benefits achieved by the project, if the stated mitigation measures are in place.

In the Likelihood column, we enter a score of 0, 1, 2, or 3 where 0 = none, 1 = low, 2 = moderate and 3 = high, and provide a description supported by evidence of the likelihood the risk factor will lead to reversal of the Carbon Benefits achieved by the project if the stated mitigation measures are in place.

In the Mitigation Measures column, we describe any mitigation measures that will be implemented to reduce the impact or likelihood of the risk factor, cross reference activities from Section 3.5 (e.g. Activity 1.1.1).

In the Score column, we multiply Impact and Likelihood scores to give a total score between 0 and 9. If the score is greater than 4 for any risk factor additional mitigation measures are required to reduce the risk to an acceptable level.

Table 3.11 Risk of Reversals

Risk Factor	Impact	Likelihood	Mitigation Measures*	Score
Social				
Land tenure and/or rights to climate	2: Climate benefits would not be issued for affected project area, but the project	2: Tenure is secure and agreements and contracts are in place	Project agreements agreed and signed by relevant stakeholders:	4

benefits are disputed	geographical spread across different project areas would limit the total impact.		- Contract with individual smallholder - Project agreement with community	
Political or social instability	2: Instability would impact administrative capacities of the project coordinator (see Administrative)	2. Cameroon and the project region are relatively stable	Close contact with Belgian embassy and ambassador will help ease the contact with the government if needed.	4
Community support for the project is not maintained	3: Potential impact would be important, but our project areas are explicitly trivial for communities (private plots for voluntary agroforestry, andcommunal gardens on community land).	1: The project is community-driven and communities receive payments for socio environmental investments, together with other co-benefits.	The project provides extra trainings on (i) technical (forestry) issues; (ii) commercial (NTFP/fruit trees) issues; and (iii) methodological issues (Plan Vivo methodology, responsibilities). Trainings are provided by the local project team and experts at least once per year.	3
Economic				
Insufficient finance secured to support project activities	3: There would be insufficient incentive to support project activities, although that situation would only be temporary	1: The project coordinators are well-established organisations, capable to provide funding for investments, start-up funding from Government of Luxembourg	The financial plan provides an overview of the estimated costs and incomes of the project. It accounts for unforeseeable expenses as well.	3
Alternative land uses become more attractive to the local community	2: Climate benefits would not be issued for affected project area, but the project geographical spread across different project areas would limit the total impact	1: Secured socio environmental investments for the project participants	Project agreements agreed and signed by relevant stakeholders for a duration of 50 years. In addition, the project aims to become more beneficial than any other land use via food security, income increase and other co-benefits.	2

External parties carry out activities that reverse climate benefits	2: Climate benefits would not be issued for affected project area, but the project geographical spread across different project areas would limit the total impact	2: Tenure is secure, and agreements and contracts are in place	The project agreement prohibits external parties to carry out activities that reverse climate benefits, while the project agreement discusses the procedure to handle disputes. Plan Vivo committees are established at village level including all ethnic groups and so also Mbororo minority group.	4;
Environmental				
Fire	2: After an unexpected environmental shock, the affected project areas will receive extra project attention and enrichment planting	3: Bushfire can occur, especially in Adamawa	Training sessions (1x/year) and sensibilisation meetings (1x/year) are organised for all project participants; community members help in protection. A fire management plan will be established together with communities. Follow up on the plan regularly, and the update is assured.	6
Pest and disease attacks	2: After an unexpected environmental shock, the affected project areas will receive extra project attention and enrichment planting.	1: Seedling planting involves a biodiverse mix of different native species and naturalized species.	Floral biodiversity will be monitored (1x/5years), via Shannon index. If a decline is noticed, an evaluation with help of the national herbarium is executed to see how the decline could be reversed.	2
Extreme weather or geological events	2: After an unexpected environmental shock, the affected project areas will receive extra	2: Farmers are used to the rhythm and sometimes unpredictable behaviour of the	The occurrence of environmental shocks is included in the monitoring targets to ensure strict follow-up.	4

	project attention and enrichment planting.	West African Monsoon.		
Administrative				
Capacity of the project coordinator to support the project is not maintained	3: Potential impact would be important, but the Plan Vivo committees in the communities could take over some responsibilities.	1: The project coordinators are well-established organisations, capable to provide socio-environmental support	The financial plan provides an overview of the estimated costs and incomes of the project. It accounts for unforeseeable expenses as well. Partnership agreements are signed	3
Technical capacity to implement project activities is not maintained	3: Potential impact would be important, but the communities could take over some responsibilities.	1: The project coordinators are well-established organisations, capable to provide socio - environmental support.	The financial plan provides an overview of the estimated costs and incomes of the project. It accounts for unforeseeable expenses as well. The technical specifications are well developed.	3

*Generally applicable for project activities 1.1 to 4.4

3.12 Leakage

We describe the risk of leakage (outside the project areas), the estimation and monitoring of leakage and leakage mitigation measures in Annex 7 (leakage sections), based on approved methodology. In summary, AR-TOOL15 version 2.0 to estimate leakage significance: A/R Methodological tool – Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity was used. Following the steps of this tool, the leakage risks are insignificant.

Table 3.12 Leakage Risk Mitigation

Project Intervention	**Leakage Risk**	**Mitigation Measures***
Agroforestry planting	-- displaced grazing, i.e. Mbororo burning pressure displaced towards other nearby areas because grazing is no longer possible inside the project areas	-- Observations of leakage are discussed during the annual community meetings and included in the annual monitoring targets (see §4) and the current project areas cannot be important or designated (Mbororo) grazing lands. A statement of a government official (see annex 7) must be made to confirm the location of the grazing lands to where cattle can be displaced, as well as the fact that these grazing lands are not under significant pressure. If relevant for Mbororo, this decision must be made in

	-- risk of displacement of agricultural activities	close consultation with the Ardos. (activity 1.1 – 1.4, 4.2) -- Smallholder farmers could hypothetically compensate the lost space (because of tree planting) on their agricultural field with slash-and burn activities on new fields. However, agroforestry is a complementary activity to their crop farming and will make their lands more productive (one of the key advantages of agroforestry[23]), so no yield will be lost. At the start of the project, the individual smallholders will receive a large percentage of the benefits according to the monitoring plan to compensate for the first years where the trees do not give NTFPs yet. With these arguments, we can reasonably state that the risk of leakage is negligible and leakage losses may be considered zero. (activity 2.2, 2.4- 2.5, 4.1-4.3)

** Cross reference activities from Section 3.5 (e.g. Activity 1.1.1)*

3.13 Double Counting

There are no other greenhouse gas emission reduction projects, programmes or initiatives that overlap with the proposed project areas. The Verra, Gold Standard and Plan Vivo registry were investigated to state this (see Annex 18). There are GHG emission reduction projects in Cameroon, but not in the Mayo-Banyo department. So, there is no potential for generating double counted transferable emission reduction or removal credits from carbon pools or emission sources included in the project.

In every annual report, the project will check emerging regulations that relate to carbon and environmental services in Cameroon and state how compliance will be organised (if applicable). We have an approval letter of the Cameroonian government for the agroforestry intervention (Annex 15).

Table 3.13 GHG Emission Reduction and Removal Projects and Programmes in the Project Region

Project, Programme or Initiative	**Scope**	**Carbon Credit Generation**	**Risk Mitigation**
No GHG emission reduction/removal project programmes or initiatives overlap with the project region	-	-	-

[23] Nyong, A. P., Ngankam, T. M., & Felicite, T. L. (2020). Enhancement of resilience to climate variability and change through agroforestry practices in smallholder farming systems in Cameroon. Agroforestry Systems, 94, 687-705.

Agreements

3.14 Land Management Plans

For every village, community plan vivo maps were designed during Plan Vivo Committee meetings. These 'plan vivos' are handwritten spatial land management plans, voluntarily produced, and owned by the community or Plan Vivo committees, which form the basis of an agreement to provide payments for ecosystem services.

This voluntary and participatory mapping/planning process addressed the following local socio-ecological needs and priorities:

Bankim:

- Water shortage and sustainable water management,
- Local livelihood needs (schools) and opportunities to improve existing or diversify livelihoods and incomes such as orchards and markets.
- Reduce pressure on the natural ecosystem via reforestation
- Investments in fodder crops for livestock of Mbororo.
- Further addition: sport and leisure infrastructure, trees within the villages and communication network

Note that each individual farmer will also establish a personal smallholder plan for his/her home orchard.

We provide the land management plans in Annex 11, where we also add examples of the smallholder plans.

3.15 Crediting Period

The initial crediting period is from 1 July 2024 to 1 July 2054 (30 years period for agroforestry) which may be extended for project areas that were added to the project after 2024.

3.16 Benefit Sharing Mechanism

Payments are linked directly to the implementation of agroforestry project activities by the community and individual smallholders, in line with the future plan of the area as developed by the community at village level and smallholders themselves (Plan Vivo maps and *Plan Communal de Développement*). As trees are distributed free of charge, individual smallholders will be able to have the resources to step into the project.

Payments will only be withheld if there is clear evidence for a violation of the project agreement or systematic missing of performance targets (see project agreement in annex 12 for details).

The smallholder benefit sharing mechanism is constructed as follows:

- 50% of the income of Plan Vivo credits is received by the project participant as direct cash (smallholder). This amount is paid over a timeframe of 15 year in which the first years the project participant will receive a larger share of this 50% as it will overcome the cost of tree care. After the first years it is expected that the agroforestry trees will

deliver fruits which makes the farmer less dependent on cash (see Annex 12 for the payment and milestone scheme).
- 10% to the Community Fund, which will be used to reinvest in socio-ecological projects, as decided by Plan Vivo assemblies according to drawn Plan Vivo maps and the *Plan Communal de Développement*.
- 40% goes to the project developers (Fes Enying, Graine de Vie Luxembourg and Climate Lab) for agroforestry activities and operational, administrative and overhead costs.

The community (at village level) benefit sharing mechanism is constructed as follows:
If the commune owns the land where communal garden planting are executed:
- 50% of the revenue goes directly to the Community Fund, which will be used to reinvest in socio-ecological projects, decided by Plan Vivo assemblies according to drawn Plan Vivo maps and the *Plan Communal de Développement*.
- 10% of the revenue goes to the community, led by the Plan Vivo committees, to maintain these communal gardens and develop NTFP
- 40% goes to the project developers (Fes Enying, Graine de Vie Luxembourg and Climate Lab) for agroforestry activities, operational, administrative and overhead costs.

The investment process: once the yearly Plan Vivo assembly agrees by vote (democratically) upon a certain investment and a fitting investment budget is estimated, payments will be made directly to the contractor that wins the bid of the investment. This direct transfer is required in order to minimise transaction cost and risk, and to maximise transparency. Investments will be subject to standard contracting practice, allowing fair competition for regional contractors. Examples for the possible investments could be the repair of a water point, school building or improvement of existing schools (according to the drawn Plan Vivo maps and the *Plan Communal de Développement*). Once a project/investment is realized, it is taken up in the monitoring plan and evaluated the next year (e.g. is the water point effectively running, is the improvement at school made, etc.). This is usually done via the satisfaction surveys, photographic evidence, and financial records.

All contracts are overseen by the project coordinators, who guarantee that at least 60% of the project budget will directly benefit project participants and other local stakeholders. The annual disbursements are transparently reported in the annual reports.

For more details, monitoring responsibilities, targets and corrective actions, we refer to the (community) Project Agreement. For the smallholder-based benefit sharing mechanism, we refer to the (smallholder) Project Agreement in annex 12.

3.17 Grievance Mechanism

Complaints and suggestions that are raised during annual Plan Vivo assemblies, community meetings or walks around the project areas are recorded by the project coordinator in a “complaints and suggestions logbook”. The logbook is regularly updated, and scans are stored on the shared drive. The project coordinators are responsible to organise extra consultation

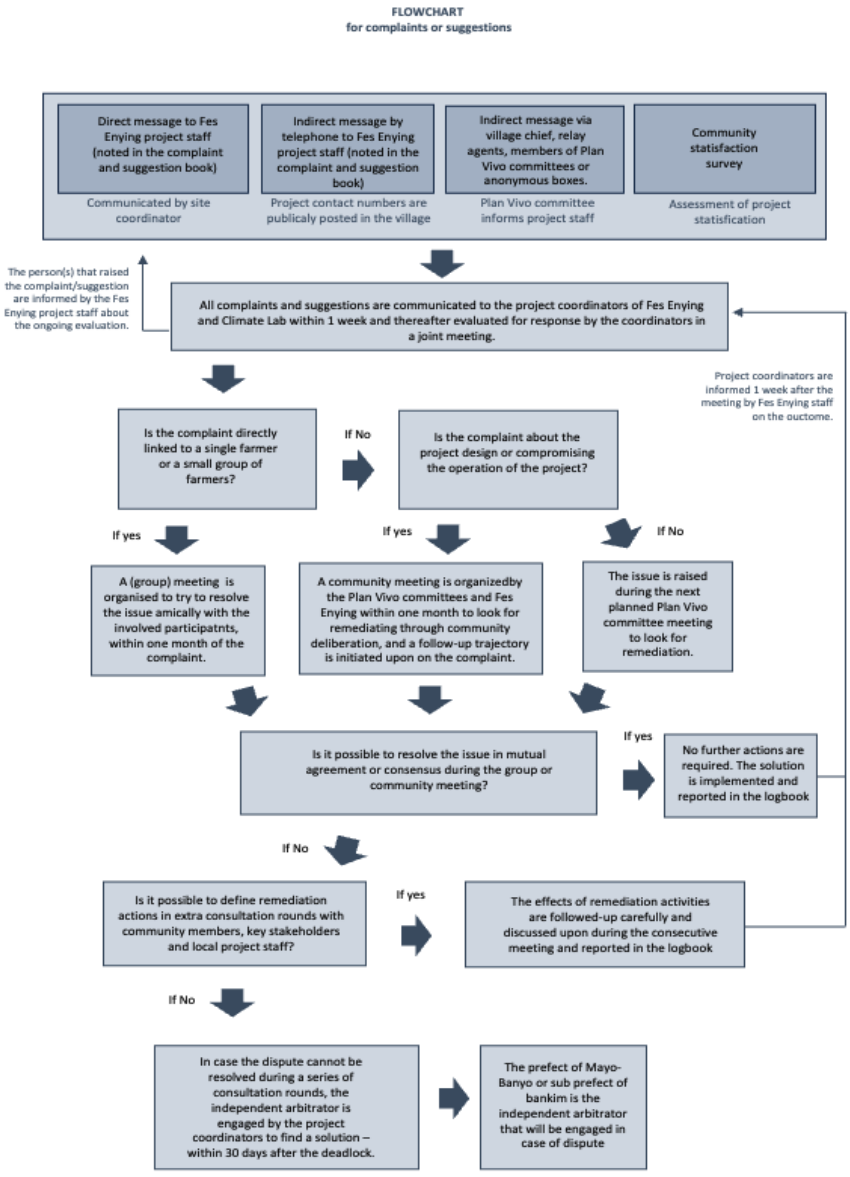
rounds, if required, and to implement remediation actions. We refer to the project agreement for actions in case of dispute.

Two relay agents can be chosen per village. This duo should be composed of a man and a woman. Among the chosen Plan Vivo committee members, people can voluntarily step forward to express their willingness to take up this function in their particular village. The agent must be interested in the project and willing to help the project grow in a constructive way. The community should accept the agents by vote, so this is not a top-down decision approach. Evaluation of the agents will be held every year. He/she will take the role as contact person, to whom every project participant can talk to. That way, everyone can easily add suggestions or complaints about the project. In the case a person wants to give anonymous feedback, this can via complaints and suggestion boxes, which will be installed on village level at a neutral place (church, mosque, health centre, etc.). The relay agents will regularly check the box if new feedback is added. The complaints and suggestions will be kept in a book for suggestions and complaints. The notes are read in the meetings and kept by the reporter. Where possible, remediating actions – following complaints and suggestions – are taken. Alternatively, it is also possible to complain or provide suggestions to the local authorities, who will then communicate to the project team.

In the event that corrective action is required during the term of this PES, the project partners (Climate Lab and the Graine de Vie) and the communities will reach agreement on the corrective actions necessary, a schedule for the corrective action, and an extension of the project agreement.

All stakeholders (participants, villagers, or other stakeholders) are encouraged to use the complaint/suggestion book/box. Mitigation actions to follow up complaints will be performed in mutual agreement between all parties and the community and will strive towards consensus. In the event that there is a dispute between different parties or stakeholders, or a consensus-based decision based on §7 of the Project Agreement is not possible, the village council will invite all parties and try to mediate. If Parties are unable to agree on corrective actions at the municipal council, another third-party arbitrator (*autorité tutelle de département Mayo-Banyo*, which could be the prefect or sub prefect), independent of all parties, but approved by all parties and after consent by the Plan Vivo Foundation, will be appointed to oversee dispute resolution.

The flowchart below provides an overview of the grievance mechanism:



3.18 Project Agreements

If a village community wants to enter into a project agreement, several initial community meetings are organised (see §2.4), to discuss the basic project logic and get initial feedback. Thereafter, the process of establishing 'plan vivos' can start. Only then, a project agreement can be signed.

Project agreements do not remove, diminish or threaten project participant's rights to land and/or resources. The agreements for agroforestry planting are valid for 50 years.

We refer to Annex 12 for the project agreement, showing all details, the process for entering into project agreements following FPIC principles and measures in place to ensure that project

agreements do not remove, diminish or threaten project participant's rights to land and/or resources.

4 Monitoring and Reporting

Indicators

4.1 Progress Indicators

We completed Table 4.1, providing SMART indicators and means of verification for the project outputs and activities included in the project logic (Table 3.5).

Table 4.1 Progress Indicators

Output/Activity	Indicator	Means of Verification	Result on non-progress indicators
Output 1 The food security of communities of Bankim is improved through communal gardens, serving as small food forests, planting on community lands via direct seeding, completed with fruit/forest trees from nurseries (density of ~200 trees/ha).	P1: Area community land undergoing communal garden planting via direct seeding and seedling plantation per year	Legal agreement via project agreement for community. GPS coordinates of area.	C5, E1
A1.2 Direct sowing of woodlots (density of ~100trees/ha) and completion with trees from nurseries (to 200 trees/ha).	P2: number of trees planted in the plots and numbers of seeds sprouting after 6 months.	Tree number count and seed sprouting count at start year. Registration in Q field app.	C2, C3, C5, E2-E4
A1.3 Establishment of fire, including firebreaks management strategy to protect seedlings from runaway fire (where appropriate).	P3: Yearly implementation of the fire management activities where necessary to protect seedlings. (% of the area protected)	Counting of lost trees due to fire incidents. Reporting of fire management (e.g. firebreaks) activities; photographic evidence in Annual Report	C6, E6
A1.4 Establishment of an artificial and a living fence to protect sprouts from being eaten.	P4: Yearly implementation of the protection activities against livestock where necessary and evaluation of	Counting of lost trees due to animals. Reporting of protection activities; photographic	C6, E7

	effectiveness (% of the area protected)	evidence in Annual Report	
A1.5 Long-term management and monitoring of the communal garden plots in line with the techspec protocol by the community led by Plan Vivo committees.	P5: survival rate and diameter growth in communal garden plots following the milestone-based scheme	Survival rate count and diameter measurements at milestone years (Qfield data archive)	C5, E2-E4, E5
A1.6 Establishment of fodder crops for Mbororo in order to prevent livestock to eat sprouts and increase feed security for livestock.	P6: fodder crop system installed per year per Mbororo community.	Surveys & Photographic evidence	C6, L7, E7
Output 2 The food security of smallholders and their families, is improved through the establishment of home orchards.	P7: 5-yearly evaluation of food production from agroforestry products (in kg per participant per year).	5-yearly social survey report	L4, L5
A2.1 Establish 1 nursery per participating community/village, delivering 10 000 indigenous/naturalised seedlings each year for agroforestry planting.	P8: Number of nurseries operating and delivering 10 000 seedlings per nursery per year	Annual tree seedlings produced, photographic evidence	C1, E4
A2.2 Interspersed agroforestry tree planting in home orchards at around 200 trees/ha.	P9: tree seedlings planted per hectare in home orchard planting areas per year	Amount of tree seedlings planted in the different plots (Qfield data archive)	C1, E4
A2.3 Providing training in agroforestry practices for smallholder farmers and community members.	P10: Organization of minimally 1 training on agroforestry practices or participative workshop enduring awareness of ecosystem benefits or 1 training on the valorisation of NTFPs (incl. apiculture).	Report and photographic evidence of trainings, attendance lists.	L2, L4, L5
A2.4 Long-term management and monitoring of the agroforestry home orchard	P11: survival rate and diameter growth in agroforestry plots following the	Survival rate count and diameter measurements	C5, E4, E5

plots in line with the techspec protocol	milestone-based scheme	at milestone years (Qfield data archive)	
A2.5 Implementing fire and animal protection strategies such as firebreaks, and branches from trees to protect the trees from livestock	P12: Implementation of plant protection strategies by smallholder farmers resulting in % of trees protected.	Photographic evidence of individual protection strategies (tree branches + fire breaks)	C6, E6, E7
Output 3 Support the production of apiculture and other NTFPs and the establishment of marketing channels and local cooperatives to improve income of smallholder farmers and community members.	P13: 5-yearly evaluation of income diversification from apiculture, non-timber forest products and agroforestry.	5-yearly social survey report	L4, L5
A3.1 Providing technical training on valorisation of non-timber forest products and honey (appropriate processing and preservation techniques).	P14: Organization of minimally 1 training on agroforestry practices or participative workshop enduring awareness of ecosystem benefits or 1 training on the valorisation of NTFPs (incl. apiculture).	Report and photographic evidence of trainings in NTFPs (incl. apiculture), attendance list	L2
A3.2 Providing training on economic value of NFTPs, and the market options and support in the set-up of cooperatives when there is interest.	P15: Organization of minimally 1 training on agroforestry practices or participative workshop enduring awareness of ecosystem benefits or 1 training on the valorisation of NTFPs (incl. apiculture).	Report and photographic evidence of trainings in NTFPs (incl. apiculture), attendance list	L2
A3.3 Enhance peer-to-peer learning and knowledge sharing within and across communities between smallholders.	P16: Organization of 1 assembly in 3 years for smallholders to facilitate the peer-to-peer learning.	Report and photographic evidence of assembly, attendance list	L2
Output 4	P17: Annual socio-environmental	Reports and contracts of socio-	L3

The community members are implementing the socio-environmental changes they envisaged, using the proceeds of the Plan Vivo funds.	investments made (or designated) in the project area and payments to the participating smallholders, in USD	environmental investments, photographic evidence	
A4.1. At least 1 participative workshop or training session per year on awareness raising and the ecosystem benefits of environmental restoration is provided.	P18: Organization of minimally 1 training on agroforestry practices or participative workshop enduring awareness of ecosystem benefits or 1 training on the valorisation of NTFPs (incl. apiculture).	Report of community meetings, attendance list, photographic evidence	L2, E5
A4.2. Setting up community-based Plan Vivo committees representing the community, including women and ensure the involvement of the all ethnic groups including Mbororo minority (if relevant for the village).	P19.1: Plan Vivo committees consist of 30% women. P19.2: Plan Vivo committees consist of representatives of all ethnic groups including the Mbororo if relevant.	Member list of Plan Vivo committees; reports and photographic evidence of Plan Vivo meetings.	L1
A4.3. Activation of socio-environmental re-investments based on Plan Vivo committee decisions.	See P17	See P17	L3
A4.4 Community and Plan Vivo meetings are organized in order to follow up on the project and the project investments.	P20: At least 3 Plan Vivo meetings are organized and at least 1 community meeting are organized per year.	Report of community/Plan Vivo meetings, attendance list, photographic evidence	L1, L3

4.2 Carbon Indicators

We completed Table 4.2 to provide a summary of the carbon indicators that will be monitored for each project intervention. We include full details of each carbon indicator in Annex 7.

Project Intervention	Carbon Indicator	Means of Verification

Agroforestry: Home orchard, and communal garden planting.	C1: Number of seedlings planted in home orchards	Registration in Qfield app of tree seedlings leaving the nurseries and planted in individual agroforestry plots, photographs of planting activities.
	C2: Number of seedlings planted in communal gardens	Registration in Qfield app of tree seedlings leaving the nurseries and planted in communal garden plots, photographs of planting activities.
	C3: Number of seeds planted via direct seeding in communal gardens	Registration of treated tree seeds, photographs of seed treatment and sowing activities.
	C4: Long term survival rate of planting activities in the project areas together with AGB measurements in home orchard plots.	Monitoring of survival rate of plantings, at the onset of the rainy season. This includes survival rate counting in year 1 and 3; DBH monitoring based on a representative sample of 10% of the trees in year 5, 7, 9, 12 and 15. (see Annex 7 – tech spec)
	C5: Long term survival rate of planting activities in the project areas together with AGB measurements in communal garden plots.	Monitoring of survival rate of plantings, at the onset of the rainy season. This includes survival rate counting in year 1 and 3; DBH monitoring based on a representative sample of 10% of the trees in year 5, 7, 10. (see Annex 7 – tech spec)
	C6: Number of observations of uncontrolled fires and damage through livestock on communal garden and home orchard plots.	Registration of the lost or damaged trees after fire or livestock disturbance by project staff.

