Project Design Document template for Plan Vivo projects

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Hieu Commune PLAN VIVO project

Hieu Commune, Kon Plong District, Kon Tum Province, Vietnam Central Highlands

Dak Lom community forest and village, CR: Liem/FFI

Executive Summary

Project Title	Hieu Commune PLAN VIVO project
Project Location – Country/Region/District	Hieu Commune, Kon Plong District, Kon Tum Province, Vietnam Central Highlands
Project Coordinator & Contact Details	Fauna & Flora International The David Attenborough Building, Pembroke Street, Cambridge, CB2 3QZ info@fauna-flora.org +44 1223 571 000
Summary of Proposed Activities (Max 30 words)	The Hieu Commune Plan Vivo project aims to avoid unplanned deforestation and degradation in 3 M'nam ethnic minority villages (1,238 hectares of forest), while replanting multi-purpose tree species (MPTS)
Summary of Proposed Target Groups (Max 30 words)	The project proponent(s) are the 3 villages of Hieu Commune, represented through the Community Forest Management Boards (CFMBs) of each village. The CFMBs are recognised as legal entities, established under a Decision by the Kon Plong district People's Committee.

Part A: Aims and objectives

A1 Describe the project's aims and objectives and the problem(s) that the project will address

The Central Highlands of Vietnam with its mix of evergreen broadleaf and natural coniferous forest are globally recognised as a priority for biodiversity conservation. However, increasing levels of deforestation and degradation mainly due to slash and burn agriculture for cassava crops and illegal logging threaten its continued existence.

The Hieu Commune Plan Vivo pilot aims to reduce deforestation and degradation in forested areas within the customary boundaries of 3 M'nam ethnic minority communities. The project aims to protect 1,238 hectares of evergreen broadleaf and natural coniferous forest in the Hieu Commune. Ethnic minority communities in Vietnam, remain marginalised and impoverished. Without land rights, strengthened capacity and opportunities to benefit from sustainable livelihoods, they will not be able to effectively manage and protect forest areas within their customary forest boundaries.

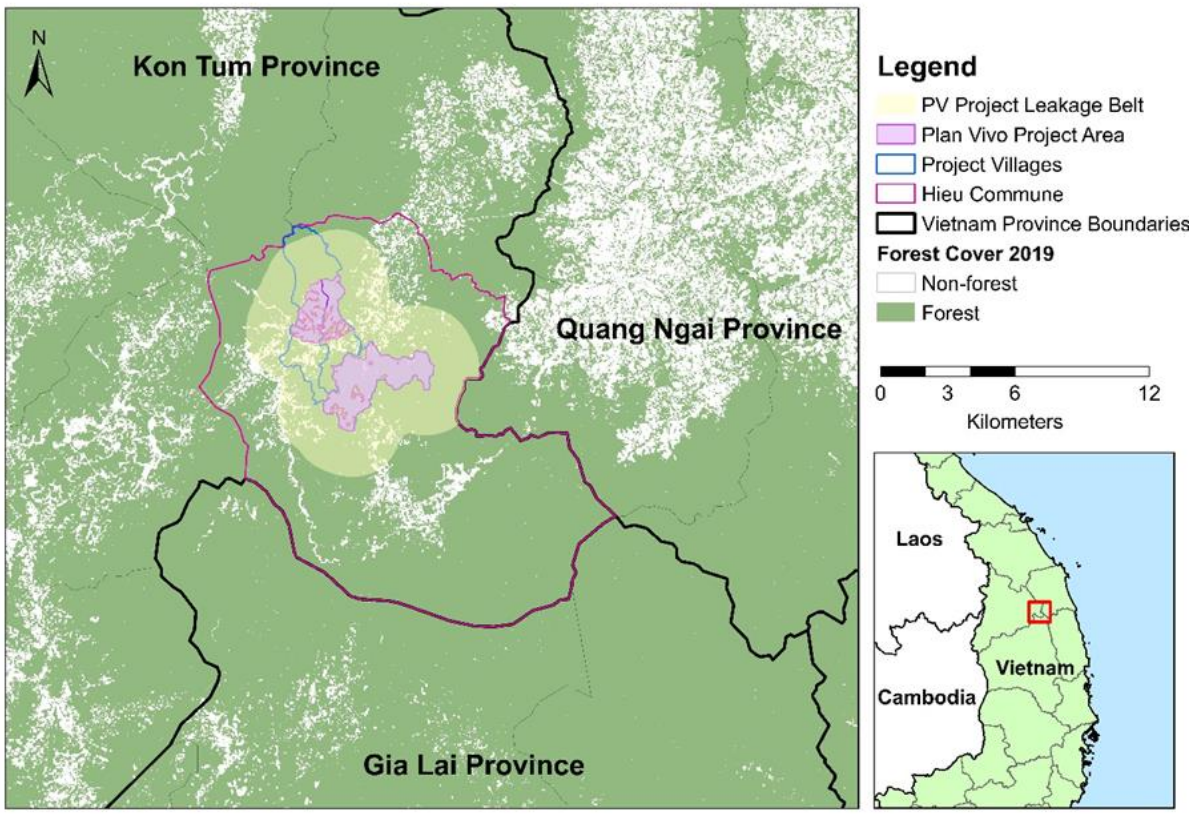
The pilot will be implemented through a range of activities including; securing land tenure for the 3 communities, improving land use planning and management strategies, strengthening forest governance and law enforcement mechanisms, and facilitating the development of sustainable livelihood improvements, partly through the planting of Multi-Purpose Tree Species (MPTS).

Part B: Site Information

B1 Project location and boundaries

The Hieu Commune (Kon Plong District, Kon Tum Province), is located in the Central Highlands of Vietnam. It is located in a landscape is recognized as a global biodiversity priority. The proposed project area covers 1,238 ha of evergreen broadleaf and natural coniferous forest in three villages: Dak Lom, Dak Lieu and Vi Chring.

Location of Plan Vivo Project within Hieu Commume, Kon Tum Province, Vietnam



B2 Description of the project area (PV requirement 5.1.1)

- Geophysical description (climate, ecological conditions, soils, topography etc.)
- Presence of endangered species and habitats
- Other critical factors affecting project management e.g. roads, infrastructure, climate hazards

The project area belongs to the Ngoc Linh sub-region mountain climate characterized by cold and wet conditions. Besides, being directly affected from the central coastal climate in the east of the Central Annamite Mountains, this region has very large precipitation with the average level of 2.500mm/year. Rainy season starts from August to December and even in the dry season, the precipitation is still considerable. Compared with other regions, dry