4.3 Livelihood Indicators

We completed Table 4.3 to describe the indicators that will be used to monitor the livelihood status of project participants and other local stakeholders, and risks of negative social impacts.

Livelihood Indicator	**Means of Verification**
L1: % female and presence of all ethnic groups including Mbororo if relevant during	Reporting, attendance list and photographic evidence in Annual Report

the meetings of Plan Vivo committees and General Annual Meeting in the community.	
L2: Organised trainings on agroforestry, ecosystem awareness, apiculture or NTFPs at least once a year.	Reporting, attendance list and photographic evidence of trainings in Annual Report
L3: Socioenvironmental investments in the project areas (e.g. according to Plan Vivo maps: waterpumps, school buildings, …)	Financial reporting included in Annual Report
L4: Volume of fruit produced (e.g. avocado, mango, …) by smallholder as well as the volume of other crops (e.g. manioc, maize, …) produced by the same smallholder.	Social satisfaction surveys taken from subsample of smallholder participants every 5 years
L5: Income of smallholder farmers due to direct income and indirect income of planting agroforestry trees (USD).	Social satisfaction surveys taken from subsample of smallholder participants every 5 years
L6: Volume of NTFPs produced by communal gardens, harvested by the community.	Reporting at moments of harvest every 5 years.
L7: Volume of fodder crops allocated to Mbororo	Social satisfaction surveys taken from subsample of Mbororo every 5 years

4.4 Ecosystem Indicators

We completed Table 4.4 to describe the indicators that will be used to monitor ecological conditions risks of negative environmental impacts in the project region.

Ecosystem Indicator	**Means of Verification**
E1: Average Above Ground Biomass in agroforestry plots (home orchards & communal gardens)	Systematic milestone-based vegetation monitoring (see tech spec).
E2: Sprouts (-vegetation < 30cm) Species Richness in communal gardens	Based on the vegetation survey, the total number of species in the community (richness S), as well as the proportion of species i relative to the total number of species (pi) can be calculated. We use the Shannon's diversity or evenness index as a robust indicator for biodiversity status in the project areas. The evolution of the Shannon index will be reported every 5 years.
E3: Bushes (30cm <= vegetation < 1m30) Species Richness in communal gardens	Evolution of the Shannon index will be reported every 5 years.

E4: Tree (vegetation >= 1m30) Species Richness in home orchards and communal gardens	Evolution of the Shannon index will be reported every 5 years.
E5: Number of observations of woodcutting and agriculture expansions in and around the communal gardens	Registration of observations of lost or damaged trees in communal gardens and buffer zone after disturbance made by project staff and/or mentioned during the yearly community meetings.
E6: Number of observations of fire incidents.	Registration of observations of lost or damaged trees in project zones after fire disturbance made by project staff and/or mentioned during the yearly community meetings
E7: Number of observations of damage by livestock.	Registration of observations of lost or damaged trees in project zones after livestock disturbance made by project staff and/or mentioned during the yearly community meetings

Monitoring

4.5 Monitoring Plan

We refer to the monitoring plan in Annex 13 for an overview of specific monitoring and verification activities. Hereunder, we provide the general project monitoring guidelines:

- **Method**: The sampling approaches and methods are described in §4.2, §4.3 and §4.4.
- **Frequency**: Overall, as fPVCs are issued based on the expected carbon benefits, annual progress reports will present activity-based indicators to determine whether the project activities are being carried out as needed to achieve the expected benefits. In parallel, every 5 years (at minimum) a full-scale (carbon) monitoring round will be organized.
- **Responsibility**: The monitoring plan is a shared responsibility of the project team. Climate Lab takes the lead in preparing the annual and 5-yearly Plan Vivo monitoring reports. Graine de Vie and Fes Enying have the resources and capacity to collect the required monitoring data.
- **Area**: progress and carbon indicators are monitored in representative samples areas.
- **Risk mitigation**: progress indicators for risk mitigation are monitored in a representative sample.

The project will start with a dedicated monitoring team responsible for data gathering (see Annex 13.2 for the “monitoring flowchart”). However, the project has the ambition to train more and more community members over the coming years, enabling local communities to collect data (with a focus on ecosystem observations, survival countings and DBH measurements). The project staff will follow up these data collection to ensure the quality of the data.

4.6 Progress Monitoring

The annual milestones or targets of the progress indicators are listed in table 4.6. The targets are subdivided in three categories: full, partial and missed target. Please see Annex 20 for the specific details regarding the fire management plan.

There are the following consequences for registration and corrective actions that will be implemented if the yearly performance targets are not met (mitigation actions):

(i) If the values for all indicators meet or exceed their performance target, the full registration is received;
(ii) If one or more of the indicator values are below its performance target for one monitoring period, the full registration is received but corrective actions must be implemented;
(iii) If one or more of the indicator values are partially achieved for two consecutive monitoring periods, the full registration is received but corrective actions must be implemented.
(iv) If one or more of the indicator values are missed for two consecutive monitoring periods or partially achieved for three consecutive monitoring periods, registration is withheld until corrective actions have been implemented and the performance target(s) have been reached.

In addition, in Table 4.6.2 we summarize the performance tracking of the project piloting activities and individual targets linked to the milestone-based schemes. These are pilot activities/targets that are not contributing to overall PVC issuance at this stage. These project activities are in addition to those generating Plan Vivo Certificates.

Table 4.6 Progress monitoring

Project interventions	Progress Indicator	Annual milestone or target		
		Full Target Achievement	Partial Target Achievement	Missed Target
Communal garden planting on community lands via direct seeding and seedlings	P2: number of trees planted in the plots and numbers of seeds sprouting after 6 months.	>= 80% of trees planted >= 50% of seeds sprouting	50 – 80% of trees planted 25 – 50% of seeds sprouting	< 50% trees planted <25% of seeds sprouting
	P3: Yearly implementation of the fire management activities where necessary to protect seedlings. (% of the area protected)	>= 80%	50 – 80%-	< 50%

	P4: Yearly implementation of the protection activities against livestock where necessary and evaluation of effectiveness (% of the area protected)	>= 80%	50 – 80%-	< 50%
	P5: survival rate and diameter growth in communal garden plots following the milestone-based scheme	Achievement following milestone-based scheme	-	Non-Achievement following milestone-based scheme
	P6: fodder crop system installed per year per Mbororo community.	Yes	-	No
Establishment of smallholder home orchards	P8: Number of nurseries operating and delivering 10 000 seedlings per nursery per year	1 nursery per village & operating > = 10 000 seedlings	Between 5000 and 10 000 seedlings	0 nurseries or < 5000 seedlings
Support production of apiculture and other NTFPs	P16: Organization of 1 assembly in 3 years for smallholders to facilitate the peer-to-peer learning.			
Community participation	P17: Annual socio-environmental investments made (or designated) in the project area and payments to the participating smallholders, in USD	50% of the allocated budget to the smallholder from home orchards, 10% to Community Fund from home orchards, 60% of the allocated budget to the Community Fund from the	-	<50% of the allocated budget to the smallholder from home orchards <10% to Community Fund from home orchards <60% of the allocated budget to the Community Fund from the

		communal gardens		communal gardens
	P10, 14, 15 & 18: Organization of minimally 1 training on agroforestry practices or participative workshop enduring awareness of ecosystem benefits or 1 training on 1 training on the valorisation of NTFPs (incl. apiculture). agroforestry practices.	>= 1	-	0
	P19.1: Plan Vivo committees consist of 30% women.	>=30%	Between 30% and 10%	<10%
	P19.2: Plan Vivo committees consist of representatives of all ethnic groups including the Mbororo if relevant.	100% of all ethnic groups	80 – 100% of all ethnic groups	< 80% of all ethnic groups
	P20: At least 3 Plan Vivo meetings are organized and at least 1 community meeting are organized per year.	>= 3 Plan Vivo meetings + >= 1 community meeting	2 Plan Vivo meetings + 1 community meeting	<=1 Plan Vivo meetings + 0 community meetings

Table 4.6.2: Non-binding activity tracker

Output/Activity	Tracker	Ambition	Purpose
Communal garden planting on community lands via direct seeding and seedlings	P1: Area community land undergoing communal garden planting via direct seeding and seedling	Significant expansion of communal garden, based on community interest	yearly tracking of communal garden areas.

	plantation per year		
Communal garden planting on community lands via direct seeding and seedlings	P2: number of trees planted in the communal garden plots and numbers of seeds sprouting after 6 months.	Density target of ~100trees per hectare for direct sowing, end density 200trees/ha.	Additional tracker for the start of the monitoring via the milestone-based scheme.
Establishment of smallholder home orchards	P7: 5-yearly evaluation of food production from agroforestry products (in kg per participant per year).	See L4	Yearly follow-up to ease the reporting of 5 yearly target.
Establishment of smallholder home orchards	P9: tree seedlings planted per hectare in home orchard planting areas per year	Every individual smallholder will achieve own milestone-based target.	To ease the follow up on the milestone-based scheme.
Establishment of smallholder home orchards	P11: survival rate and diameter growth in agroforestry plots following the milestone-based scheme	Every individual smallholder will achieve own milestone-based target.	To ease the follow up on the milestone-based scheme.
Establishment of smallholder home orchards	P12: Implementation of plant protection strategies by smallholder farmers resulting in % of trees protected.	Every individual smallholder will achieve own milestone-based target.	To ease the follow up on the milestone-based scheme.
Support production of apiculture and other NTFPs	P13: 5-yearly evaluation of income diversification from apiculture, non-timber	See L5	Yearly follow-up to ease the reporting of 5 yearly target.

	forest products and agroforestry.		

4.7 Carbon Monitoring

The carbon monitoring scheme follows a double track:

- At annual pace, the carbon indicators are monitored throughout the project period. This allows to follow-up on the activity-based indicators underpinning the carbon estimation as described in Annex 7.

- At a 5-year pace, carbon verification rounds are organised. This allows verification of estimated carbon sequestration and calibration of the carbon model to fit the measured carbon sequestration rates based on field measurements. Every verification round is verified by a VVB. If the project expands, the frequency of verifications could be accelerated in the future.

4.8 Livelihood and Ecosystem Monitoring

4.8.1 Livelihood Monitoring

For each of the livelihood indicators listed in Section 4.3, we identified targets for each period of 5-years throughout the crediting period.

Livelihood Indicator (section 4.3)	**Baseline**	**5-year target**
L1: % female and presence of all ethnic groups including Mbororo if relevant during the meetings of Plan Vivo committees and General Annual Meeting in the community.	From the semi-structured interviews, it was clear that the society was male dominated, although women are allowed to give their opinion. We assumed that the baseline was 0% women participation. At least 1 Mbororo was present at the community council.	Minimally 30% female participation; at least one representative of the "*peuples autochtones*" is present during every Assembly
L2: Organised trainings on agroforestry, ecosystem awareness, apiculture or NTFPs at least once a year.	0	At least 1 training on one topic given by the local team of Fes Enying per village per year.
L3: Socioenvironmental investments in the project areas (e.g. according to Plan Vivo maps: waterpumps, school buildings, …)	0 USD	See Project Agreement: 60% of revenue of carbon credits of communal ground and 10% of individual smallholder ground = Community Fund, which is invested in

		socio-environmental projects.
L4: Volume of fruit produced (e.g. avocado, mango, …) by smallholder as well as the volume of other crops (e.g. manioc, maize, …) produced by the same smallholder	See 3.3.1 Livelihood baseline: farmers are not producing fruits at the moment, so 0 kg.	Statistically significant increase of the smallholders' food supply from agroforestry for participants in the project.
L5: Income of smallholder farmers due to direct income and indirect income of planting agroforestry trees (USD).	See 3.3.1 Livelihood baseline: Farmers are not putting agroforestry trees in their field, so 0 USD	Statistically significant increase of the smallholders' income from agroforestry for participants in the project
L6: Volume of NTFPs produced by communal gardens, harvested by the community.	See 3.3.1 Livelihood baseline: The community does not systematically collect NFTPs, so 0 kg.	Statistically significant increase of the communities' NFTP supply from communal gardens
L7: Volume of fodder crops allocated to Mbororo	See 3.3.1 Livelihood baseline: Mbororo do not have fodder crops at the moment, so 0.	Statistically significant increase of Mbororo's fodder supply for their livestock.

4.8.2 Ecosystem Monitoring

For each of the ecosystem indicators listed in Section 4.4, we identified targets for each period of 5-years throughout the crediting period.

Ecosystem Indicator	**5-year target**
E1: Average Above Ground Biomass in agroforestry plots	Statistically significant increase in Above Ground Biomass in agroforestry plots in line with Annex 7 – tech spec agroforestry measured by the local project team with technical expert.
E2: Sprouts Species Richness in communal gardens	Significant ($p < 0.05$) increase of plant-species richness in agroforestry plots, based on the Shannon diversity index measured by the local project team with technical expert.
E3: Bushes Species Richness in communal gardens	Significant ($p < 0.05$) increase of plant-species richness in agroforestry plots, based on the Shannon diversity index measured

	by the local project team with technical expert.
E4: Tree Species Richness in home orchards and communal gardens	Significant ($p < 0.05$) increase of plant-species richness in agroforestry plots, based on the Shannon diversity index measured by the local project team with technical expert.
E5: Number of observations of woodcutting and agriculture expansions in and around the communal gardens.	No significant increase in felled trees counted by the local project team within the communal gardens and in the buffer zone around the project area .
E6: Number of observations of fire incidents.	Continued reduction of fire incidents destroying agricultural land and forest observed by local project team and project participants, mentioned during annual meetings.
E7: Number of observations of damage by livestock.	Continued reduction of livestock damaging agroforestry plots observed by local project team and project participants, mentioned during annual meetings.

4.8.3 Sharing Monitoring Results

Ecosystem and livelihood monitoring results are discussed directly with all local stakeholders involved in the project during the Plan Vivo meetings and assemblies. This allows for direct feedback from the community members and to adjust the project design if issues arise.

In parallel, the project will disseminate monitoring results to the broader society by setting-up joint workshops with local governments to inspire communities outside the project areas. The preferable method to distribute the monitoring results to the people of the village, is the annual Plan Vivo meeting together with a poster summarising the results on a public place.

In addition, monitoring results will be shared in annual reports and verification reports, transparently published on the Plan Vivo website.

PV meeting timelines:

The committees have decided to hold monthly meetings. But during the rainy season (from April onwards) and during the harvest they will not hold meetings as people are very busy with their fields. Only if there is a concern that requires quick action will the committee meet during that season. In the Statutes of the Plan Vivo committees it is written that at least 3 times a year the committee will meet. A calendar with fixed dates does not exist, but at each meeting the date for the next meeting is fixed.

Reporting

4.9 Annual Report

The baseline measurements and environmental activities began in February 2023. First Annual report will be submitted in July 2025.

Monitoring rounds will be organised (at minimum) in 2028, 2033, 2038, 2043, 2048 and 2053 (end of the project), these will be in parallel with the verification rounds.

4.10 Record Keeping

All project data are stored on a shared project drive with limited access (Google Drive). The project data (technical data, financial data, monitoring data) are updated on the drive at least once per month.
In Annex 14, an overview of the general database architecture is included. Note that this a dynamic environment, subjected to changes over time. The database includes the following first-level folders:

00_PrePin
01_PIN
02_PDD
03_Validation
04_AnnualReport
05_Verification
06_ProjectManagement
07_ReferencePapers
08_FieldVisit
09_MeetingNotes
10_ProjectFunds

5 Governance and Administration

5.1 Governance Structure

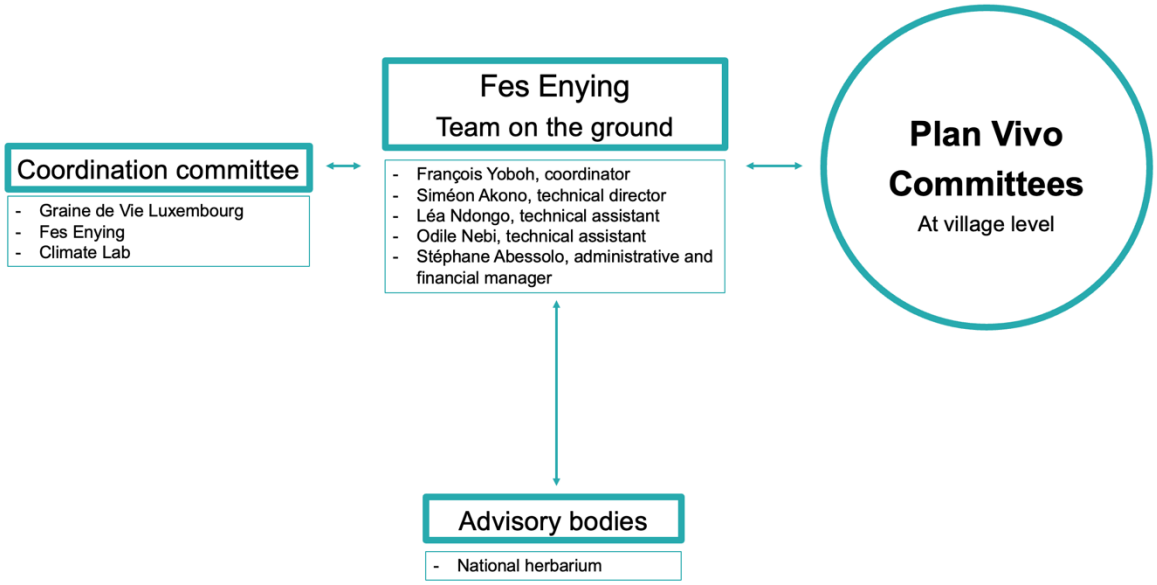
The governance set-up of the project includes the *Comités Plan Vivo* at village level.

As stated in §2.3, every participating village will form a *Comité Plan Vivo* that will codesign and cogovern the project, and must include women, all ethnic groups (and Mbororo when relevant). The project will establish these structures together with the participating communities. The composition of the Plan Vivo structures are described in Annex 19.

At the partnership level, a Coordination Committee is chaired by GDVL, it meets regularly through videoconference and brings together the Project Coordinators (GDVL/Fes Enying and Climate Lab). The goal is to evaluate the operational progress of the project, if the targets are met or if corrective actions need to be taken. In short, Climate Lab will take care of the higher-level monitoring activities, such as developing project management guidelines, carbon monitoring, and integrated assessment of the project activities. Fes Enying will be responsible for managing the project activities on the ground, including administrative reporting (more details see §2.2, Table 2.2).

Socio-environmental Experts Siméon Akono (national technical director of Fes Enying; CV on file with Plan Vivo) and Léa Ndongo (Technical assistant in charge of plant reproduction) are recruited to focus on the Plan Vivo compliance and development and are working within the Graine de Vie team. They will be responsible for the institutional development and organisational strengthening of the Committees. They will also be the guarantor of compliance with the contractual clauses contained in the various agreements, and will work closely with the Committees, the villages and the Relay agents. The National Herbarium has an advisory role within the governance structure.

The proposed project governance structure is summarised in the scheme below:



5.2 Equal Opportunities

The project is committed to ensuring equal opportunities for all participants. The ethical charter, as detailed in §2.3, mandates that project participants refrain from discriminating based on gender, age, ethnicity, religion, or social status during participant selection. Additionally, people can enter on a voluntarily basis to the project as individual smallholder, they can enter a Plan Vivo committee on voluntarily basis. The community liaisons officer is chosen by the village people via vote (see Grievance mechanism). The ethical charter, project agreements and project design demonstrate the project's commitment to inclusivity, promoting a fair and diverse representation in the project.

Besides, as explained in §2, stakeholder participation is embedded in the design phase consultations of the project using community meetings and is maintained throughout the project lifetime. The project actively encourages participation of women in all meetings and strives towards equal participation, with an absolute minimum of 30% female participation.

If Mbororo have their grazing lands or settlements alongside a village, then they need to be integrated in the Plan Vivo committees of that village, actively engage them in codesigning and cogoverning the project. The Plan Vivo committees play a pivotal role in defining policies

for income generated, promoting equitable distribution. Ongoing community engagement, surveys, and risk sessions during implementation showcase a dynamic responsiveness to evolving community needs, reinforcing the project's commitment to inclusive development.

5.3 Legal and Regulatory Compliance

In Annex 15, we included a letter of approval from the authorities with overall responsibility for land management and greenhouse gas emissions assessment within the project region, which states that the project does not violate any national or regional laws or regulations. The authority with overall responsibility for land management and greenhouse gas emissions assessment within the project region is the Cameroon Ministry of Environment, Nature Protection and Sustainable Development.

The project will operate in full compliance with all national and international policies, laws and regulations. Below, we list the most relevant legislation and policies that may impact the project.

Table 5.3: Legal and Regulatory Compliance

Policy, Law or Regulation	**Relevance**	**Compliance Measures**
Prime Ministerial Decree No.103/CAB/PM regarding the creation, organization and operation of the Steering Committee for activities to reduce emissions from deforestation, degradation, sustainable management and conservation of forests, REDD+	REDD+ is no longer part of the project, so the law for now is not relevant. This Decree established the Steering Committee for REDD+. The Committee is headed by the Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED). The Committee is responsible for formulating proposals for REDD+ strategy options, providing feedback regarding the implementation of the strategies, developing selection criteria for REDD+ projects, evaluating REDD+ pilot project proposals, promoting REDD+ activities and validating the work of the Technical Secretary. The Technical Secretary is chaired by MINEPDED and assisted by the Minister of Forests and Fauna (MINFOF). Other members include the Focal Point of the UNFCCC and the National Co-ordinator of REDD+	Pilot REDD+ registration together with the Ministry. This process is on hold, we now only focus on the agroforestry part of the project.
Presidential Decree No. 2009/410 establishing the creation, organization and functions of the National	This Decree established the National Climate Change Observatory (ONACC) as a national legal implementing body of climate change policies (It was later reorganized in 2019 by Presidential Decree No. 2019/026. The observatory became operational in 2015.). The Ministry of Environment, Nature Protection and Sustainable Development	This is an advisory body on which the project could rely in case of climate change issues. However, no compliance measures need to be taken towards this decree.

Observatory on Climate Change	(MINEPDED) is responsible for the supervision of the ONACC, and overall co-ordination of climate change activities and policies within the country. It is supervised by the Ministry of Finance for the financial matters. The responsibilities of the ONACC are to: establish relevant climate indicators for monitoring environmental policy; carry out prospective analyses to provide a vision on climate change, to provide weather and climate data to all sectors concerned and to develop annual climate balance of Cameroon; educate and promote studies on the identification of indicators, impacts and risks of climate change; collect, analyse and provide policy makers, national and international organisations information on climate change in Cameroon; initiate activities to promote awareness on and provide information to prevent climate change; serve as operational instrument in the context of other activities to reduce greenhouse gas emissions; propose to the government preventive measures for GHG reduction as well as mitigation and/or adaptation to the adverse effects and risks of climate change; serve as an instrument for cooperation with other regional and international observatories operating in the climate sector; to facilitate the achievement of consideration to payment for ecosystem services provided by forests through the management, conservation and restoration of ecosystems; and to strengthen the capacity of institutions and bodies responsible for collecting data on climate change to create a nation-wide, reliable network for collecting and transmitting the data.	
Decree N0 2011/2582/PM setting out how to protect the atmosphere	This decree establishes the modalities of how Cameroon protects the atmosphere for a list of air pollutants including carbon dioxide, methane and CFCs. It establishes that the air quality measurement and control stations designed to ensure compliance with the requirements set out in Article 21 of Law No. 96/12 of 5 August 1996 on a framework law for the management of the environment are	As the project does not intend using air pollutants, no compliance measures need to be taken.

	located in sites where pollution is presumed to exceed the limit values. It further lists all industrial activities susceptible of emitting one of the air pollutant.	
National Biodiversity Strategy and Action Plan (SPANB II)	This document sets Cameroon's strategy to protect biodiversity. It notably defines adaptation objectives. The plan aims to promote sustainable development and the conservation of biodiversity in Cameroon.	As the projects aim is to support sustainable development and enhance biodiversity, no compliance measures need to be taken.
National Adaptation Plan to Climate Change (PNACC)	This is Cameroon's National Adaptation Plan (NAP). The plan aims to improve knowledge on climate change, public information, education and mobilization in order to adapt to climate change, reduce major sectors and agro-ecological areas vulnerability to climate change, and integrate climate change adaptation into national sectoral planning.	As the project want to create climate resilient solutions within the boundaries of smallholder agriculture and on communal land, the project is in line with the PNACC and does not need compliance measures.
Law n° 94/01 of 20th January 1994	The Cameroon legislature on forest regulation is identified by law n° 94/01 of 20th January 1994, which defines the different types of forest that are part of the State Forest domain, which also includes production forests. These are then divided into forest management units (Unité Forestière d'Aménagement -UFA), and as specified by the aforementioned law, they require a forestry concession to be exploited. The law indicates that, once this concession has been obtained, it is necessary to produce a Management Plan for the whole UFA for the period of the authorization according to the guidelines set out in order No. 222/A/MINEF/ 25 May 2002, which also designates the approval, observation and control procedures. Once approved, the management plan of a UFA is thus effectively in compliance with the legislative requirements of the Republic of Cameroon.	The project is aware of the different types of forestland in Cameroon and will only execute project activities on private property or on communal ground.
Strategy REDD+ Technical Secretariat	Publication of Cameroon’s national REDD+ strategy	Pilot REDD+ registration together with the Ministry. This process is on hold, we now only focus on the

		agroforestry part of the project.
Carbon legislation	Cameroon has no legislation on carbon rights to date (Tamasang & Gideon Fosoh, 2018). According to the 1994 Forestry Law which puts in place a system of different use rights in state and national forests, the state as owner of most of the forest land will by implication be the main beneficiary of any carbon rent obtained under REDD+. Consequently, the right to carbon as a property would belong to the state where it is a state forest while the right to carbon on community and private forests would belong to the owners of these forests, and the carbon on council forests and national land would respectively belong to councils and to the nation managed by the state. Good practice requires devolving carbon rights to local communities, along with other forest rights. Yet, under relevant legislation, any financial benefits resulting from the exploitation of forest resources can be subject to the payment of royalties to the state	See legal note (Annex 17) and agroforestry approval letter (Annex 15).

5.4 Financial Plan

A grant of ~800k€ has been granted by the Luxembourg Climate Fund for a project in the Mayo-Banyo region. 1/3 of this budget is foreseen for the Bankim department (~266,67k€). This will allow us to finance the project activities during the first three years. The financial plan is added in Annex 16; the Luxembourg funding table is available upon request.

5.5 Financial Management

The annual benefit sharing (USD) will be transparently reported in the annual reports. The details of the benefit sharing mechanism can be found in the Project Agreements (Annex 12).

The responsible accountant is Vandelanotte, an approved legal entity by the Professional Institute for Tax Advisors and Accountants (ITAA) with number 50792735.

Vandelanotte performs an annual audit and submits the annual accounts to the Belgian national bank.

Annexes

Annex 1 – Project Boundaries

Digital shapefiles of all project area boundaries are attached together with document providing comments on the shapefiles.

Annex 2 –Registration Certificate and Partner Agreements

We provide a copy of the project coordinators registration certificates and signed agreement with all partner organisations identified in Section 2.2.

Annex 3 – Initial Project Areas

See table below

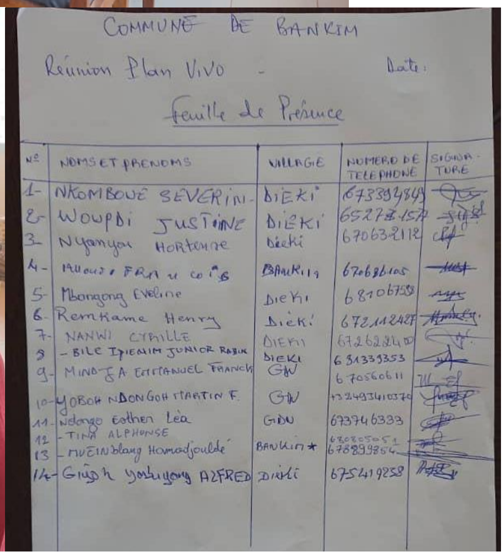
Initial Project Area	Name of project participant	Location	Project intervention	Extent of agroforestry area*	Project Agreement Reference	Start date	Project Requirements 2.3.1 and 2.3.2 met?
Communal Garden Moinkoing	Community of Moinkoing	Moinkoing	Agroforestry: Communal garden	4.07 ha	Annex 12 -	01/06/2023	Yes
Communal Garden Bandam	Community of Bandam	Bandam	Agroforestry: Communal garden	2.3 ha	Annex 12 -	01/06/2023	Yes
Home orchard Moinkoing	Smallholders in Moinkoing	Moinkoing	Agroforestry: Home orchard	3.00 ha 1.23 ha 3.89 ha	Annex 12 -	01/06/2023	Yes
Home orchard Bandam	Smallholders in Bandam	Bandam	Agroforestry: Home orchard	1.65 ha	Annex 12 -	01/06/2023	Yes

*Note that over the coming years more and more shareholder land patches will be added within the same communities.

Annex 4 –Participatory Design

See evidence of stakeholder involvement in the participatory design process for every community, such as attendance lists and photographs, below.

Bankim



COMMUNE DE BANKIM

Réunion Plan Vivo - Date: [illegible]

Feuille de Présence

N°	NOMS ET PRENOMS	VILLAGE	NUMERO DE TELEPHONE	SIGNATURE
1-	NKOMBOUE SEVERIN	DIEKI	673394849	[signature]
2-	WOUPDI JUSTINE	DIEKI	652721157	[signature]
3-	Nyanyou Hortense	Dieki	670632112	[signature]
4-	[illegible] FRANCOIS	BANKIM	670686105	[signature]
5-	Mbongong Eveline	Dieki	681067558	[signature]
6-	Remkame Henry	Dieki	672112427	[signature]
7-	NANWI CYRILLE	DIEKI	672622400	[signature]
8	BILE IPIENIM JUNIOR RABIK	DIEKI	631339353	[signature]
9-	MINDJA EMMANUEL FRANCK	GIW	670560611	[signature]
10-	YOBOH NDONGOH MARTIN F.	GIW	+32493410370	[signature]
11-	Ndongo Esther Léa	GIW	673746333	[signature]
12	TINA ALPHONSE		630805051	[signature]
13	MVEINblang Hamadjoulde	BANKIM	678899354	[signature]
14-	Giush Yoshiyong ALFRED	Dieki	675419258	[signature]

Moinkoing

Bandam

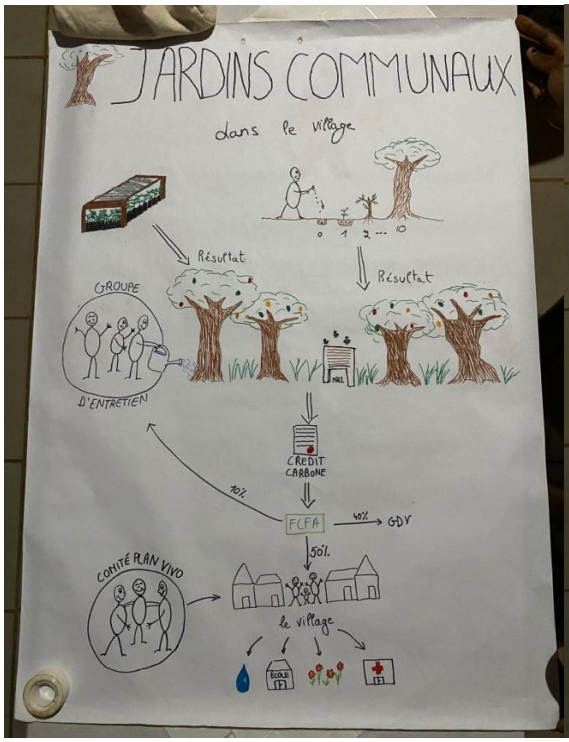


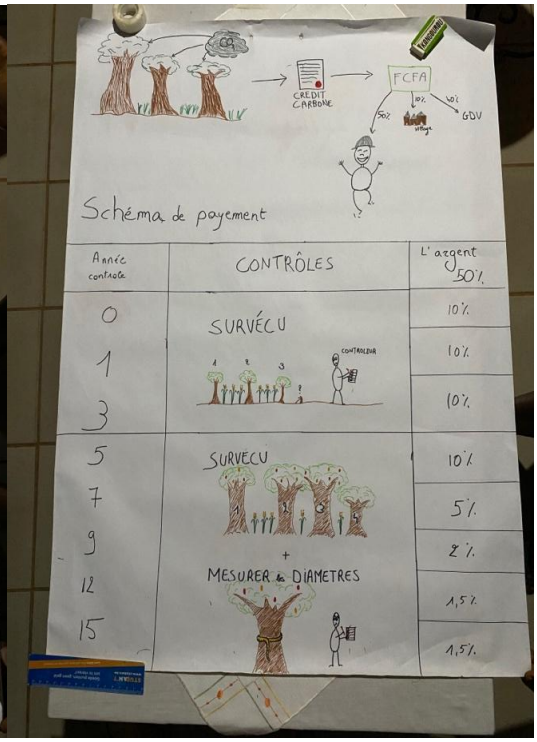

Annex 5 – Initial FPIC

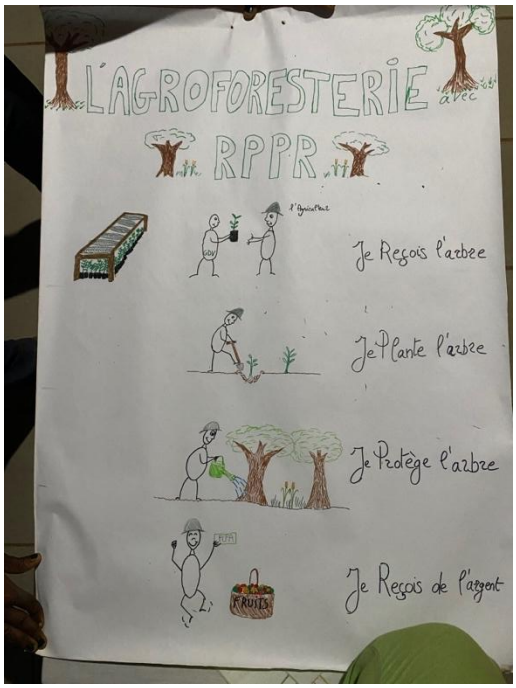
Photographs, attendance lists, written feedback of the FPIC meetings is attached together with the signed FPIC letters.

The FPIC meeting in Moinkoing on 26/01/2024 was with 121 people, 50/50 men/women.
The FPIC meeting in Bandam on 27/01/2024 was with 63 people, 50/50 men/women.
Separate FPIC meeting with Mbororo in Moinkoing (7 people of which 3 women) on 28/01/2024 and in Bandam (14 people) on 29/01/2024.

Presented materials:







Annex 6 – Carbon Calculations Spreadsheet

All details of the calculations for the Carbon Baseline summary and other tables summarising carbon benefits are provided in Annex 6 (Excel sheet attached).

Annex 7 – Technical Specifications

See document attached.

Annex 8 – Exclusion List

We completed the exclusion list by responding 'Yes' if the activity is included in the project and 'No' if the project does not include the activity.

Activities	Included in Project ('Yes' or 'No')
Any project activities leading to or requiring the destruction [1] of critical habitat [2] or any forestry project which does not implement a plan for improvement and/or sustainable management.	No
Any activity which could be associated with the significant impairment of areas particularly worthy of protection of cultural heritage (without adequate compensation in accordance with international standards).	No
Trade in animals, plants or any natural products not complying with the provisions of the CITES/Washington convention [3].	No
Destructive fishing methods or drift net fishing with a net more than 2.5 km in length, explosives and/or poison.	No
Large-scale commercial logging operations for use in primary tropical moist forest.	No
Production or trade in wood or other forestry products other than from sustainably managed forests [4].	No
Exploitation of diamond mines and marketing of diamonds where the host country has not adhered to the Kimberley Process.	No
Activities involving harmful or exploitative forms of forced labour [5] or harmful child labour [6].	No
Projects that include involuntary physical displacement and/or forced eviction.	No
Production or activities that encroach on lands owned, or claimed or occupied by Indigenous Peoples, without full documented consent of such peoples.	No
Production, use, sale or trade of pharmaceuticals, pesticides/herbicides, ozone layer depleting substances [7], and other toxic [8] or dangerous materials such as asbestos or products containing PCB's [9], wildlife or products regulated under CITES, including all products that are banned or are being progressively phased out internationally	No
Production or trade of arms, ammunition, weaponry, controversial weapons, or components thereof (e.g., nuclear weapons and radioactive ammunition, biological and chemical weapons of mass destruction, cluster bombs, anti -personnel mines, enriched uranium).	No
Procurement and use of firearms.	No
Provision of finances to military institutions involved in conservation or security activities.	No
Production or trade of strong alcohol intended for human consumption or other alcoholic beverages (excluding beer and wine).	No

Production or trade of tobacco and other drugs	No
Gambling, gaming establishments, casinos or any equivalent enterprises and undertaking [10].	No
Any trade related to pornography or prostitution.	No
Production or trade in radioactive material. This does not apply to the procurement of medical equipment, quality control equipment or other application for which the radioactive source is insignificant and/or adequately shielded	No
Production or trade in unbound asbestos. This does not apply to the purchase or use of cement linings with bound asbestos and an asbestos content of less than 20%.	No
Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals. Hazardous chemicals include gasoline, kerosene, and other petroleum products.	No
Transboundary trade in wastes, except for those accepted by the Basel Convention and its underlying regulations [11].	No
Any activity leading to an irreversible modification or significant displacement of an element of culturally critical heritage [12].	No
Production and distribution, or investment in, media that are racist, antidemocratic or that advocate discrimination against a part of the population.	No
Projects involving the planting or introduction of invasive species	No
Projects that increase the dependency of primary participants and other stakeholders on fossil fuels.	No

Notes:
[1] Destruction means (1) the elimination or severe reduction in the integrity of a habitat/area caused by a major and long-term/prolonged change in land-use or water resources or (2) the modification of a habitat such that this habitat's ability to fulfil its function/ role is lost.
[2] The term critical habitat encompasses natural and modified habitats that deserve particular attention. This term includes (1) spaces with high biodiversity value as defined in the IUCN's classification criteria, including, in particular, habitats required for the survival of endangered species as defined by the IUCN's red list of threatened species or by any national legislation; (2) spaces with a particular importance for endemic species or whose geographical range is limited; (3) critical sites for the survival of migratory species; (4) spaces welcoming a significant number of individuals from congregatory species; (5) spaces presenting unique assemblages of species or containing species which are associated according to key evolution processes or which fulfil key ecosystem services; (6) and territories with socially, economically or culturally significant biodiversity for local communities. Primary forests or high conservation value forests must also be considered as critical habitats
[3] https://cites.org/eng/disc/text.php
[4] Sustainably managed forests are forests managed in a way that balances ecological, economic and socio-cultural needs.

[5] Forced labour means all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.
[6] Harmful child labour means the employment of children that is economically exploitive, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health, or physical, mental, spiritual, moral, or social development. Employees must be at least 14 years of age, as defined in the ILO's Declaration on the Fundamental Principles and Rights at Work (C138 – Minimum Age Convention, Article 2), unless local laws require compulsory school attendance or a minimum working age. In such circumstances, the highest age requirement must be used.
[7] Any chemical component which reacts with, and destroys, the stratospheric ozone layer leading to the formation of holes in this layer. The Montreal Protocol lists Ozone Depleting Substances (ODS), their reduction targets and deadlines for phasing them out
[8] Including substances included under the Rotterdam Convention, Stockholm Convention and WHO "Pharmaceuticals: Restrictions in Use and Availability".
[9] PCBs (polychlorinated biphenyls) are a group of highly toxic chemical products that may be found in oil-filled electrical transformers, capacitors and switchgear dating from 1950 to 1985.
[10] Any direct financing of these projects or activities involving them (for example, a hotel including a casino). Urban improvement plans which could subsequently incorporate such projects are not affected.
[11] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal (1989).
[12] "Critical cultural heritage" is considered as any heritage element recognised internationally or nationally as being of historical, social and/or cultural interest.

Annex 9 - Environmental and Social Screening Report

Complete the template below with details of the environmental and social screening:
Process for use of the E&S questionnaire:
i) The Project Coordinator is to fill in the "Project coordinator response" section of the questionnaire.
ii) Once completed by the Project Coordinator, the Plan Vivo Foundation E&S reviewer is to fill in the "E&S reviewer comments" section of the questionnaire. This includes filling in the "E&S reviewer conclusions".
iii) The screening report is then completed at the end by the Plan Vivo Foundation E&S reviewer, and the results are shared and discussed with the Project Coordinator.

SECTION A: PROJECT INFORMATION			
Project title:	Fes Enying		
Project coordinator:	Climate Lab		
Country:	Cameroon		
Geography/ landscape:	Agroforestry		
Project summary:	The Plan Vivo project in Bankim, Cameroon aims to improve food security and climate resilience through sustainable agroecosystems. It involves planting home orchards and communal gardens with fruit and forestry trees. The project provides free seedlings and supports smallholder farmers with workshops. It also includes fire management strategies and animal protection measures to ensure the success of the planted trees. The project aims to benefit both the community and the ecosystem. The project starts in the villages Moinkoing and Bandam and will organically expand in the future.		
Name and role of project coordinator staff member filling this questionnaire:	Jade Timperman, project leader of Fes Enying		
Confirm that the Plan Vivo Exclusion List is appended to this E&S questionnaire:	Yes		
SECTION B: POTENTIAL E&S RISKS AND IMPACTS			
Topic	Question	Project coordinator response	E&S reviewer comments
E&S Risks and Impacts			

Vulnerable Groups	Are there vulnerable or disadvantaged groups or individuals, including people with disabilities (consider also landless groups, lower income groups less able to cope with livelihood shocks/ stresses) in the project area, and are their livelihood conditions well understood by the project?	Potential risks mainly related with perpetuation of income-related inequality and Mbororo as they do not own or rent land where they can plant trees. However, the project will install fodder for their cattle.	OK – please ensure these risks are described in full at PDD stage, and mitigation/management measures are discussed by the community and implemented into the project design.
	Is there a risk that project activities disproportionately affect vulnerable groups, due to their vulnerability status?	Potential risks mainly related with perpetuation of income-related inequality and Mbororo as they do not own or rent land where they can plant trees. However the project will install fodder for their cattle.	OK – as above.
	Is there a risk that the project discriminates against vulnerable groups, for example regarding access to project services or benefits and decision-making?	Potential risks mainly related with individuals not being present during decision-making by community meetings. If needed separate meetings with Mbororo or women	OK – the explanation provided to ensure participation and engagement with the Mbororo women in particular looks sufficient to manage this key risk.

		will be held to insure their involvement.	
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 3, the magnitude and influence of vulnerable groups involved in the project mean that this risk is likely to occur. Estimated magnitude of risks (1-5) & justification: 3, if this risk were to occur, it would impact a significant number of people. Risk significance: Moderate			
Gender equality	Is there a risk of adverse gender impacts due to the project/ project activities, including for example discrimination or creation/exacerbation or perpetuation of gender-related inequalities?	Potential risks, such as lesser involvement of women in decision making meetings, mainly related with perpetuation of gender-related inequality.	OK – the explanation provided to ensure participation and engagement with women looks sufficient to manage this key risk.
	Is there a risk that project activities will result in adverse impacts on the situation of women or girls, including their rights and livelihoods? Consider for example where access restrictions disproportionately affect women and girls due to their roles and positions in accessing environmental goods and services?	Potential risks, such as lesser involvement of women in decision making meetings, mainly related with perpetuation of gender-related inequality. Further investigation in the PDD.	OK – as above.
	Is there a risk that project activities could cause or contribute to gender-based violence, including risks of sexual exploitation, sexual abuse or sexual harassment (SEAH)? Consider partner and collaborating partner organizations and policies they have in place. Please describe.	No risk, ethical charter will in place (see further in PDD).	OK
E&S reviewer conclusions			

Estimated likelihood of risks (1-5) & justification: 2, the traditional values of groups within the project and number vulnerable women involved in the project mean that this risk could occur, but sufficient participatory processes and management measures have been detailed within the community to lessen this risk to make it unlikely to occur. Estimated magnitude of risks (1-5) & justification: 3, if this risk were to occur, it would impact a significant number of people. Risk significance: Moderate			
Human Rights	Is there a risk that the project prevents peoples from fulfilling their economic or social rights, such as the right to life, the right to self-determination, cultural survival, health, work, water and adequate standard of living?	No risk, because the project interventions do not intend to prevent people from fulfilling their economic or social rights.	OK.
	Is there a risk that the project prevents peoples from enjoying their procedural rights, for example through exclusion of individuals or groups from participating in decisions affecting them?	Potential risks mainly related with individuals not being present during decision-making by community meetings. Potential risk related with top down decision making on the revenue sharing of the carbon credits. To prevent this a solidarity clause may be included in the project agreements.	OK – the explanation provided to ensure participation and engagement with project participants – particularly identified vulnerable groups – if sufficient in managing this risk through the project activities and safeguarding provisions.
	Are you aware of any severe human rights violations linked to project partners in the last 5 years?	There are no severe human right violations linked with GDV Cameroun, GDV	OK

		Luxembourg and Climate Lab.	
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 1, the management of risks and precedent of those involved in this project mean this risk is very unlikely to occur. Estimated magnitude of risks (1-5) & justification: 4, if this risk were to occur it would impact a large number of people. Risk significance: Low			
Community, Health, Safety & Security	Is there a risk of exacerbating existing social and stakeholder conflicts through the implementation of project activities? Consider for example existing conflicts over land or natural resources, between communities and the state.	Potential risks mainly related with social conflicts with the Mbororoas their livelihood is different from the farmers. They hold cattle and seek grazing grounds. Sometimes the cattle enter farming lands and destroys crops, causing agropastoral conflicts.	OK – the explanation provided to ensure participation and engagement with the relevant groups looks sufficient to manage this risk.
	Does the project provide support (technical, material, financial) to law enforcement activities? Consider support to government agencies and to Community Rangers or members conducting monitoring and patrolling. If so, is there a risk that these activities will harm communities or personnel involved in monitoring and patrolling?	Potential risk, as monitoring activities will be established. The format is yet unknown and will be further described in the PDD.	OK
	Are there any other activities that could adversely affect community health and safety? Consider for example exacerbating human-wildlife conflict, affecting provisioning ecosystem services, and transmission of diseases.	Potential risks mainly related with social conflicts and land tenure with the Mbororo, as their	OK – as above.

		livelihood is different from the farmers. They hold cattle and seek grazing grounds. Sometimes the cattle enters farming lands and destroys crops, causing agropastoral conflicts..	
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 2, the management plans included in the project design and the project activities inherently mean that these risks are unlikely to occur. Estimated magnitude of risks (1-5) & justification: 2, if this risk were to occur it would affect a relatively small number of people. Risk significance: Low			
Labour and working conditions	Is there a risk that the project, including project partners, would lead to working conditions for project workers[2] that are not aligned with national labour laws or the International Labor Organization's (ILO) Declaration on the Fundamental Principles and Rights at Work (discriminatory working conditions, lack of equal opportunity, lack of clear employment terms, failure to prevent harassment or exploitation, failure to ensure freedom of association etc.)?	No risk, as the project will at all times align with national labour laws	OK
	Is there an occupational health and safety risk to project workers while completing project activities?	No risk, as the project will at all times align with national labour laws	OK
	Is there a risk that the project support or be linked to forced labour, harmful child labour, or any other damaging forms of labour?	No risk, as the project will at all times align with national labour laws	OK
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 2, the nature and activities of this project mean this risk is unlikely to occur.			

Estimated magnitude of risks (1-5) & justification: 2, if this risk were to occur it would impact a relatively small number of people. Risk significance: Low			
Resource efficiency, pollution, wastes, chemicals and GHG emissions	Is there a risk that project activities might lead to releasing pollutants to the environment, cause significant amounts of waste or hazardous waste or materials?	No risk, as no pollutants are used, although a biocide policy must be included in the agroforestry smallholder agreements	OK
	Is there a risk that the project will lead to significant consumption of energy, water or other resources, or lead to significant increases of greenhouse gases?	Small risk, project GHG emissions are negligible. Water and energy consumption will probably be negligible, but to be further assessed in technical specifications in PDD.	OK
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 1, the project activities mean this risk is very unlikely to occur Estimated magnitude of risks (1-5) & justification: 3, if this risk were to occur it would affect a significant number of people Risk significance: Low			
Access restrictions and livelihoods	Will the project include activities that could restrict peoples' access to land or natural resources where they have recognised rights (customary, and legal). Consider projects that introduce new access restrictions (eg. creation of a community forest), reinforce existing access restrictions (eg. improve management effectiveness and patrolling of a community forest) , or alter the way that land and natural resource access restrictions are decided (eg. through introducing formal management such as co-management).	Potential risks related with the land competition for the instalment of a reforested communal garden. The project aims to manage this risk through close	OK – the project design and consultation process mean this risk is sufficiently managed.

		consultation with the community over location and management of communal gardens.	
	Is there a risk that the access restrictions introduced /reinforced/altered by the project will negatively affect peoples' livelihoods?	Potential risks mainly related with disputes around the issue of fire (grievance mechanism will be established)	OK – the grievance mechanism and fire risk management is well-detailed in the PDD.
	Have strategies to avoid, minimise and compensate for these negative impacts been identified and planned?	Firebreaks will be installed.	OK
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 3, the management of these risks is sufficient but their presence within the project activities means this risk is still slightly likely to occur. Estimated magnitude of risks (1-5) & justification: 3, if this risk were to occur it would impact a significant number of people. Risk significance: Moderate			
Cultural heritage	Is the Project Area officially designated or proposed as a cultural site, including international and national designations?	Potential risk, since sacred sites in the project areas contain cultural heritage. These sites need to be identified, and risk analysis is established in the PDD.	OK – evidence in the PDD that community consultation and identified of these sacred sites mean that communal gardens will not interfere with them.
	Does the project site potentially include important physical cultural resources, including burial sites and monuments, or natural features or resources of cultural significance (eg. sacred sites and species, ceremonial areas) and is there risk that the project will negatively impact this cultural heritage?	Potential risk, since sacred sites in the project areas contain cultural heritage. These sites need to be	OK – as above.

		identified and risk analysis is established in the PDD.	
	Is there a risk that the project will negatively impact intangible cultural heritage? Consider for example cultural practices, social and cultural norms in relation to land and natural resources.	Potential risk, since sacred sites in the project areas contain cultural heritage. These sites need to be identified and risk analysis is established in the PDD.	OK – as above.
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 2, the project has worked well with the community in consultations and engagements to ensure the risk of interfering with sacred sites is very unlikely to occur. Estimated magnitude of risks (1-5) & justification: 2, if this risk were to occur if would impact a relatively small number of people. Risk significance: Low			
Indigenous Peoples	Are there Indigenous Peoples[3] living within the Project Area, using the land or natural resources within the project area, or with claims to land or territory within the Project Area?	Potential risks mainly related with involving Mbororo as planting trees in communal gardens could limit their access to grazing ground.	OK – please ensure these risks are described in full at PDD stage, and mitigation/management measures are discussed by the community and implemented into the project design.
	Is there a risk that the project negatively affects Indigenous Peoples through economic displacement, negatively affects their rights (including right to FPIC), their self-determination, or any other social or cultural impacts?	Potential risks mainly related with involving Mbororo as planting trees in communal	OK – as above.

		gardens could limit their access to grazing ground.	
	Is there a risk that there is inadequate consultation of Indigenous Peoples, and/or that the project does not seek the FPIC of Indigenous Peoples, for example leading to lack of benefits or inappropriate activities?	No, the FPIC process is included in the PDD	OK – thank you for including a thorough FPIC process in the PDD.
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 3, given the nature of the project area and involvement of indigenous groups in project activities, this risk is likely to occur, however, is being well-managed by the project Estimated magnitude of risks (1-5) & justification: 3, if this risk were to occur it would impact a significant number of people. Risk significance: Moderate			
Biodiversity and sustainable use of natural resources	Is there a risk that project activities will cause adverse impacts on biodiversity (both in areas of high biodiversity value, and outside of these areas) or the functioning of ecosystems? Consider issues such as use of pesticides, construction, fencing, disturbance etc.	The project does not intend to use pesticides, construct, use fencing or disturb ecosystems.	OK
	Is there a risk that the project will introduce non-native species or invasive species?	Potential risks mainly related with introducing non-“native”, although “naturalized” trees	OK
	Is there a risk that the project will lead to the unsustainable use of natural resources? Consider for example projects promoting value chains and natural resource-based livelihoods.	Potential risk related to the project that wants to support improving the marketing channels for non-timber forest products.	OK
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 2, this risk is being well-managed by the project and so is unlikely to occur			

Estimated magnitude of risks (1-5) & justification: 2, if this risk were to occur it would impact a relatively small number of people Risk significance: Low			
Land tenure conflicts	Has the land tenure and use rights in the project area been assessed and understood?	Yes, see 1.3 Land and carbon rights.	OK
	Is there a risk that project activities will exacerbate any existing land tenure conflicts, or lead to land tenure or use right conflicts?	Potential risks mainly related with the issue of fire (slash-and burn agriculture), and land tenure disputes by Mbororo as they constantly looking for grazing land for their cattle.	OK – please ensure these risks are described in full at PDD stage, and mitigation/management measures are discussed by the community and implemented into the project design.
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 2, the nature of the project area means this risk is unlikely to occur. Estimated magnitude of risks (1-5) & justification: 3, if this risk were to occur it would impact a significant number of people. Risk significance: Moderate			
Risk of not accounting for climate change	Have trends in climate variability in the project areas been assessed and understood?	Yes, see 3.3 ecosystem baseline	OK
	Has the climate vulnerability of communities and particular social groups been assessed and understood?	Yes, see 3.2 livelihood baseline	OK
	Is there a risk that climate variability and changes might influence the effectiveness of project activities (e.g. undermine project-supported livelihood activities) or increase community exposure to climate variation and hazards? Consider floods, droughts, wildfires, landslides, cyclones, etc.	Potential risks mainly related with droughts and floodings	OK – please ensure these risks are detailed and mitigation measures discussed at implemented

			through project design stage.
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 2, the project is aware and managing these risks, so they are unlikely to occur. Estimated magnitude of risks (1-5) & justification: 2, if these risks were to occur, they would have a small effect on a substantial number of people. Risk significance: Low			
Other – eg. cumulative impacts	Is there a risk that the project will contribute cumulatively to existing environmental or social risks or impacts, for example through introducing new access restrictions in a landscape with existing restrictions and limited land availability?	Potential risks mainly related with the potential leakage from displaced wood cutting	OK – please include a management plan for this risk in the PDD.
	Are there any other environmental and social risks worthy of note that are not covered by the topics and questions above?	Other environmental and social risks will be further assessed in the risk management plan in the PDD.	OK
E&S reviewer conclusions Estimated likelihood of risks (1-5) & justification: 1, the thorough monitoring plans and risk assessments provided by the project at PDD stage mean that this risk is very unlikely to occur, and will be well-managed should it occur. Estimated magnitude of risks (1-5) & justification: 2, if this risk were to occur it would have a relatively minor impacts on a small number of people. Risk significance: Low			
SECTION C: SAFEGUARD PROVISIONS			
Stakeholder engagement: requirements 2.1.1-2.1.3	Has a stakeholder analysis been conducted that has identified all stakeholders that could influence or be affected by the project, or is this still to be completed? Please describe.	We refer to section 2 Stakeholder Engagement	Agree
	Are the local community and indigenous peoples statutory or customary rights to land or resources within the project area already	We refer to 1.3 Land and carbon rights	Agree

	clear and documented, or is further assessment required? Please describe.		
	Are local governance structures and decision-making processes described and understood (including details of the involvement of women and marginalized or vulnerable groups), or is further assessment required? Please describe.	We refer to 4.1 Governance structure.	Agree
	Are past or ongoing disputes over land or resources in the project area known and documented, or is there need for further assessment? Please describe.	Land tenure disputes by Mbororo.	Agree
Stakeholder consultation: requirements 2.5.1 and 2.5.2	Does the project have a Stakeholder Engagement Plan with clear measures to engage Vulnerable Groups, or is this plan still to be developed? Please describe.	We refer to 2.5 FPIC process and further clear measures are still to be developed.	All the FPIC Meetings have been included in the PIN. Agree
	Has the Project Coordinator informed all stakeholders of the project, through providing relevant project information in an accessible format, or does this still need to be completed? Please describe.	We refer to 2.4 Participatory Design.	Agree
Free, Prior and Informed Consent: requirements 2.6.1-2.6.4	Has the project analysed and understood national and international requirements for Free Prior and Informed Consent (FPIC)? Please describe.	We refer to 2.5 FPIC process.	Agree
	Has the project identified potential FPIC rightsholders and potential representatives in local communities and among indigenous peoples, or is this still to be completed? Please describe.	Yes, we refer to 2.4 the project participants and to 2.5 the FPIC process.	Agree
	Has the project worked with rightsholders and representatives of local communities and indigenous peoples to understand the local decision-making process and timeline (ensuring involvement of women and vulnerable groups), or is this still to be completed? Please describe.	Yes, we refer to 2.4 the project participants and to 2.5 the FPIC process. The involvement of women will be secured, but	Agree

		this will be further defined in the PDD and if separate Plan Vivo meetings or parity voting majority are necessary.	
	Has the project sought consent from communities to 'consider the proposed Project', and if so, where is this in principle consent documented? Please describe.	Yes, we refer to the Annex 5, the 'lettres d'engagement'.	Agree
Grievance Redress Mechanism: requirements 3.16.1	Does the project already have a Grievance Redress Mechanism (GRM), or is this still to be established? Please describe.	Yes, see PDD section.	Agree
	For projects with a GRM, is this accessible to project affected people? Please describe.	Once established, it will be accessible for all project affected people.	Agree

E&S reviewer conclusions for safeguard provisions

Are the project Safeguard Provisions adequately addressed, or to be adequately addressed during the project design phase?

The safeguarding provisions required of the project have been adequately met and the risk assessments provided have been very detailed. The thorough community consultations and FPIC processes, particularly with identified vulnerable and indigenous groups, have been well implemented and detailed, and make for well-managed and mitigated risks through the project design.

What additional actions need to be conducted during the project design phase?

The risks yet to be identified regarding land tenure, conflict and concerns over the welfare and involvement of the Mbororo peoples have been sufficiently discussed and engaged with at PDD stage.

Any other comments

SECTION D: SCREENING REPORT (E&S REVIEWER TO COMPLETE)

Name of E&S reviewer	Amelia Evans
Date of E&S screening:	16/07/24
Project risk rating:	**Low**
Principle risks and impacts	

E&S topic/ risk area	Likelihood (1-5)	Magnitude (1-5)	Significance (low, moderate, severe, high)
Vulnerable Groups	3	3	Moderate
Gender equality	2	3	Moderate
Human Rights	4	1	Low
Community, Health, Safety & Security	2	2	Low
Labour and working conditions	2	2	Low
Resource efficiency, pollution, wastes, chemicals and GHG emissions	1	3	Low
Access restrictions and livelihoods	3	3	Moderate
Cultural heritage	1	2	Low
Indigenous Peoples	3	3	Moderate
Biodiversity and sustainable use of natural resources	2	2	Low
Land tenure conflicts	2	3	Moderate

	Risk of not accounting for climate change	2	2	Low
	Other – eg. cumulative impacts	2	2	Low
E&S assessment required	An ESA and ESMP should be filled out at PDD stage, with a particular focus on the risks identified here as 'moderate'.			

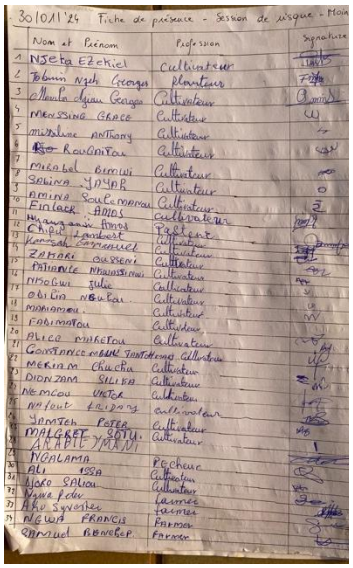
Annex 10 – Environmental and Social Assessment Report

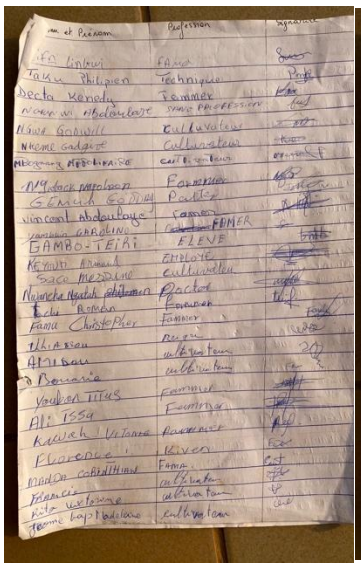
See report below.

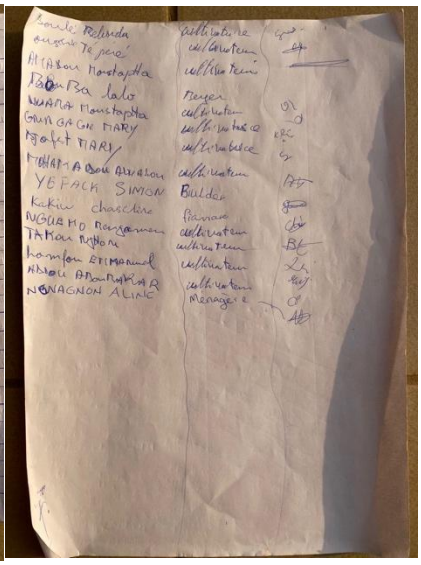
Method

In January 2024, village meetings on risks were held in Moinkoing and Bandam. Using the model below, the main risk areas were discussed, and mitigation measures were suggested and decided. In Moinkoing, 78 people (men, women and Mbororo) joined the session at 30/01/2024, and in Bandam this were 64 people (men, women and Mbororo) at 31/01/2024. The risk session started with a brief recapitulation of the project, to remind people what activities will take place. Secondly, questions of people that were written or asked at the FPIC meetings were answered. As of last, the potential risks were discussed in group. Note that the questions were asked in French, after which they were translated in Pidgin (people in Moinkoing) and Foulbé (Mbororo), so everybody could participate in their own mother tongue.

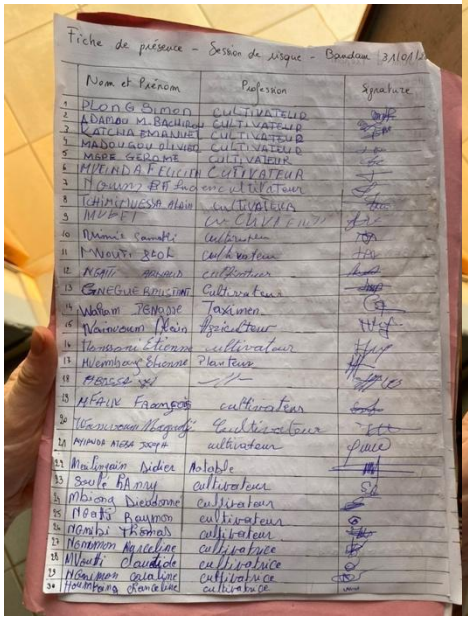
Risk session Moinkoing (30/01/2024)

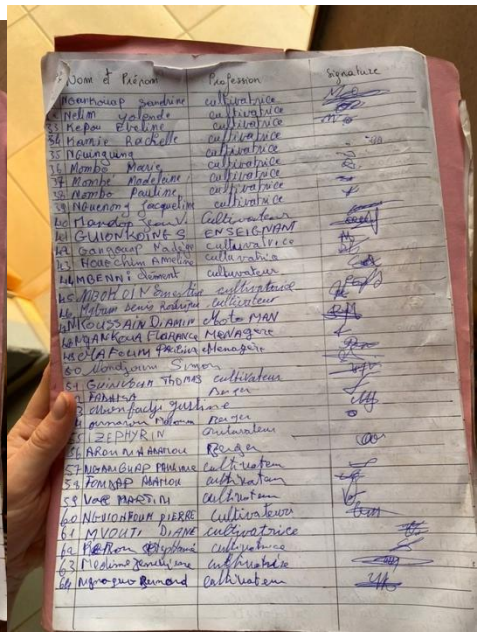






Risk session Bandam (31/01/2024)





1. Community-level risk assessment through community discussions

Key areas of risk (note: M = Moinkoing, B = Bandam)	Community discussion of the importance of risk?	Measures to reduce this risk?
Is there a risk that the project inhibits your daily activities?	M & B: there is no risk for someone who is engaging in the project. We can continue our daily activities.	/
If we ask to work together, men, women, other ethnic groups, in a Plan Vivo committee, is there a risk that this will not work?	M: there is no risk, as in the meeting now, everybody is here (men, women, Mbororo, Tikar, …). We will work together; the project does not need to worry.	/

	B: there is no risk towards this. Men in Bandam are aware of the fact that women are strong partners in projects.	
Is there a risk towards the usage of chemical products in the fields?	M & B: no, they will follow the directions given by GDV	/
Is there a risk the project will consume an important energy, water or other resource?	M & B: no, there is enough water in the area for the project activities, and besides that, the activities proposed do not consume an important energy resource or other resources.	/
Is there a risk the project will lead to territorial conflicts?	M: No, as for the communal gardens, we will decide as a group and the chief and his *notables* will confirm that area and everyone will respect this. B: No, every individual farmer has his own territory, there is no discussion about that. For the communal gardens, we will decide as a group and the chief and his *notables* will confirm the area and everyone will respect this.	/
As the way of farming now is based on the slash-and burn method, but when planting trees, fire can no longer be used. Does that hold a risk for your livelihood?	M: no risk, you will not burn if you know it can cost you money (in this case trees) B: yes it can be a risk for the Mbororo as they use fire to grow new herbs.	B: giving fodder, so the need to burn to find food for the cows is reduced.
Is there a risk that bush fires will destroy the planted trees? If so, how can we solve this?	M & B: yes, it is an important risk	M & B: there is a responsibility for every farmer to keep his field clean and to install fire breaks to protect the plants on his field. Planting manioc could also help preventing fire destroying the fields. Warning neighbors when you are going to set fire in your field. In communal gardens we should also install fire breaks.

		In Bandam the proposed dimensions of a fire break were 5m.
Is there a risk that the communal gardens will be close to sacred sites?	M & B: yes, there are sacred sites, so it is important that this is considered and that communal gardens are installed far from these sites.	M & B: as the chief and his *notables* will codecide where the communal gardens will be located, it will eliminate the risk that it is near a sacred site.
Is there a risk that the project will have a negative impact on cultural practices?	M & B: not at all	/
Is there a risk that people renting a field will lose their field due to the project.	M: yes, this could happen, so it is important to consider this. B: no risk towards losing a field.	M: there needs to be a contract between the owner and the renter. Maybe it could be an idea that the renter pays something to the owner every month or year.
Is there a risk that the minority group, the Mbororo will not be included in the project?	M & B: no, because the project is for everyone, so we will all work together.	/
Is there a risk that the project will have a negative impact on the Mbororo	M: no, as there will be fodder included in the project. B: no, as the project can help the Mbororo with fodder and water for the cows.	The project should include fodder in the project activities. The future investments should take into account water availability for the zebu of the Mbororo. Mbororo need to take part in the meetings.
Is there a risk that animals, like zebu, will destroy the trees	M: yes, this is a risk that should be considered. B: yes, this is a risk as the Mbororo sometimes use fire in the fields of farmers.	M: The project should include fodder, which can be cut especially when the trees are still small. When the trees are mature, the cows could graze in the communal gardens. B: the farmers and shepherds should get along and the project should include fodder in order to reduce the need to burn. Farmers could use branches of trees to protect young trees on their fields.
Is there a risk that not the whole population will be involved in the project?	M & B: no risk, because the project is intended to be for all the people of the village.	/
Is there a risk that Plan Vivo committees, including men,	M & B: no risk at all, this will work.	M: but if a person in the Plan Vivo committee is not

women and all ethnic groups, will not work?		working together with the others, we will change him/her.
Is there any other risk that is not discussed, but that could cause the project to fail?	M: What happens with the field of people who are renting, but die during the project period? B: no, the most important risks are the fires and the zebu.	M: in the contract it should be clear what will happen with the field in case a renter dies.

2. Community E&S Risk Management Plan (ESMP)

Not every risk question was considered as a risk by the population, however, some risk questions are followed by a (mitigation) measure to ensure the risk does not occur in the future. These risks are not considered as risk by the population, but rather by the project coordinators (Climate Lab and Graine de Vie).

E&S risks and impacts and mitigation measures					
Environmental and social risks and impacts	Mitigation measures	Feasibility, effectiveness and sustainability	Costs	Implementation responsibility and schedule	Follow-up indicator?
Gender equality, vulnerable groups & indigenous people: If we ask to work together, men, women, other ethnic groups, in a Plan Vivo committee, is there a risk that this will not work?	Women participation in Plan Vivo committee is at least 30%, with a role as president or vice-president. In Plan Vivo committees every ethnic group in the village should have a representation. M: if a person in the Plan Vivo committee is not working together with the others, we will change him/her. rules for PV committees are written down (annex 19).	The target for women participation is 30%. Keep track of women participation in every meeting (Plan Vivo or village meeting). Keep track of every ethnic group has their represents in Plan Vivo and village meetings (attendance list). People in Plan Vivo committees are volunteers and do know how a Plan Vivo committee will look like: they have an intrinsic motivation to be part of the committee.	No costs (meeting)	Annually, GDV M&B	L1 P15
Vulnerable groups & indigenous people: Is there a risk that the minority group, the Mbororo, will not be included in the project?	In Plan Vivo committees every ethnic group should have a represent.	Keep track of every ethnic group has their represents in Plan Vivo and village meetings (attendance list).	No cost (meeting)	Annually, M&B, GDV	L1 P15

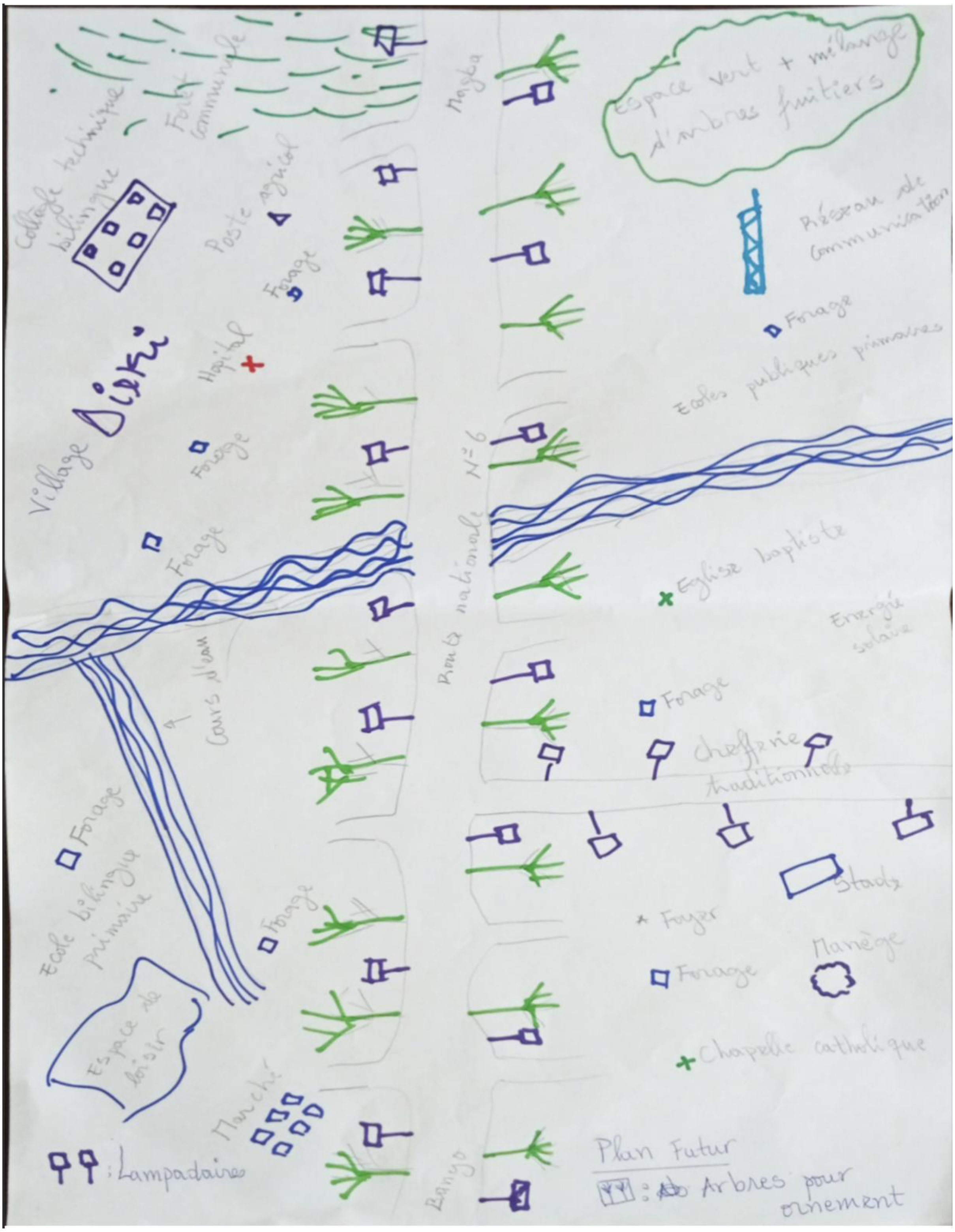
Vulnerable groups & indigenous people: Is there a risk that the project will have a negative impact on the Mbororo	The project should include fodder in the project activities. The future investments should take into account water availability for the zebu of the Mbororo.	Feasible as fodder was foreseen in the project budget. There is a Mbororo representation in the Plan Vivo committees, so future investments in favor of the Mbororo are secured.	Cost to implement fodder in	Annually, GDV, M&B	P13, P15
Human rights: As the way of farming now is based on the slash-and burn method, but when planting trees, fire can no longer be used. Does that hold a risk for your livelihood?	Milestone based payment scheme (15y) giving the farmer a larger share of the carbon credit revenues at the start of the project to compensate for the fact trees are not yet producing fruits. B: Establishing fodder, so the need to burn to find food for the cows is reduced.	The payment scheme is included in the individual project agreement. Feasible as fodder was foreseen in the project budget.	Cost to implement fodder in	Annually, GDV	P5, P11
Community, Health, Safety & Security; land tenure conflicts: Is there a risk the project will lead to territorial conflicts?	Village chiefs or landowners cosign the individual project agreements in order to avoid territorial conflicts. Fodder will be installed to help reducing the need of burning on the fields of farmers. M & B: The emplacement of the communal garden should be in agreement with chief and his *notables.*	The village chiefs are easily accessible, and are considered as the gardeners of the land. Their decision is also respected by the population. Feasible as fodder was foreseen in the project budget. The village chief will also sign the project agreement, confirming the emplacement of the communal garden	Cost to implement fodder in	Signing contractsbefore start of planting activities (2024), fodder activities M&B	P1, P8
Resource efficiency, pollution, wastes, chemicals and GHG emissions :Is there a risk towards the usage of chemical products in the fields?	Following the advice given by trainings and workshops via GDV.	There are workshops and trainings foreseen by GDV.	Costs related to workshops	Annually, GDV	P9, P12, P14

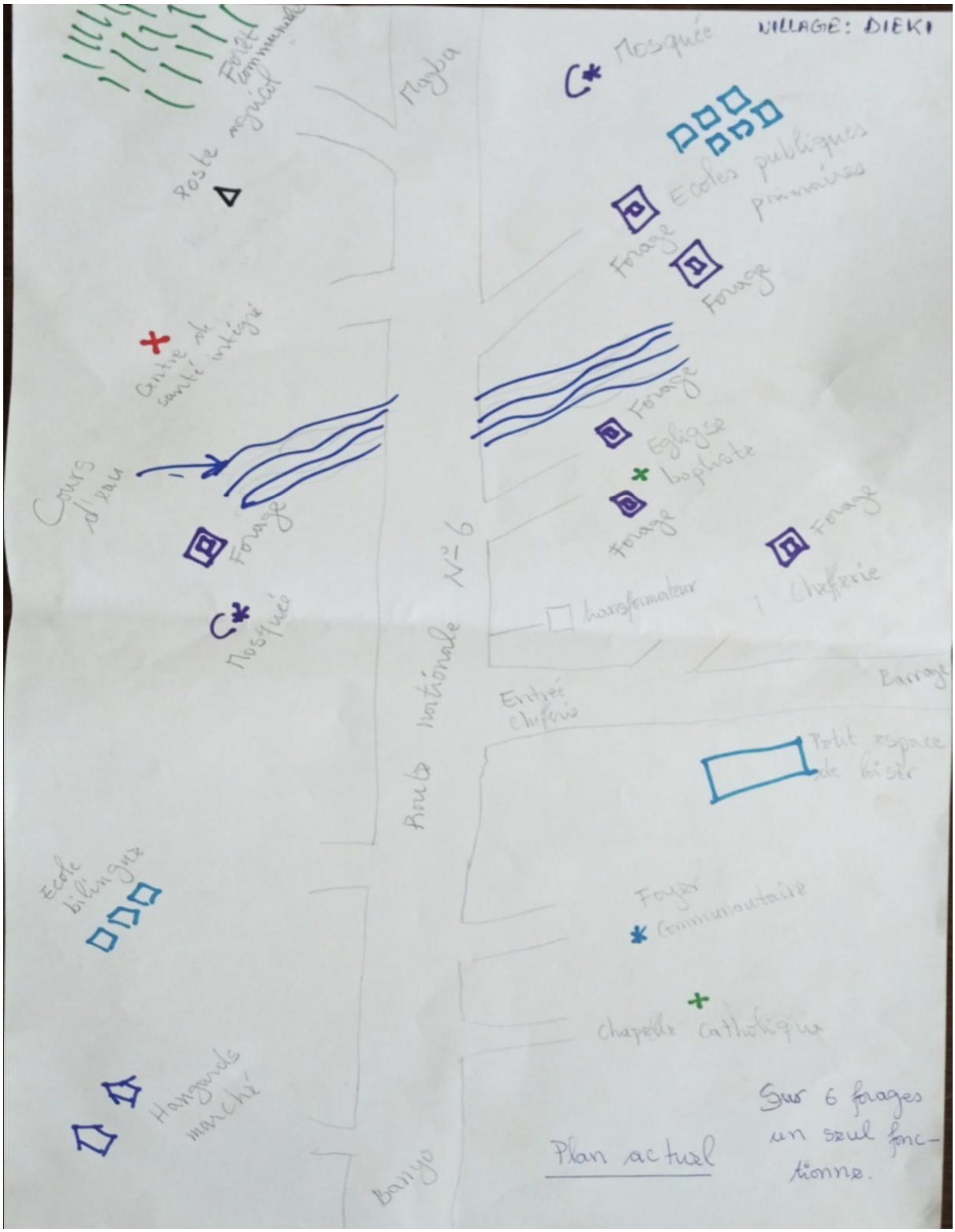
Access restrictions and livelihoods & land tenure conflicts: Is there a risk that people renting a field will lose their field due to the project.	Project agreements need a section explaining the payment and follow- up procedure in case of renting a field. The landowner should co-sign the contract.	As farmers need to sign an individual agreement, it is easy and necessary that the owner of the field signs as well.	No cost	Before signing project agreements, CL	NA
Cultural heritage: Is there a risk that the communal gardens will be close to sacred sites?	M & B: The emplacement of the communal garden should be in agreement with chief and his *notables.*	The village chiefs are easily accessible, and are considered as the gardeners of the land.	No cost	Before signing project agreement, GDV, M&B	NA
Other: Is there a risk that bush fires will destroy the planted trees? If so, how can we solve this?	Implementation of fire management plan including activities for individual farmer (fire breaks, sensitization towards cleaning their fields, communication towards neighbours), village people (sensitization: disadvantages of fire) and protection of communal gardens (a.o. fire breaks)	Knowledge about fire breaks is already common among farmers, but not everyone uses the same dimensions. Sensibilization is necessary. Farmers are aware that fires are not desirable.	Cost for installing firebreaks, sensitization meetings	Annually, GDV, M & B	P3
Other: Is there a risk that animals, like zebu, will destroy the trees?	Instalment of fodder for shepherds Communal gardens could be used as grazing zone when trees are mature (silvopastoral use). Individual farmers can protect young trees using branches of trees around the young plants.	Effectiveness: Mbororo themselves answered that this could help reducing the need of fire. Feasible: Fodder was foreseen in the project budget. Easy, affordable and effective solution to avoid that cows would eat the young trees.	Cost to implement fodder	Annually, GDV, M&B	P4
Other: Is there any other risk that is not discussed, but that could cause the project to fail?	M: in the contract it should be clear what will happen with the field in case a renter dies.	An addition in the project agreement is possible as these are not yet signed.	No cost	Before signing individual contract (2024 or 2025), CL	NA
Safeguard provisions					

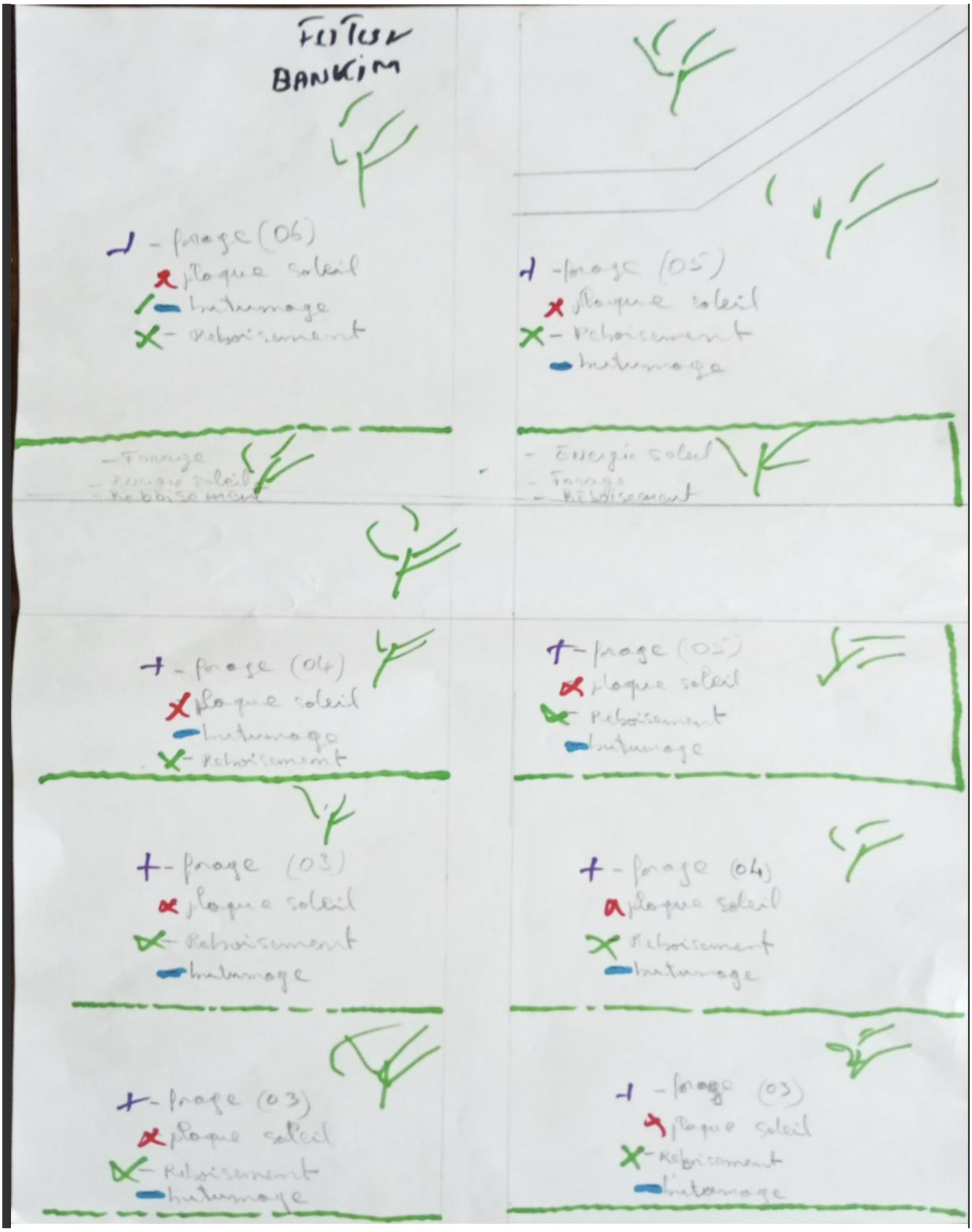
Stakeholder Engagement & consultation	• About 2 to 3 village meetings before project start • Separate village meeting with Mbororo represents if relevant for village • Yearly Plan Vivo assembly per village for the coming 30 years. • Involve village chief and his notables in the project design	Feasible, since the project has a local team near the project regions. Sustainable on the long term (annually during 2023 – 2053)	No cost	Annually (2023 – 2053)	P15
Grievance Redress Mechanism	• Complaint and suggestion book • Agents de relais, duo in every village to collect complaints and suggestions • Suggestion boxes within the village • Community satisfaction survey	See §3.17	No costs	Annually (2023 – 2053), GDV, CL, Plan Vivo committees	NA
Free, Prior and Informed Consent	• About 2 to 3 village meetings before project start • Separate village meeting with Mbororo represents if relevant for village. • Yearly Plan Vivo assembly per village for the coming 30 years. • Involve village chief and his notables in the project design	Feasible, since the project has a local team near the project regions. Sustainable on the long term (annually during 2023 – 2053)	No costs	Annually (2023 – 2053), GDV, CL	P15

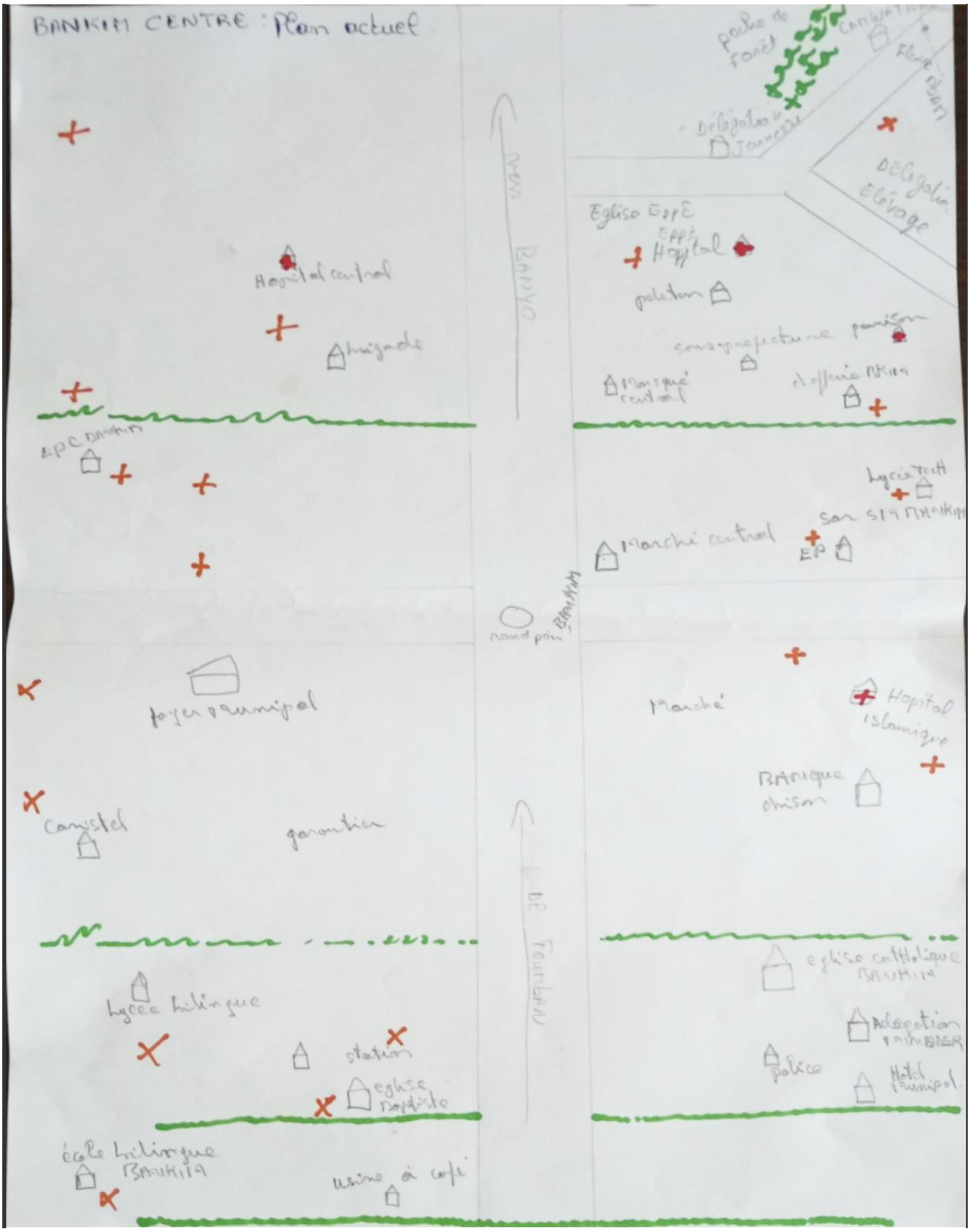
Annex 11 – Land Management Plans

The land management plans are made by a group that represents the community, which means that all ethnic groups were present, including the Mbororo and that there were at least 30% women present.

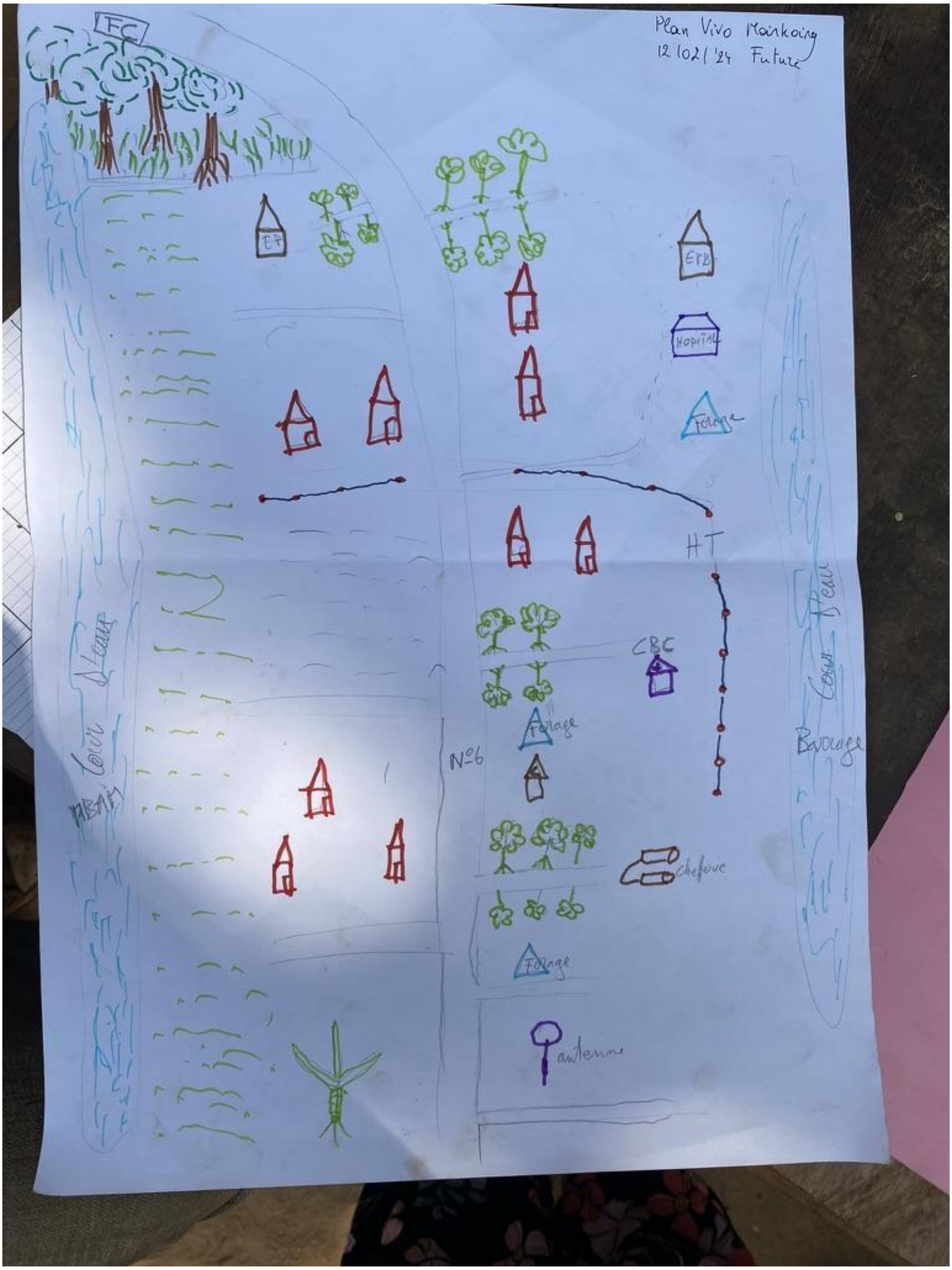

Village
Collège technique bilingue
Forêt communale
Poste agricole
Forage
Hôpital
Cours d'eau
Route nationale N°6
Espace vert + mélange d'arbres fruitiers
Réseau de communication
Écoles publiques primaires
Église baptiste
Énergie solaire
Chefferie traditionnelle
Stade
Foyer
Manège
Chapelle catholique
École bilingue primaire
Espace de loisir
Marché
Lampadaires
Plan Futur
Arbres pour ornement


VILLAGE: DIEKI
Mosquée
Ecoles publiques primaires
Forage
Forage
Forage
Forage
Forage
Forage
Forage
Eglise baptiste
Centre de santé intégré
Cours d'eau
Mosquée
Route nationale N°6
Transformateur
Chefferie
Entrée Chefferie
Barrage
Petit espace de loisir
Ecole bilingue
Foyer Communautaire
Chapelle Catholique
Hangards marché
Plan actuel
Sur 6 forages un seul fonctionne.


FUTUR
BANKIM
- forage (06)
plaque soleil
bitumage
Reboisement
- forage (05)
plaque soleil
Reboisement
bitumage
- Forage
- Energie soleil
- Reboisement
- Energie soleil
- Forage
- Reboisement
- forage (04)
plaque soleil
bitumage
Reboisement
- forage (05)
plaque soleil
Reboisement
bitumage
- forage (03)
plaque soleil
Reboisement
bitumage
- forage (04)
plaque soleil
Reboisement
bitumage
- forage (03)
plaque soleil
Reboisement
bitumage
- forage (03)
plaque soleil
Reboisement
bitumage


BANKIM CENTRE : Plan actuel
Hopital central
Marché central
Marché
foyer municipal
garantie
lycée bilingue
station
église
usine à café
église catholique
Hopital
Police
Hotel


Plan Vivo Moinkoing
12/02/'24 Présent
Champs
chefferie
Cours D'eau
Habitation
Mosqué
Palmerais
EGLISE
Haute tension
Forage
entenne
Ecole.
EP
EPB
Mosqué
CBC
Forage
Mosqué
chefferie
MBAM
Forage
Barrage
ANTENNE
PALMERAIS
N°6
ENTREE
MOUKOING


Plan Vivo Mainkoing
12/02/'24 Future
FC
ETB
HOPITAL
Forage
HT
CBC
N°6
Chefferie
antenne
Bovouge

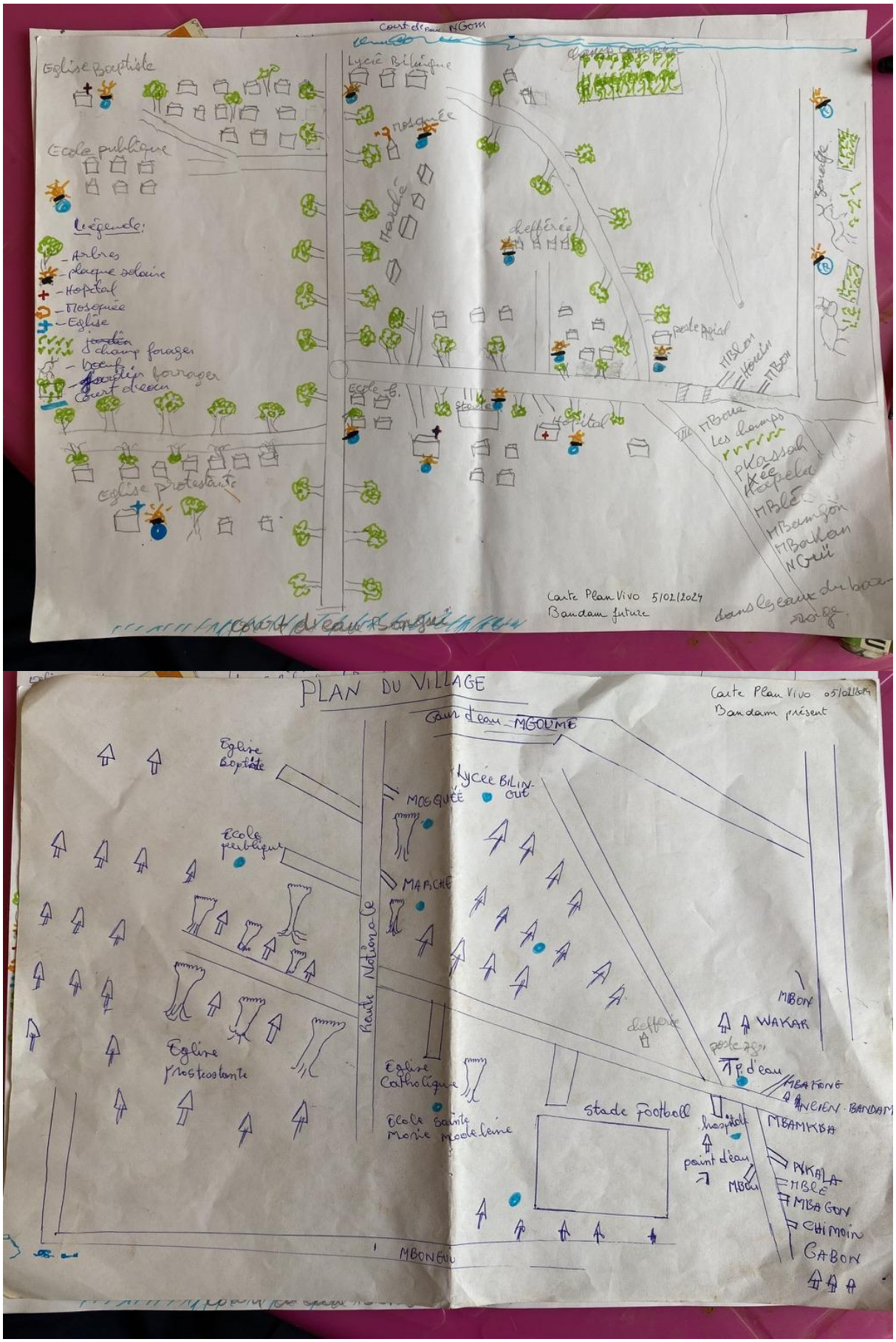
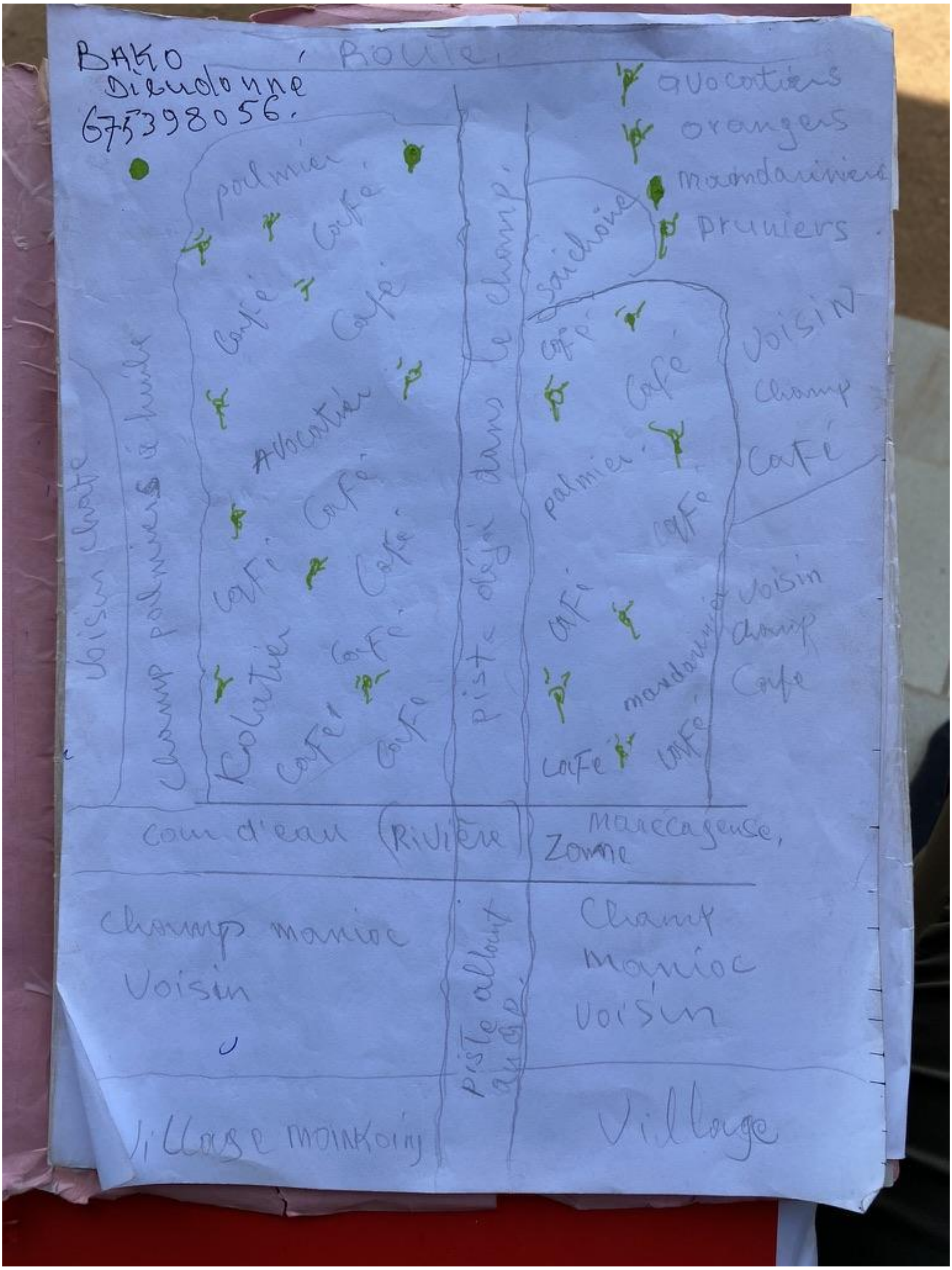


Figure 2: Example Smallholder land management plan


BAKO
Dieudonné
675398056.
Route
avocatiers
orangers
mandariniers
pruniers
palmier
Café
Avocatier
Kolatier
palmier
Voisin
Champ
Café
Voisin
champ
Café
mandarinier
champ palmiers à huile
piste déjà dans le champ
cours d'eau (Rivière)
Zone marécageuse
champ manioc
Voisin
Champ
Manioc
Voisin
Village

Annex 12 – Project Agreements

See draft Project Agreement attached.
Individual project agreement for RPPR (home orchard component).

CONVENTION AGROFORESTERIE - RPPR

Entre les soussignés :

1. M/Mme ..... CIN° ..... du ..... fait à ..... qui garantit être propriétaire/loueur d'une parcelle de terrain de minimum un demi hectare qui n'a pas été récemment défriché, largement dépourvue d'arbres et située dans le village ..... de la commune ..... Ci-après désigné « le propriétaire du terrain »
   Téléphone : .....
2. La village rurale de ..... représentée par son chef de village ..... lequel garantit que :
   — le terrain appartient au propriétaire ou est loué par le loueur; (supprimer ce qui ne convient pas)
   — le terrain ne constitue pas une réserve de pâturage indispensable pour les éleveurs de la communes qui peuvent aisément déplacer leur bétail vers des pâturages existants qui ne sont pas surchargés;
   — le terrain n'est pas grevé d'aucune hypotèque.
3. L'ONG « GRAINE DE VIE - CAMEROUN » ayant son siège à ..... représentée par M/Mme .....

Il est convenu ce qui suit :

1. GRAINE DE VIE s'engage :
   — à fournir au propriétaire du terrain 200 plants d'arbres ou graines à l'hectare en provenance de ses pépinières ainsi qu'une formation, des conseils en traitement et un suivi pour la plantation et la croissance des arbres.
   — à rendre éligible la séquestration du carbone générée par la croissance des arbres à la création et à la vente de crédits carbone via son partenaire CLIMATE LAB et le standard PLAN VIVO.
   — à verser chaque année pendant quinze ans après l'année de la plantation des arbres une somme égale à la moitié du prix des crédits carbone obtenus pour la séquestration de carbone lié à la plantation des arbres sur le terrain à la condition que les 200 arbres par hectare continuent à croître sur le terrain. Ce paiement se fera après vérification, par satellite et par un agent de Graine de Vie directement sur le terrain, de la bonne santé des arbres. Au cas où le propriétaire du terrain détruit, laisse détruire, coupe ou élague les arbres pendant la durée du projet, il sera disqualifié du projet et la présente convention deviendra caduque, sauf aux parties à trouver ensemble une solution pour que le terrain soit maintenu dans le projet. Le schéma par étapes clarifiant les objectifs à atteindre pour recevoir les paiements se trouve en annexe 1.
   — à verser aux fonds communautaire dix pour cent du prix des crédits carbone obtenus pour la séquestration de carbone lié à la plantation des arbres sur le terrain pour des actions sociales et environnementales en accord avec les comités Plan Vivo.
2. Le propriétaire/loueur du terrain s'engage à contribuer à la séquestration du carbone en :
   — plantant des arbres ou graines sur son terrain tous les 7 à 10 mètres,
   — protégeant ces nouveaux arbres contre les zébus, chèvres et contre le feu au besoin au moyen de clôtures ou pare-feux.
   — de ne pas utiliser les produits chimique pour proteger le terrain contre les insects et les maladies
   — en prenant soin des jeunes arbres y compris en les arrosant en cas de période très sèche,
   — en utilisant et en gérant le terrain dans le cadre d'un système agroforestier pendant 50 ans
   — en dessinant exactement son terrain sur l'application de CLIMATE LAB en suivant les instructions fournies,

1

— à maintenir les arbres en vie sans les élaguer ni les couper pendant une période de 50 ans; le propriétaire/loueur pourra cependant mener sur son terrain des activités liées à l'agroforesterie et tirer profit de la production des arbres fruitiers.

3. En cas de location d'un site, le locataire et le bailleur conviennent que
   — Si un site est loué, le propriétaire accepte que les avantages et les obligantions du projet reviennent au locataire.
   — Si le locataire ne continue pas à louer le terrain pendant les 15 premières années, le propriétaire assumera la responsabilité des arbres et obtiendra cinquante pourcent des revenus directs. Les cinquante pourcent restants iront directement au fonds communautaire.
   — En cas de décès du locataire, les enfants ont la possibilité de continuer à louer et de reprendre l'engagement du parent. S'ils n'ont pas les moyens de continuer à louer, l'engagement revient au propriétaire comme décrit précédemment.
   — Si le propriétaire loue à nouveau le site au cours des 15 ans, les bénéfices iront à nouveau au locataire.
   — Dans tous les cas, le propriétaire s'assure que le site prospère dans un système agroforestier pendant au moins 50 ans et que les arbres plantés ne sont pas détruits.

Au cas où le terrain changerait de propriétaire durant la durée de la convention, la présente convention, dans ses avantages et obligations, devra être respectée par le nouveau propriétaire.

En cas de litige entre les différentes parties prenantes, le conseil du village sera consulté. Si les parties ne parviennent pas trouver un accord, un arbitre tiers, approuvé par le propriétaire et par Graine de Vie sera désigné pour solutionner le litige.

Fait à .....
Le .....

Avec le soutien du département Mayo-Banyo.

Signatures :

Le chef de village | Le propriétaire | Le loueur | Graine de Vie

2

A Annex 1 : Tableau des objectifs à atteindre sur les premières années suivant la réception des jeunes plants

Lorsqu'une étape est franchie, l'agriculteur recevra son paiement au cours des années suivantes jusqu'à ce que la prochaine étape soit atteinte. Par exemple, lorsque l'agriculteur atteint l'objectif de l'année 3, il recevra 10 % la troisième année et 10 % la quatrième année.

TABLE 1 – Programme de suivi par étapes pour les parcelles de vergers familiaux :

Durée de mesure (année)	Jalon basé sur la performance	Méthode de mesure	Paiement par hectare
0	Au moins 50 % du nombre d'arbres prévu est planté et protégé contre les incendies le cas échéant, tandis que les coordonnées géographiques et le DHP de tous les arbres existants sur la parcelle sont enregistrés.	Comptage physique de tous les arbres.	20 %
1	Au moins 100 % du nombre d'arbres prévu est planté et protégé contre les incendies, le cas échéant.	Comptage physique de tous les nouveaux arbres plantés	20 %
3	Au moins 80 % des arbres prévus ont survécu	Comptage physique de tous les nouveaux arbres plantés	20 %
5	DHP moyen d'au moins 6 cm	mesures de DHP basées sur un échantillon représentatif d'au moins 10 % des arbres concernés	20 %
7	DHP moyen d'au moins 8.5 cm	mesures de DHP basées sur un échantillon représentatif d'au moins 10 % des arbres concernés	10 %
9	DHP moyen d'au moins 10.5 cm	mesures de DHP basées sur un échantillon représentatif d'au moins 10 % des arbres concernés	4 %
12	DHP moyen d'au moins 13.5 cm	mesures de DHP basées sur un échantillon représentatif d'au moins 10 % des arbres concernés	3 %
15	DHP moyen d'au moins 16 cm	mesures de DHP basées sur un échantillon représentatif d'au moins 10 % des arbres concernés	3 %

5

B Annex 2 : Schéma de planification de plantation de la parcelle

Dessin à faire à main levé au stylo

ANNEX: PROJECT AGREEMENT FOR AGROFORESTRY

Project agreement between the Fes Enying project partners and the participating communities in Cameroon.

Fes Enying Project
2024

[Once in its final stage, the Project Agreement will be translated in French]

This document lays out the terms of mutual commitment between the partners of the Fes Enying project and the participating project communities in Cameroon. The mutual commitments contained in this Agreement are as follows:

1. Introduction

1.1 The Project Agreement describes the roles and responsibilities of the project partners in relation to the Fes Enying Plan Vivo project (Cameroon), including the involved committees and assemblies, and the terms and conditions governing the generation of and payment for ecosystem services from ecosystem protection, non-timber forest products and related management activities. The four project partners (Parties) are (i) Fes Enying, (ii) Graine de Vie Luxembourg, (iii) Climate Lab, (iv) Plan Vivo committees representing the village.

This agreement is valid for the agroforestry interventions (communal gardens) from ...../...../..... and is valid for 50 years.

1.2 Ecosystem services (ES) arise from the processes by which the environment produces resources needed by humans, such as clean air, water, food and materials. For the purposes of this agreement, carbon sequestration services, as a result of agroforestry activities and related management activities are considered. Nevertheless, the provision of all ecosystem services from agroforestry is indicated by monitoring changes in tree density and health, biodiversity, carbon sequestration and socio-economic development. The delivery of the ecosystem services will be indicated by monitoring changes.

1.3 The project is intended to facilitate community agroforestry activities and management efforts by strengthening communities that choose for sustainable agricultural systems. Agroforestry activities consist of sustainable management of the agricultural land, and set up of communal gardens. Such activities provide community-wide benefits and valorization of non-timber forest products improves the wellbeing of the community. In support of this intention the local community will be considered beneficiary of this agreement. The project will enter a benefit-sharing mechanism governing the management and distribution of payments received under this agreement.

1.4 It is acknowledged by all Parties that an informative and explanatory "FPIC" meeting was organized before. In this meeting it has been clearly explained that the Plan Vivo project was in the process of maturing, and that it was necessary and even essential that the populations were previously informed, and if they would be convinced, they could freely give their consent. The core of this project remains in the hands of the community. The parties acknowledge having understood all the information given, and that all have been able to ask all the necessary questions to understand it correctly. All parties have understood the answers that were given. No Party has been coerced or influenced in any way to

give consent. Parties give their consent out of conviction, so that agroforestry activities are sustainable. The Parties know that plan vivo credits can provide a safety net in the first years during the initial growth period of the agroforestry trees. Parties consider that they now have sufficient information to make an informed decision.

2. Roles and obligations of the parties

The roles of Graine De Vie and Climate Lab are to:

- Manage its activities to install a durable agroforestry system and thereby generate ecosystem services; therefore to pay local employees and nursery technicians a salary and thus contribute to improving the life of the people living in the project areas;
- Operate nurseries and distribute all seedlings for free;
- Co-organise minimum once a year a community meeting to discuss the project impact on the communities, keep records and follow-up the issues raised during this meeting;
- Strive for gender balance, create awareness of the issue and actively encourage women participation in their activities;
- Coinvest the generated carbon investments in consensus with the plan vivo committees and the wider community of the villages, with the level of investment as specified below;
- Provide information, cooperation and support to all partners in order to create reports required by Plan Vivo Foundation
- Draft and develop all certification documents (PIN, PDD etc.)
- Organize Project Validation
- Organize Project Registration
- Organize monitoring, quality management, annual reporting and verification
- Organize the sales of Plan Vivo certificates and the distribution of the shared benefits

The project participants have the role and responsibility to support the project towards obtaining its targets as described in Annex A, and that to the best of their ability. External parties are not allowed to execute activities in the communal garden that would endanger the durable agroforestry system in any way.

The project participants are not able to generate any other type of carbon credits or be involved in other programs that deliver the same benefits with other parties or standards.

3. Monitoring and payment system

3.1 Monitoring. Monitoring activities, annual activity-based indicators and methods are described in Annex A. A simple set of monitoring indicators will be used, and monitoring observations will concentrate on three main aspects:

a. Ecosystem health
b. Carbon sequestration
c. Livelihood

The annual progress monitoring and the milestone based indicators are set forth in two schemes in Annex A & B. The system shows the monitoring indicators, performance targets and thresholds.

3.2 Payments. Annual payments will be linked to monitoring results in relation to the targets and thresholds described in Annex B. Payments are directly dependent on sales; this means that in case that there are no sales of carbon credits, there will be no payments. Payments will only be made if responsibilities and, where applicable, corrective actions (see performance targets in Annex A) are carried out by the parties.

In addition, the milestonebased payment system is set forth in Annex B. This system outlines the monitoring indicators, evaluation methods, and how they link to project payments.

3.3 Plan Vivo buffer. There is a deduction of the risk buffer (20% of the total carbon removal), which is pooled by Plan Vivo and therefore not available for participants to claim. There is also a 10% Achievement Reserve that becomes available only after verification every five years.

4. Use of Payments

4.1 Plan Vivo investments under this agreement are made in consensus with the community and should be gender balanced and take into account the rights and needs of the *peuples autochtones*. The balance based on Payment allocation as per article 4.3 of this agreement will be used to make community investments if performance targets and thresholds are achieved (see Annex A).

4.2 Land management plans and the communal development plan (Plan Communal de Développement) are consulted for community investments. Investments should strengthen 4 main activities (1) Agroforestry activities, (2) water availability, (3) support economic livelihood through fruit and non-timber forest products, (4) improve capacity building and education of local citizens.

4.3 All parties explicitly agree that Climate Lab will sell all carbon credits, while Graine De Vie is responsible to allocate the Payment as follows:

50% of Net Revenue allocated for investment for local village projects in priority sectors (each village may have different priorities);

10% of Net Revenue allocated for community, led by Plan Vivo committees, to maintain these communal gardens.

40% of Net Revenue allocated for the project developers (Fes Enying, Graine de Vie Luxembourg and Climate Lab) for agroforestry activities, administrative and overhead costs.

5. Corrective action

5.1 In the event that corrective action is required during the term of this agreement, the project partners (Climate Lab and the Graine de Vie) and the village will reach agreement on the corrective actions necessary, a schedule for the corrective action, and an extension of this agreement.

5.2 All stakeholders (participants, villagers or other stakeholders) are encouraged to use the complaint/suggestion book or box. Mitigation actions to follow up complaints will be performed in mutual agreement between the stakeholders and the community and will strive towards consensus. In the event

that there is a dispute between different parties or stakeholders, or a consensus-based decision based on §7 is not possible, the village council will invite all parties and try to mediate. If parties are unable to agree on corrective actions a third-party arbitrator (*autorité tutelle de département Mayo-Banyo*, which could be the prefect or sub prefect), approved by all parties and after consent by the Plan Vivo Foundation, will be appointed to oversee dispute resolution.

5.3 The community will pay the costs of any corrective actions under any agreement extension. Such payments shall be made from Payment allocation for investments in the local village projects (60% Net Revenue) as defined in article 4.3 of this agreement.

6. Agreement term

This agreement will remain in force for a period of 50 years from the date of signing, unless payments are withheld in any year, in which case the parties shall agree to an extension and corrective actions as set forth in section 5.

If a community decides to add land to the communal garden, a new milestone-based payment scheme for that project area will be started.

After 50 years, there is a possibility to extend the agreement for the project areas of which the scheme is still running.

7. Consensus-building between Parties

Each village forms a Plan Vivo committee by vote. The composition and roles of the Plan Vivo committees can be found in Annex D. The Plan Vivo committee needs to represent the community in the village and it is obligatory that it consist of at least 30% women (and striving towards 50%) and at least 1 representative of each ethnic group, including the Mbororo, *peuples autochtones*[1] (if relevant[2]). The members of the Plan Vivo committees are elected every 2 years.

At least once per year, one Plan Vivo assembly for the community will be organised by the Plan Vivo Committee, this is called the Annual General Meeting (where the community and the Plan Vivo committees will be present). The meeting prior to the Annual General Meeting will be used to discuss the project progress, and to determine the budget for the next year's activities and a final budget for the following year must be agreed to prior to the Annual General Meeting. Any decision on Plan Vivo investments is made in consensus, meaning that all Parties, and so all ethnic groupes, must agree with the decision in writing, including the representatives of the Mbororo. If the Plan Vivo committee cannot find a consensus, they will vote for the investment decisions. The vote is valid if 2/3 of the Plan Vivo committee votes pro, and that 2/3 should consist of representatives of different ethnic groups and at least 1 female person.

At the Annual General Meeting, the budget for the next year's activities will be announced and the amount of money that will go back to the village will also be announced to the community.

[1] In case women are not allowed to participate in meetings, separate meetings including only women will be held and secure that all participants are included.

[2] When Mbororo settlements are close to villages or if assigned grazing land is adjacent to the village.

The parties agree to the terms and conditions contained in this Project agreement and all Annexes.

Signatures for Fes Enying, Graine De Vie Luxembourg, Climate Lab, The mayor, the village chief, and the Plan Vivo Committee.

Annex A: Annual performance targets

The annual activity-based indicators will include:

Project interventions	Progress Indicator	Annual milestone or target		
		Full Target Achievement	Partial Target Achievement	Missed Target
Communal garden planting on community lands via direct seeding and seedlings	P2: number of trees planted in the plots and numbers of seeds sprouting after 6 months.	>= 80% of trees planted >= 50% of seeds sprouting	50 – 80% of trees planted 25 – 50% of seeds sprouting	< 50% trees planted <25% of seeds sprouting
	P3: Yearly implementation of the fire management activities where necessary to protect seedlings. (% of the area protected)	>= 80%	50 – 80%-	< 50%
	P4: Yearly implementation of the protection activities against livestock where necessary and evaluation of effectiveness (% of the area protected)	>= 80%	50 – 80%-	< 50%
	P5: survival rate and diameter growth in communal garden plots following the milestone-based scheme	Achievement following milestone based scheme	-	Non-Achievement following milestone based scheme
	P6: fodder crop system installed per year per Mbororo community.	Yes	-	No

Establishment of smallholder home orchards	P8: Number of nurseries operating and delivering 10 000 seedlings per nursery per year	1 nursery per village & operating > = 10 000 seedlings	Between 5000 and 10 000 seedlings	0 nurseries or < 5000 seedlings
Support production of apiculture and other NTFPs	P16: Organization of 1 assembly in 3 years for smallholders to facilitate the peer-to-peer learning.			
Community participation	P17: Annual socio-environmental investments made (or designated) in the project area and payments to the participating smallholders, in USD	50% of the allocated budget to the smallholder from home orchards 10% to Community Fund from home orchards 60% of the allocated budget to the Community Fund from the communal gardens	-	<50% of the allocated budget to the smallholder from home orchards <10% to Community Fund from home orchards <60% of the allocated budget to the Community Fund from the communal gardens
	P10, 14, 15 & 18: Organization of minimally 1 training on agroforestry practices or participative workshop enduring awareness of ecosystem benefits or 1 training on 1 training on the valorisation of NTFPs (incl. apiculture). agroforestry practices.	>= 1	-	0

	P19.1: Plan Vivo committees consist of 30% women.	>=30%	Between 30% and 10%	<10%
	P19.2: Plan Vivo committees consist of representatives of all ethnic groups including the Mbororo if relevant.	100% of all ethnic groups	80 – 100% of all ethnic groups	< 80% of all ethnic groups
	P20: At least 3 Plan Vivo meetings are organized and at least 1 community meeting are organized per year.	>= 3 Plan Vivo meetings + >= 1 community meeting	2 Plan Vivo meetings + 1 community meeting	<=1 Plan Vivo meetings + 0 community meetings

There are the following consequences for certificate issuance and corrective actions that will be implemented if the yearly performance targets are not met:

(i) If the values for all indicators meet or exceed their performance target, the full issuance is received;

(ii) If one or more of the indicator values are below their performance target for one monitoring period, the full issuance is received but corrective actions must be implemented;

(iii) If one or more of the indicator values are partially achieved for two consecutive monitoring periods, the full issuance is received but corrective actions must be implemented.

(iv) If one or more of the indicator values are missed for two consecutive monitoring periods or partially achieved for three consecutive monitoring periods, certificate issuance is withheld until corrective actions have been implemented and the performance target(s) have been reached.

Annex B: Milestone based payment scheme

TABLE 1 – Milestone-based monitoring scheme for communal garden plots :

Time of measurement (yr)	Performance-based milestone	Method of measurement	Payment per hectare
0	At least 50 % of the planned number of trees is planted and protected against fires if relevant, while geographic coordinates and DBH of all existing trees on the plot are recorded.	Physical counting of all trees.	20 %
1	At least 100 % of the planned number of trees is planted and protected against fires if relevant.	Physical counting of all new trees planted	20 %
3	At least 80 % of the planned trees survived	Physical counting of all new trees planted	30 %
5	Average DBH of at least 4.5 cm	DBH measurements based on a representative sample of at least 10 % of the trees concerned	10 %
7	Average DBH of at least 6.5 cm	DBH measurements based on a representative sample of at least 10 % of the trees concerned	10 %
10	Average DBH of at least 9.5 cm	DBH measurements based on a representative sample of at least 10 % of the trees concerned	10 %

Annex C: Carbon calculations

Expected carbon sequestration rates can be found in the tables below:

Expected Carbon Benefits Summary

Project Intervention	Initial carbon stock (tCO2e/ha)	Baseline Emissions (t CO2e/ha)	Project Emissions (t CO2e/ha)	Leakage Emissions (t CO2e/ha)	Carbon Benefit (t CO2e/ha)
Home orchard	0	0	255.4	0	255.4
Communal garden	0	0	247.1	0	247.1

Plan Vivo Certificate Potential

Project Intervention	Carbon Benefit (t CO2e/ha)	Project Area (ha)	Total Carbon Benefit (t CO2e)	Risk Buffer (t CO2e/ha)	Potential PVCs (t CO2e)
Home orchard	255.4	9.77	2 495.3	51.1	1 996
Communal garden	247.1	6.4	1 573.9	49.4	1 259
TOTAL	502.5	16.17	5 643.1	100.5	3 255

Annex D: Statutes for Plan Vivo Committees in Fes Enying project

1. Each village with an area of land under the Fes Enying project shall have a Plan Vivo committee chosen by the village who will help to oversee the use of funds generated from the project and the operations required to achieve the project's targets.

2. During the establishment phase, each Plan Vivo committee will consist of 11 people.
    a. 08 representatives chosen by the village with voting rights, among the 08 represents, all ethnic groups are represent:

    b. 02 relay agents (1 woman, 1 man) with voting rights, chosen among the eight representatives.
    c. 01 representative to the village council (the chief or one of its *notables*) without voting rights.
    d. 01 representative of the commune without voting rights.
    e. 01 representative from Fes Enying without voting rights.

3. The Plan Vivo committee will eventually consist of a total of 16 people.
    a. 12 representatives chosen by the village with voting rights, among the 08 represents, all ethnic groups are represent:

    b. 01 representative of the group maintaining communal gardens and woodlots with voting rights.
    c. 02 relay agents (1 woman, 1 man) with voting rights, chosen among the twelve representatives.
    d. 01 representative to the village council (the chief or one of its *notables*) without voting rights.
    e. 01 representative of the commune without voting rights.
    f. 01 representative from Fes Enying without voting rights.

4. All committee members will be elected for a 2-year period. Committee members will be allowed to stay on the committee for a period of up to 6 years but must renominate for their position on the committee every two years. Hence, the maximum number of terms will be three consecutive two-year terms.

5. At the formation of the Plan Vivo Committee, 8 members will be chosen by the village. After one year, at the first annual general meeting, another 4 members will be put forward by the village. At the second annual general meeting the original 8 members will have completed their first two-year term and will be required to renominate and stand for election if they would like to continue.

6. Elections of members will take place at the Annual General Meeting. Each year four positions on the subcommittee will become available. These positions may be filled by existing members who are standing down and who have not served more than four years on the committee or by other village members who are not currently on the Plan Vivo Committee.

7. After a period of 6 years, committee members must stand down and may re-stand for election after one year.

8. At least 30% of the village representatives on the Plan Vivo committee must be female. Which means at least 3 women in the first year, and at least 4 women in the second year.

9. The representative of Fes Enying on the committee will act as the secretary and will be responsible for recording the minutes of meetings.

10. There will be a minimum requirement of at least three meetings per year.

11. Meetings will be used to plan project operations and discuss ways to increase village engagement.

12. The final meeting of the year will be the Annual General Meeting – at this meeting, the budget for the next year's activities will be announced and the amount of money that will go back to the village will also be announced.

13. The meeting prior to the Annual General Meeting will be used to determine the budget for the next year's activities and a final budget for the following year must be agreed to prior to the Annual General Meeting.

14. The Plan Vivo committee may be required and may choose to call additional meetings throughout the year.

15. At least two-thirds of all voting members must be present at a meeting for the meeting to go ahead. If the appointed representative from Fes Enying cannot attend, another Fes Enying employee may attend and act in their stead.

16. If Plan Vivo committee members miss two or more committee meetings, they may be voted out of the Plan Vivo committee by the other committee members unless there are valid extenuating circumstances.

17. There will be a President and Vice-President elected by the Plan Vivo committee. At least one of these roles must be filled by a non-male person. The President and vice-president are elected again after two years. After a period of 6 years, the President and Vice-President must stand down and may re-stand for election after one year.

18. In addition to meetings, Plan Vivo committee members will also be required to attend training and engagement activities designed to build the overall capacity of the village to manage the project and increase familiarity with project areas and objectives.

19. The role of the Plan Vivo committee will be to represent and engage with their village in relation to the activities and outcomes of the Fes Enying Project.

20. The objective of the Plan Vivo committee will be to support the operations of the Fes Enying Project and to ensure that this project brings benefits to the village through its agroforestry activities including the sale of carbon sequestration credits.

21. The scope of the Fes Enying Project will be fifty years and the Plan Vivo committee should operate for the full length of the project.

Dispute resolution

In the case of a deadlock, where Plan Vivo committee members are unable to reach a majority decision, the President of the committee can:

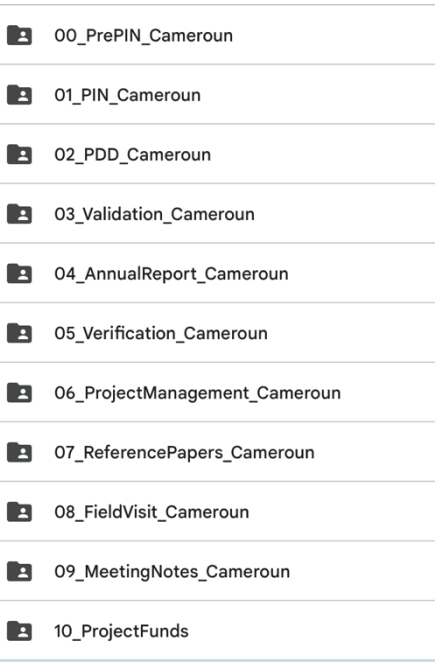
1) Choose to give a single casting vote to the two non-voting members (Commune and Fes Enying) for that decision only.
2) Choose to refer the matter to the village chiefs
3) Choose to call a village meeting to reach consensus on the issue.

Where the non-voting representatives of the commune Bankim and Fes Enying are in agreement that a Plan Vivo committee decision is contradictory to the aims and purpose of the Fes Enying Project and/or rules governing the expenditure of carbon credit income, they have the right to appeal that decision to the President. Examples can be but are not limited to: Refusal to pursue dispute resolution as per the process defined in the Plan Vivo committee agreement; decisions by the commune to undertake logging or sale of Fes Enying project lands to a private party; decisions to use operating funds for non-project activities or allocating carbon credit income for individual gain rather than for socioenvironmental benefits for the whole village community. In this case, appeal, the non-voting members will be given an opportunity to explain their opposition to the decision and, after hearing these arguments, the committee will vote again. If the decision is still unsatisfactory to the commune and Project Coordinators, the issue will be resolved through arbitration by the Project agreement.

Annex 13 – Monitoring Plan

See Excel attached

Annex 14 – Project Database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01_PIN_Cameroun
02_PDD_Cameroun
03_Validation_Cameroun
04_AnnualReport_Cameroun
05_Verification_Cameroun
06_ProjectManagement_Cameroun
07_ReferencePapers_Cameroun
08_FieldVisit_Cameroun
09_MeetingNotes_Cameroun
10_ProjectFunds

Annex 15 – Letter of Approval

REPUBLIQUE DU CAMEROUN
Paix — Travail — Patrie
MINISTERE DE L'ENVIRONNEMENT, DE LA PROTECTION DE LA NATURE ET DU DEVELOPPEMENT DURABLE
SECRETARIAT GENERAL
DIRECTION DE LA CONSERVATION ET DE LA GESTION DES RESSOURCES NATURELLES

REPUBLIC OF CAMEROON
Peace - Work - Fatherland
MINISTRY OF ENVIRONMENT, PROTECTION OF NATURE AND SUSTAINABLE DEVELOPMENT
SECRETARIAT GENERAL
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES MANAGEMENT

00687 /L/MINEPDED/SG/DCGR/CN-REDD+/CSSC

Yaoundé, le 03 JUIL 2023

LE MINISTRE

A

Messieurs les Représentants de : Fes Enying « Graine de Vie Cameroun », Climate et Plan Vivo
E-mail : grainedeviecameroun@gmail.com; info@climatelab.be

Objet : Décision 5ème session extraordinaire du Comité de Pilotage REDD+ sur la NIP « Projet Agroforesterie, réduction des Gaz à effet de serre et conservation des forêts au Cameroun »

Monsieur le Représentant,

Faisant suite à la tenue de la 5ème session extraordinaire du Comité de Pilotage des activités de la REDD+ le 31 mai 2023 à SUITA Hôtel de Yaoundé pour laquelle la Note d'identification du Projet (NIP) intitulée « Projet d'Agroforesterie, réduction des gaz à effet de serre et conservation des forêts au Cameroun » soumise par votre entreprise a été examinée.

J'ai l'honneur de vous informer que le Comité de Pilotage après délibération a donné l'avis de non objection à votre entreprise afin de mener l'étude de faisabilité REDD+ du projet susmentionné sous réserve de la clarification du statut de la zone de projet.

En outre, l'intervention agroforestière du projet Plan Vivo de Fes Enying « Graine de Vie Cameroun » est conforme aux lois et réglementations nationales en vigueur. N'étant pas une intervention REDD+, elle est donc approuvée et peut être mise en place à tout moment, car ne violant aucune loi ou réglementation nationale ou régionale.

Après la prise en compte de ces observations, vous êtes invités à soumettre pour validation, les Termes de Références de l'Etude de faisabilité à la Coordination Nationale REDD+. Les résultats de cette étude feront l'objet d'une approbation du Comité de Pilotage.

Veuillez agréer, Messieurs les Représentants, l'assurance de ma considération distinguée.

Le Ministre
The Minister

HELE Pierre

See letters attached

Annex 16 – Financial Plan

See Excel attached

Annex 17 – Legal note

Société Civile Professionnelle

MEMONG – ETEME & ASSOCIES

Avocats

B.P: 12538 Yaoundé – Tél. : (237) 22 00 65 45

AVIS SUR L'OPERATIONNALITE DU CADRE JURIDIQUE DE MISE EN OEUVRE DES CREDITS CARBONE VOLONTAIRE AU CAMEROUN

Par
Me ETEME ETEME
*Avocat au Barreau du Cameroun, à la CPI (**La Haye**), à la CADHP (**Arusha**)*
*Avocat International Membre du Corps Spécial des Avocats près la CPS (**Bangui**)*
Expert Consultant_Gouvernance, Développement Durable, État de droit

Janvier 2023

SOMMAIRE

INTRODUCTION : RAPPEL DU CONTEXTE DU PRESENT AVIS

Les projets de réduction d'émission ou de séquestration (particulièrement les projets boisement/reboisement) de gaz à effet de serre (GES) – mis en œuvre dans des pays en voie de développement qui ont signé le Protocole de Kyoto et suivant le processus défini par le Mécanisme pour un Développement Propre – peuvent générer des crédits d'émissions négociables qui attestent de réductions d'émissions de GES qui sont réelles, additionnelles et durables. Dans le cadre de la mise en œuvre des Instruments pertinents de de réduction de GES, le projet vise à réaliser au Cameroun les activités de conservation des forêts communales classées ou non classées, de plantation de milliers d'arbres, de certification du projet selon la norme Plan Vivo, qui est une norme sur le marché volontaire du carbone, à l'effet de réinvestir 60% du revenu carbone dans des projets socio-écologiques au sein des communautés.

Aussi s'agit-il d'avoir des réponses au questionnement qui suit, notamment :

1) Existe-t-il déjà une loi sur la délivrance de crédits carbone volontaires ? Si oui, quelle feuille de route devons-nous suivre ? Si non, comment pouvons-nous encore mettre en place un projet de crédit carbone au Cameroun ?
2) Les forêts communales doivent-elles être classées, ou cela n'est-il pas nécessaire pour délivrer des crédits carbones ?
3) Y a-t-il des taxes applicables (TVA, taxe d'exploitation, taxe carbone...) ?
4) Existe-t-il des autres préoccupations ou des incitations pour encourager les projets carbones ?

On le voit bien, ce questionnaire adresse, de façon générale, deux problématiques dont les solutions permettront de proposer les réponses souhaitées lesquelles s'articulent d'une part autour de la problématique des bases du cadre juridique en matière de crédits carbone volontaires au Cameroun, et de la feuille de route indiquée pour son opérationnalité, d'autre part.

1. LES BASES DU CADRE JURIDIQUE EN MATIERE DE CREDITS CARBONE VOLONTAIRES AU CAMEROUN

1.1. L'INEXISTENCE D'UN CADRE JURIDIQUE SPECIFIQUE OU DE REFERENCE

L'État du Cameroun a adhéré à la Convention Cadre des Nations Unies pour les Changements Climatiques (CCNUCC). Il a également signé *Le Protocole de Kyoto*, conclu en 1997 et ratifié par 184 pays, qui est entré en vigueur depuis le 16 février 2005. Il fixe des objectifs chiffrés légalement contraignants de réduction d'émissions de gaz à effet de serre (GES) pour 30 pays industrialisés.
Pour le Cameroun qui participe ainsi régulièrement aux négociations internationales sur le climat depuis la COP de Bali en 2007, il est établi que face aux changements climatiques, il doit s'impliquer aux cotes des autres Etats dans la réduction des émissions de gaz à effet de serre pour contenir la vitesse du réchauffement de la planète.

Mais, bien qu'engagé à plusieurs égards au titre du droit international de l'environnement et du développement durable, le Cameroun ne dispose pas encore, contrairement à certains pays[1], de règlementation spécifique en la matière au plan interne.

Pour autant, **l'on ne saurait parler de vide juridique des lors que le cadre juridique général offre de nombreuses pistes même si ces dernières peuvent paraître insuffisantes voire incomplètes** au regard des orientations faites par les Conventions Internationales pertinentes.

1.2. LA POSSIBLE REFERENCE AU CADRE JURIDIQUE GENERAL EXISTANT

a) Les normes internationales de référence

Par rapport au cadre juridique général, il convient de rappeler comment le cadre juridique au niveau des engagements internationaux du Cameroun dont procèdent les opérations de credit carbone pourrait contribuer à leur mise en œuvre.

En effet, c'est l'adhésion du Cameroun à la Convention cadre des Nations Unies sur les changements climatiques et au Protocole de Kyoto qui démontrent l'importance que le Cameroun accorde à la lutte contre les changements climatiques lesquels servent de référence aux opérations de credit carbone. En cela précisément, ce sont ces instruments ratifiés par le Cameroun qui lui fournissent un cadre juridique international, cadre de départ pour la mise en œuvre du MDP. Le « Mécanisme de développement propre – MDP » qui en est le produit étant un instrument permettant aux pays ou entités industrielles du Nord d'investir dans des projets de diminution des émissions ou de séquestration de carbone dans les pays du Sud et de recevoir des 'crédits carbone'.

Bien que créé par le Protocole de Kyoto, le Mécanisme de Développement Propre trouve son fondement dans la Convention cadre des Nations Unies sur les changements climatiques, un traité cadre, en ce sens que c'est « un instrument conventionnel qui énonce les principes devant servir de fondement de coopération entre Etats parties dans un domaine déterminé, tout en leur laissant le soin de définir, par des accords séparés, en prévoyant, s'il y a lieu, une ou des institutions adéquates à cet effet ».

L'on peut dès lors sans ambages affirmer que le cadre juridique repose au premier chef sur ces deux principales conventions puisqu'elles lient le Cameroun et peuvent être utilement mobilisées pour la mise en œuvre liée aux MDP.

[1] Cas du Congo: Arrêté n° 113/MEF du 08 janvier 2019 déterminant les principes sur le processus de réduction des émissions de gaz à effet de serre liées à la déforestation, à la dégradation des forêts avec l'inclusion de la gestion forestière durable, de la conservation de la biodiversité et de l'accroissement des stocks de carbone durable. Arrêté n° 113/MEF du 08 janvier 2019 déterminant les principes sur le processus de réduction des émissions de gaz à effet de serre liées à la déforestation, à la dégradation des forêts avec l'inclusion de la gestion forestière durable, de la conservation de la biodiversité et de l'accroissement des stocks de carbone durable.

Ces textes sont-ils en soi suffisants ? Les projets MDP doivent respecter des conditions générales. A cet effet, par exemple, le promoteur de projet (entreprise publique ou privée, commune rurale ou urbaine, ONG, etc.) ne peut soumettre son projet au MDP que si son pays a ratifié le Protocole de Kyoto et établi une Autorité Nationale Désignée du MDP (AND). Cette instance nationale est l'Autorité qui délivre, après examen du projet, une « lettre d'autorisation et d'approbation » dans laquelle il est dit que le projet est proposé de façon volontaire par le promoteur et qu'il contribue au développement durable du pays. **Si la première condition paraît d'emblée remplie, il reste que des mesures d'implémentation nationales du droit international n'ont pas encore été adoptées en lien avec les règles d'éligibilité ainsi que les règles de procédure[2]**.

b) Les normes nationales de référence

A ce niveau, on observe une juxtaposition de normes sectorielles autour d'une norme spécialement conçue pour la mise en œuvre nationale du droit international sus énoncé.

- *S'agissant de la norme spécialement conçue pour la mise en œuvre nationale du droit international*

Il s'agit de la décision ministérielle n°0009/MINEP/CAB du 16 Janvier 2006 portant création, organisation et fonctionnement du Comité national chargé de la mise en œuvre du MDP au Cameroun est la norme principale au plan interne concernant le MDP. Cette décision crée l'institution, conformément aux dispositions du Protocole de Kyoto et aux Accords de Marrakech, en charge de remplir les fonctions dévolues à l'Autorité National désignée, et elle élabore les critères et la procédure d'évaluation et d'approbation des projets MDP par le Comité national du MDP. Mais le mécanisme demeure incomplet au regard des attentes.

- *S'agissant des normes sectorielles*

L'on citera avec pertinence :

La loi portant Code Général des Collectivités Territoriales en son ARTICLE 150 qui rappelle les attributions, pouvoirs et compétences des communes *: (1) La Commune peut, en plus de ses moyens propres, solliciter le concours de l'Etat, de la population, des organisations de la société civile, d'autres Collectivités Territoriales et des partenaires internationaux, conformément à la législation et à la réglementation en vigueur. (2) Le recours aux concours mentionnés à l'alinéa 1 ci-dessus est décidé par délibération du Conseil Municipal concerné, prise au vu du projet de convention y afférent.*

[2] La mise en œuvre d'un projet MDP doit suivre des étapes précises et obéir à des procédures spécifiques, conçues pour que l'objectif global de réduction des émissions de GES, responsables du réchauffement global de la planète, soit atteint de façon réelle, mesurable, vérifiable et économique. En effet, un projet MDP doit passer par différentes étapes : premièrement l'élaboration d'un Document Descriptif du Projet. Le Document Descriptif du Projet, dont le modèle est établi par le Conseil exécutif du MDP, est élaboré par le promoteur. Ce document est structuré en chapitres et annexes pour décrire techniquement le projet, présenter la méthodologie et les résultats du calcul des réductions d'émissions, démontrer l'additionalité et fournir un certain nombre d'informations sur le projet et sur les participants au projet. Ensuite l'approbation du projet par l'Autorité National Désignée (AND), la validation du projet par une Entité Opérationnelle Désignée, l'enregistrement du projet, entre autres…

- **La loi n° 94/01 du 20 janvier 1994 portant régime des forêts, de la faune et de la pêche dont** l'Article 7 rappelle les attributs des communes sur leurs forets : « L'État, les communes, les communautés villageoises, et les particuliers exercent sur leurs forêts et leurs établissements aquacoles, tous les droits résultant de la propriété, sous réserve des restrictions prévues par les législations foncière et domaniale et par la présente loi ».

Et s'agissant du régime des DES FORETS COMMUNALES

« Article 30 :
(1) Est considéré, au sens de la présente loi, comme forêt communale, toute forêt ayant fait l'objet d'un acte de classement pour le compte de la commune concernée ou qui a été plantée par celle-ci.

- *(2) L'acte de classement fixe les limites et les objectifs de gestion de ladite forêt qui peuvent être les mêmes que ceux d'une forêt domaniale, ainsi que l'exercice du droit d'usage des populations autochtones. Il ouvre droit à l'établissement d'un titre foncier au nom de la commune concernée.*
- *(3) Les forêts communales relèvent du domaine privé de la commune concernée.*
- *(4) La procédure de classement des forêts communales est fixée par décret.*

Article 31 :
(1) les forêts communales sont dotées d'un plan d'aménagement approuvé par l'administration chargé des forêts. Ce plan d'aménagement est établi à la diligence des responsables des communes, conformément aux prescriptions de l'Article 30 ci-après.
(2) Toute activité dans une forêt communale doit, dans tous les cas, se conformer à son plan d'aménagement.
Article 32 :
(1) L'exécution du plan d'aménagement d'une forêt communale relève de la commune concernée, sous le contrôle de l'administration chargée des forêts qui peut, sans préjudice des dispositions de la loi portant organisation communale, suspendre l'exécution des actes contraires aux indications du plan d'aménagement.
(2) En cas de défaillance ou de négligence de la commune, l'administration chargée des forêts peut se substituer à celle-ci pour réaliser, aux frais de ladite commune, certaines opérations prévues au plan d'aménagement »

- **La loi n° n°96/12 du 05 août 1996 portant loi-cadre relative à la gestion de l'environnement** au sujet DES MESURES INCITATIVES

« Article 75 :
Toute opération contribuant à enrayer l'érosion, à combattre efficacement la désertification, ou toute opération de boisement ou de reboisement, toute opération contribuant à promouvoir l'utilisation rationnelle des ressources renouvelables notamment dans les zones de savane et la partie septentrionale du pays bénéficie d'un appui du Fonds prévu par la présente loi.
Article 76 :
(1) Les entreprises industrielles qui importent des équipements leur permettant d'éliminer dans leur processus de fabrication ou dans leurs produits les gaz à effet de serre notamment le gaz carbonique, le

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chloro-fluoro-carbone, ou de réduire toute forme de pollution bénéficient d'une réduction du tarif douanier sur ces équipements dans les proportions et une durée déterminée, en tant que de besoins, par la loi de Finances.
(2) Les personnes physiques ou morales qui entreprennent des actions de promotion de l'environnement bénéficient d'une déduction sur le bénéfice imposable suivant des modalités fixées par la loi des Finances ».

Toutes ces normes forment le cadre juridique interne pertinent si elles sont bien articulées avec le cadre juridique international au départ. Ce cadre est reconnu par les Autorités publiques, a l'instar du ministre des Finances, qui, présidant le 25 octobre 2022 à Yaoundé, la capitale du Cameroun, un atelier de sensibilisation des acteurs de l'administration sur le marché du carbone, afin d'en faire une source de financements plus importante du budget de l'État, dès l'année 2023, a bien souligné qu'« il s'agit de *faire l'état des lieux, d'interroger la situation à date et de* ***proposer des palliatifs ou des thérapies, pour endiguer les carences et autres manquements constatés dans le processus d'adhésion de notre pays au marché du carbone*** ».

Ces carences qui sont en partie juridiques ne sont pas dirimantes et ont été au cœur des préoccupations du *« Séminaire sur les projets MDP au Cameroun » Suivi carbone, investissements initiaux et types de contractualisation de l'achat/vente de crédits carbone* des 28 au 30 Octobre 2009 à Yaoundé. Sur la nécessité de créer un cadre juridique spécifique aux crédits carbone au Cameroun précisément, après avoir rappelé qu'un tel cadre n'existe pas au Cameroun, il a été unanimement relevé que des constructions juridiques permettraient d'y pallier, en attendant le cadre plus élaboré projeté par les Conventions Internationales.

L'analyse juridique effectuée dans le contexte du Cameroun permettrait ainsi d'assimiler un crédit carbone à un bien meuble incorporel qui de fait peut-être échangé et commercialisé sur les marchés MDP ou volontaires. D'où il suit que cette absence de cadre juridique spécifique au Cameroun ne constitue pas en soi un obstacle au développement des projets carbones. Le système juridique ne fait pas de distinction entre les arbres et les éléments tels que le carbone qui y sont stockés. En se concentrant sur les terres forestières, la Partie I de la loi forestière de 1994 dispose que *« l'État, les conseils municipaux, les communautés villageoises et les particuliers peuvent exercer sur leur forêt tous les droits résultant de la propriété* ».

Sous cet angle d'analyse par exemple, il n'y a pas de distinction possible entre le propriétaire du carbone et celui de la ressource (l'arbre qui stocke le carbone) et que le propriétaire du terrain possède les ressources, ce propriétaire pouvant, par conséquent être le propriétaire du carbone.
Cependant, comment déterminer ce propriétaire de crédits carbone ? Tout porteur de projet de réduction ou de séquestration d'émissions de GES peut recevoir des « crédits carbone » à condition de respecter certaines conditions. Un crédit carbone fonctionne comme un certificat attestant que ledit projet a bien évité ou séquestré une tonne de CO2 (dioxyde de carbone équivalent (tCO2e). Cette idée de propriété de carbone (à qui appartient le carbone ?) est encore en discussion au niveau national. Le Cameroun n'ayant pas encore de législation en matière de crédit carbone, non plus.

Au total, le développement des projets carbones est juridiquement possible au Cameroun sous réserve de mobiliser le droit des contrats et de la propriété. Mais des détails sur la procédure, les attributions et les compétences pour le faire et évaluer les divers processus sont requis. Entre temps une feuille de route pour y parvenir peut être suggérée sur la base des leçons apprises de la stratégie REDD+ .

2. POUR UNE FEUILLE DE ROUTE A PARTIR DES LECONS APPRISES DE L'EXPERIENCE REDD+ AU CAMEROUN

2. 1. QUELLES SONT LES PRINCIPALES LECONS APPRISES REDD+ AU CAMEROUN ?

Selon la stratégie nationale REDD+, en attendant l'avènement d'une loi spécifique sur les droits carbones, les options suivantes ont été retenues :

- Dans le cas d'une forêt domaniale, les droits carbones appartiendront à l'État ;
- Dans le cas d'une forêt communautaire, les droits carbone appartiendront à la communauté ;
- Dans le cas d'une forêt communale, les droits carbone appartiendront à la Commune ;
- Dans le cas d'une forêt privée, les droits carbone appartiendront au propriétaire.

Sur la base de cette analyse, deux possibilités légales d'attribution des droits carbones sont envisageables :

- Les droits carbones et les droits aux bénéfices appartiendront en principe, à celui qui a le droit d'occuper un terrain sur lequel sont situés les arbres qui stockent le carbone.
- Dans le cas d'un projet REDD+, les droits carbone et les droits aux bénéfices appartiendront de fait à ceux ayant contribué à la réalisation de l'activité de réduction/séquestration ou ceux ayant renoncé à leurs moyens de subsistance pour permettre la réalisation de l'activité. La combinaison des deux possibilités juridiques précédentes indique que les droits carbone et les droits aux avantages ne seraient pas nécessairement fondés sur la permanence, mais pourraient également inclure des droits ancestraux, des droits d'exploitation, des droits d'utilisation ou des investissements en capital. Si le crédit carbone est catégorisé comme un actif incorporel et prend la forme d'un actif monétaire représentant le résultat d'une action, la propriété des crédits carbone serait accordée aux acteurs qui prouvent qu'ils sont derrière l'action. Cette revendication ne serait pas nécessairement fondée sur le régime foncier, mais pourrait également inclure des droits ancestraux, des droits d'exploitation, des droits d'utilisation ou des investissements en capital. Si l'on tient compte du cadre juridique actuel au Cameroun, cela signifie que l'État, en tant que propriétaire ou gestionnaire de la plupart des terres forestières, est le principal bénéficiaire de toute rente carbone obtenue dans le cadre des futurs mécanismes internationaux de partage des avantages REDD+.

Il faut donc prendre en compte que les promoteurs de projets REDD+ peuvent être les principaux bénéficiaires d'une rente carbone potentielle. Sur la base des expériences de la politique et de la pratique actuelles de la redistribution des redevances forestières, d'autres parties prenantes telles que les conseils municipaux et les communautés locales et les peuples autochtones seraient des bénéficiaires éligibles.

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Malgré la complexité juridique et le fait que la loi sur les terres et les forêts reconnaît l'État en tant que principal bénéficiaire, d'autres parties prenantes telles que les communautés locales, les peuples autochtones et groupes vulnérables devraient tirer profit du processus national de REDD+.

2.2. COMMENT CAPITALISER LES PRINCIPALES LECONS APPRISES REDD+ AU CAMEROUN ?

Il suffira de suivre la procédure nationale de soumission qui sont fondés sur des principes connus.

a) Les principes et précautions de base pour la soumission

- Disponibilité : celle des forets visés
- Responsabilité : celle des Acteurs et partenaires par la vérification de leurs competences, par exemple.
- Compatibilité : avec le Droit (Approche transversale d'accompagnement
- Fisc, CTD, foret, environnement, genre, droits des riverains et peuples autochtones,etc)

b) **La procédure nationale de soumission et de validation des projets REDD+**

Pour faire valider leurs projets REDD+, les porteurs de projet doivent suivre la procédure décrite ci-dessous.

1- Le porteur du projet rédige la Note d'Identification du Projet (NIP) qui comprend le contexte, la localisation, la problématique de déforestation et de dégradation des forêts, la Présentation des hypothèses d'option stratégique, le Plan de consultation préalable des populations, le Plan de financement du projet et le calendrier ;

2- Le porteur du projet soumet sa Note d'Idée de Projet (NIP) et son dossier administratif à la Coordination Nationale REDD+ (CN REDD+) basée au MINEPDED pour étude et avis ;

3- Le porteur de projet réalise l'étude de faisabilité selon les TDRs conjointement validés ;

4- Le porteur de projet restitue les résultats de l'étude de faisabilité aux parties prenantes et transmets à la CN REDD+ le rapport final de l'étude pour archivage ;

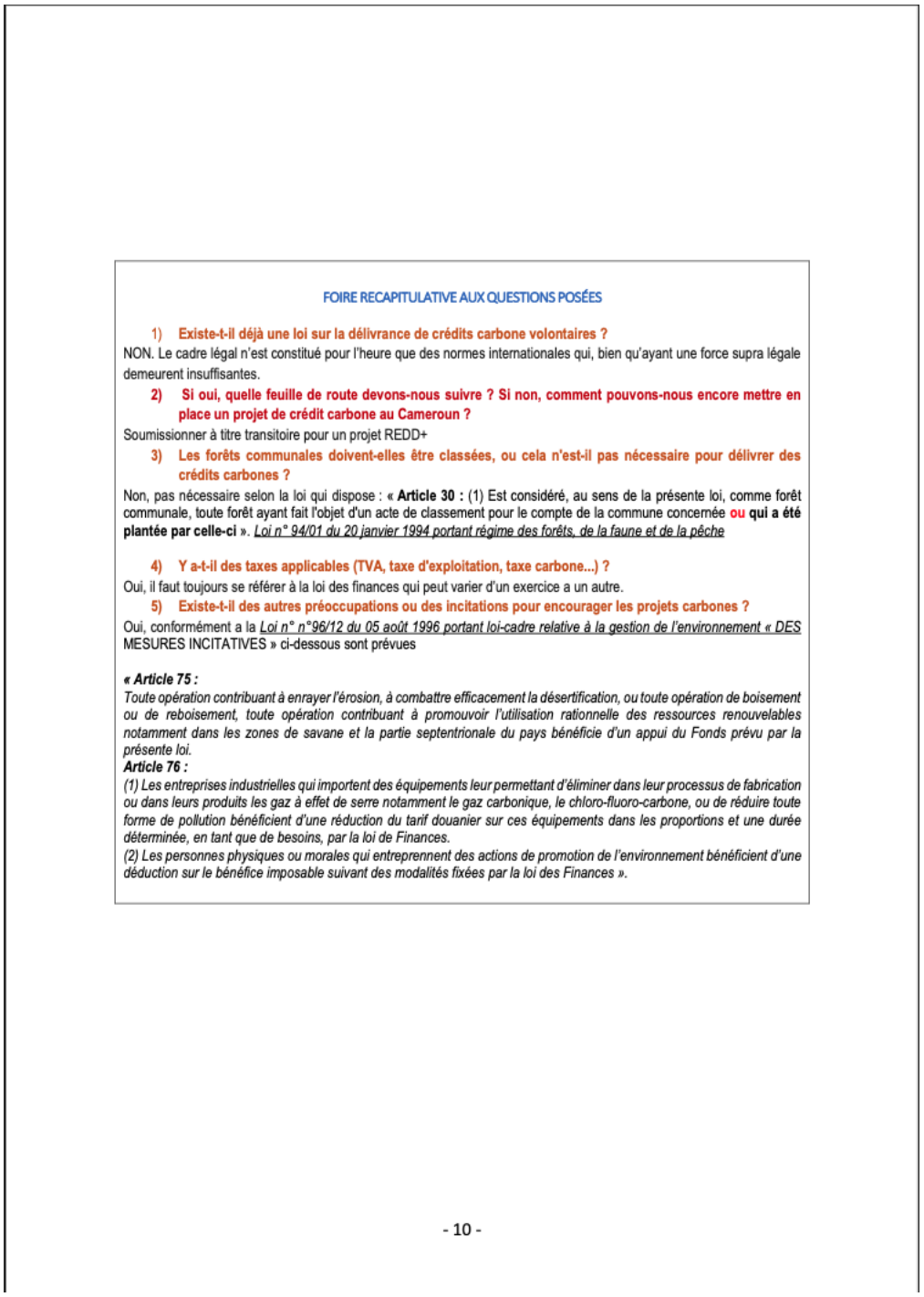
5- Le porteur de projet élabore le document de projet sur la base du rapport d'étude de faisabilité et le transmet à la CN REDD+ pour analyse et soumission au Comité de Pilotage ;

6- Le porteur de projet et la CN REDD+ élabore conjointement le mémorandum d'entente qu'ils transmettent à la cellule juridique du MINEPDED ;

7- Le porteur de projet transmet le mémorandum d'entente au Comité de Pilotage en même temps que le document de projet (DDP) ;

8- Le porteur de projet met en œuvre le projet conformément au mémorandum d'entente et au document de projet validé par le Comité de Pilotage. Le Comité de pilotage se réserve le droit de mettre fin à un projet si celui-ci n'a pas respecté les différents engagements vis-à-vis des parties prenantes.

Nous demeurons naturellement disponibles pour l'accompagnement.



FOIRE RECAPITULATIVE AUX QUESTIONS POSÉES

1) **Existe-t-il déjà une loi sur la délivrance de crédits carbone volontaires ?**

NON. Le cadre légal n'est constitué pour l'heure que des normes internationales qui, bien qu'ayant une force supra légale demeurent insuffisantes.

2) **Si oui, quelle feuille de route devons-nous suivre ? Si non, comment pouvons-nous encore mettre en place un projet de crédit carbone au Cameroun ?**

Soumissionner à titre transitoire pour un projet REDD+

3) **Les forêts communales doivent-elles être classées, ou cela n'est-il pas nécessaire pour délivrer des crédits carbones ?**

Non, pas nécessaire selon la loi qui dispose : « **Article 30 :** (1) Est considéré, au sens de la présente loi, comme forêt communale, toute forêt ayant fait l'objet d'un acte de classement pour le compte de la commune concernée **ou qui a été plantée par celle-ci** ». *Loi n° 94/01 du 20 janvier 1994 portant régime des forêts, de la faune et de la pêche*

4) **Y a-t-il des taxes applicables (TVA, taxe d'exploitation, taxe carbone...) ?**

Oui, il faut toujours se référer à la loi des finances qui peut varier d'un exercice a un autre.

5) **Existe-t-il des autres préoccupations ou des incitations pour encourager les projets carbones ?**

Oui, conformément a la *Loi n° n°96/12 du 05 août 1996 portant loi-cadre relative à la gestion de l'environnement « DES* MESURES INCITATIVES » ci-dessous sont prévues

« Article 75 :
Toute opération contribuant à enrayer l'érosion, à combattre efficacement la désertification, ou toute opération de boisement ou de reboisement, toute opération contribuant à promouvoir l'utilisation rationnelle des ressources renouvelables notamment dans les zones de savane et la partie septentrionale du pays bénéficie d'un appui du Fonds prévu par la présente loi.
Article 76 :
(1) Les entreprises industrielles qui importent des équipements leur permettant d'éliminer dans leur processus de fabrication ou dans leurs produits les gaz à effet de serre notamment le gaz carbonique, le chloro-fluoro-carbone, ou de réduire toute forme de pollution bénéficient d'une réduction du tarif douanier sur ces équipements dans les proportions et une durée déterminée, en tant que de besoins, par la loi de Finances.
(2) Les personnes physiques ou morales qui entreprennent des actions de promotion de l'environnement bénéficient d'une déduction sur le bénéfice imposable suivant des modalités fixées par la loi des Finances ».

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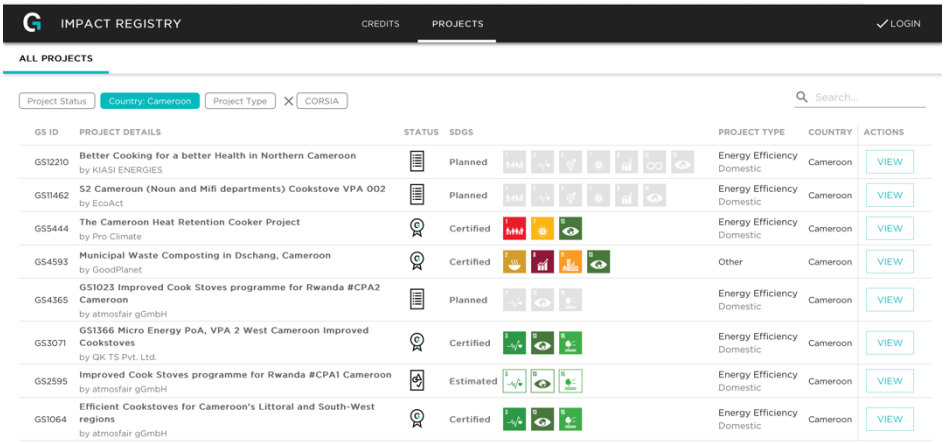
See note attached

Annex 18 – Evidence no double counting

See map with evidence attached

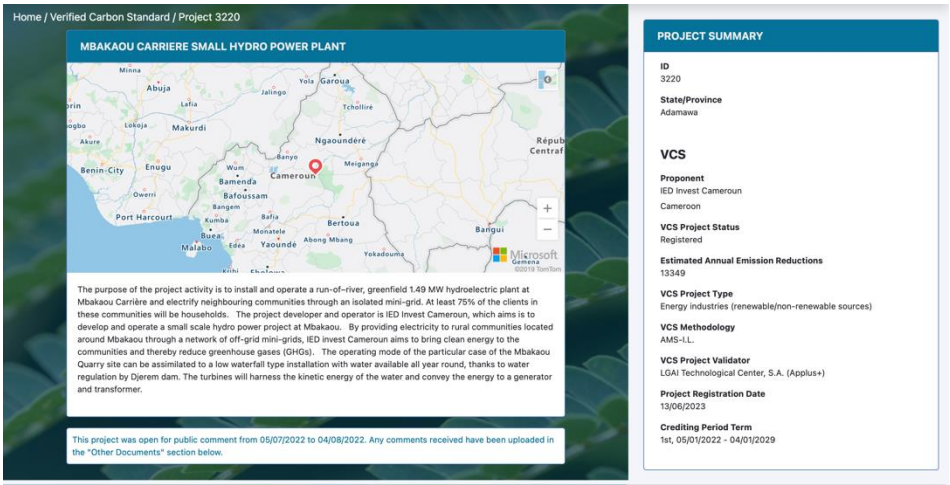
Gold Standard Registry

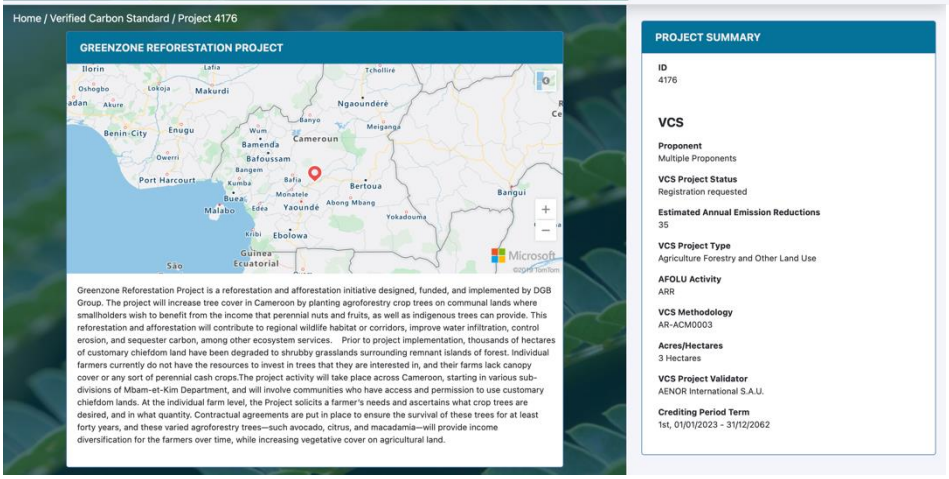


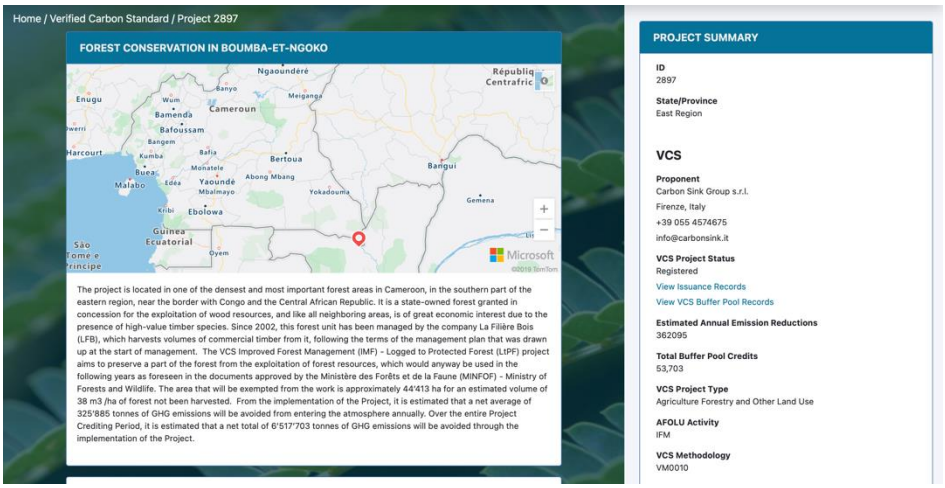
Plan Vivo Registry

PES in the Manoka Community Forest	Cameroon	Cameroon Ecology and CIFOR	PIN approved August 2022	Project Idea Note (PIN)
A Carbon Fund to Reduce Deforestation & Improve Living Conditions of population in the Sangha Tri-National Forest Complex (TNS)	Cameroon	FTNS	PIN approved August 2017	Project Idea Note (PIN)

Verra registry







Annex 19 – Statutes for Plan Vivo Committees

1. Each village with an area of land under the Fes Enying project shall have a Plan Vivo committee chosen by the village who will help to oversee the use of funds generated from the project and the operations required to achieve the project's targets.

2. During the establishment phase, each Plan Vivo committee will consist of 11 people.
    a. 08 representatives chosen by the village with voting rights, among the 08 represents, all ethnic groups are represent:

    b. 02 relay agents (1 woman, 1 man) with voting rights, chosen among the eight representatives.
    c. 01 representative to the village council (the chief or one of its *notables*) without voting rights.
    d. 01 representative of the commune without voting rights.
    e. 01 representative from Fes Enying without voting rights.

3. The Plan Vivo committee will eventually consist of a total of 16 people.
    a. 12 representatives chosen by the village with voting rights, among the 08 represents, all ethnic groups are represent:

    b. 01 representative of the group maintaining communal gardens and woodlots with voting rights.
    c. 02 relay agents (1 woman, 1 man) with voting rights, chosen among the twelve representatives.
    d. 01 representative to the village council (the chief or one of its *notables*) without voting rights.
    e. 01 representative of the commune without voting rights.
    f. 01 representative from Fes Enying without voting rights.

4. All committee members will be elected for a 2-year period. Committee members will be allowed to stay on the committee for a period of up to 6 years but must renominate for their position on the committee every two years. Hence, the maximum number of terms will be three consecutive two-year terms.

5. At the formation of the Plan Vivo Committee, 8 members will be chosen by the village. After one year, at the first annual general meeting, another 4 members will be put forward by the village. At the second annual general meeting the original 8 members will have completed their first two-year term and will be required to renominate and stand for election if they would like to continue.

6. Elections of members will take place at the Annual General Meeting. Each year four positions on the subcommittee will become available. These positions may be filled by existing members who are standing down and who have not served more than four years on the committee or by other village members who are not currently on the Plan Vivo Committee.

7. After a period of 6 years, committee members must stand down and may re-stand for election after one year.

8. At least 30% of the village representatives on the Plan Vivo committee must be female. Which means at least 3 women in the first year, and at least 4 women in the second year.

9. The representative of Fes Enying on the committee will act as the secretary and will be responsible for recording the minutes of meetings.

10. There will be a minimum requirement of at least three meetings per year.

11. Meetings will be used to plan project operations and discuss ways to increase village engagement.

12. The final meeting of the year will be the Annual General Meeting – at this meeting, the budget for the next year's activities will be announced and the amount of money that will go back to the village will also be announced.

13. The meeting prior to the Annual General Meeting will be used to determine the budget for the next year's activities and a final budget for the following year must be agreed to prior to the Annual General Meeting.

14. The Plan Vivo committee may be required and may choose to call additional meetings throughout the year.

15. At least two-thirds of all voting members must be present at a meeting for the meeting to go ahead. If the appointed representative from Fes Enying cannot attend, another Fes Enying employee may attend and act in their stead.

16. If Plan Vivo committee members miss two or more committee meetings, they may be voted out of the Plan Vivo committee by the other committee members unless there are valid extenuating circumstances.

17. There will be a President and Vice-President elected by the Plan Vivo committee. At least one of these roles must be filled by a non-male person. The President and vice-president are elected again after two years. After a period of 6 years, the President and Vice-President must stand down and may re-stand for election after one year.

18. In addition to meetings, Plan Vivo committee members will also be required to attend training and engagement activities designed to build the overall capacity of the village to manage the project and increase familiarity with project areas and objectives.

19. The role of the Plan Vivo committee will be to represent and engage with their village in relation to the activities and outcomes of the Fes Enying Project.

20. The objective of the Plan Vivo committee will be to support the operations of the Fes Enying Project and to ensure that this project brings benefits to the village through its agroforestry activities including the sale of carbon sequestration credits.

21. The scope of the Fes Enying Project will be fifty years and the Plan Vivo committee should operate for the full length of the project.

Dispute resolution
In the case of a deadlock, where Plan Vivo committee members are unable to reach a majority decision, the President of the committee can:

1) Choose to give a single casting vote to the two non-voting members (Commune and Fes Enying) for that decision only.
2) Choose to refer the matter to the village chiefs
3) Choose to call a village meeting to reach consensus on the issue.

Where the non-voting representatives of the commune Bankim and Fes Enying are in agreement that a Plan Vivo committee decision is contradictory to the aims and purpose of the Fes Enying Project and/or rules governing the expenditure of carbon credit income, they have the right to appeal that decision to the President. Examples can be but are not limited to: Refusal to pursue dispute resolution as per the process defined in the Plan Vivo committee agreement; decisions by the commune to undertake logging or sale of Fes Enying project lands to a private party; decisions to use operating funds for non-project activities or allocating carbon credit income for individual gain rather than for socioenvironmental benefits for the whole village community. In this case, appeal, the non-voting members will be given an opportunity to explain their opposition to the decision and, after hearing these arguments, the committee will vote again. If the decision is still unsatisfactory to the commune and Project Coordinators, the issue will be resolved through arbitration by the Project agreement.

Annex 20 – Fire management strategy

General Information

Firebreaks include all the means used to fight the spread of flames in order to protect plants, animals and people. Typically, it is a strip of vegetation that has been removed or modified to stop the fire. It is a physical barrier, it can be, among other things:

- A sown and maintained vegetation, it consists of plants that are difficult to ignite, often these are plants that vegetate all year round and having a good biomass we can mention the Titonia however it requires regular maintenance;
- A natural firebreak is generally found in this group: roads and rocky outcrops, cliffs, rivers or gaps. These firebreaks are still not in the right place and sometimes are not always large enough; Glades devoid of vegetation;

- Some practices, such as controlled or early burning, limit the spread of fire because the burned edges are devoid of vegetation. Also, some arrangements such as ploughing, tidying up stones that do not catch fire, deforestation of the edge. These methods can sometimes be expensive and labour-intensive.

The effectiveness of the firebreak depends on the wind and the season, arid areas are more sensitive, vegetation can serve as a natural firebreak if it spares plants that are difficult to ignite. Limiting bushfires is a community endeavour and we are all concerned about the consequences for health and the environment.

All in all, several methods can be combined depending on the environment and the extent of the risk, but also awareness and education of all actors can be an effective means of fighting bushfires.

Fire management strategy communal garden & home orchards

People and farmers in Bankim are used to fires in the dry season (December to March). The communal garden is community forest which will provide fruits and NTFP for the community when trees are mature. It's therefore in their interest to establish a fire management strategy for their communal gardens. In addition, smallholder farmer do already understand the importance of keeping their fields clean and instalment of firebreaks and the project will accompany them to improve the strategies.

Prevention strategy

Firebreaks

- Location:
    - Around communal garden
    - Around individual fields (home orchards)
- Width and maintenance:
    - The width of firebreaks in communal gardens will be decided with the guidance of Siméon Akono, the technical director of Fes Enying. These depend on the vegetation and the risk that fires could occur near the communal garden. Maintenance (removing flammable material) will occur in collaboration with Plan Vivo committees and the community.
    - The smallholders already know about firebreaks (clearing edges of their field of vegetation) and the project will encourage them to continue this and provide feedback if necessary.
- Controlled burning
    - If the fuel load is too large, the community can decide, in consultation with Fes Enying, to use controlled burnings during the safe periods to remove excess fuel in communal gardens.
    - Smallholders can use this strategy as well for their own fields. But this should also be in consultation with Fes Enying.

Sensitization

- Education campaigns:
    - The importance of the protection of communal gardens is explained to the community via ecosystem awareness workshops organised by Fes Enying and assisted by the Plan Vivo committees. The danger and risk of fires are also explained in these sessions.
    - The Plan Vivo committees play an important role in spreading the information about the communal garden via word-of-mouth advertising.
    - Information boards during the dry season with pictograms warning about the danger of fires.
    - Teaching sessions at school: preventing kids from putting fire in fields to hunt.
- Community engagement:
    - It should be very clear where the communal garden is located, so farmers, but also livestock keepers are not setting fire near the communal gardens. This can be with panels or clear markings around the borders of the communal garden.
    - The community is engaged in setting up fire breaks and the maintenance of these firebreaks.
    - Encourage farmers to warn neighbours if they will use fires to prepare their fields.
- Communication channels:
    - Workshops o Plan Vivo committee to community exchange
    - Information board
    - Farmer to farmer exchange

Treatment strategy

Early detection and rapid response

- Communication network (to be decided within the community), preliminary ideas:
    - Neighbouring farmers need to have their numbers, so they can warn each other.
    - Siren for communal gardens?
- Fire brigade (if wanted within the community)
    - Train volunteer group to attack small fires

Fire suppression techniques

- Training on fire suppression techniques
    - Extinguish fires with young leaves, …
    - Protect neighbouring land with water
- Equipment: if necessary and wanted the community can invest in equipment to help suppress fires.

Evaluation strategy

Monitoring

- Fire occurrence data
    - Track the number, location, size, and cause of fires.
    - Farmers can report these to members of Plan Vivo committees and these will report to Fes Enying.
- Fuel load monitoring:
    - Monitor fuel loads in communal gardens to assess fire risk at the onset of the dry season

Evaluation

- Yearly review of the effectiveness of fire management strategy: Fes Enying in collaboration with Plan Vivo committee for communal gardens.
    - Use fire data!
- Yearly workshop with smallholder farmers to talk about their individual strategies

Adapt & improve

Based on the monitoring and evaluation, the fire management plan is adapted and improved to meet the needs. If needed for a smallholder, a personal strategy is developed to reduce the risk to fire on his/her field.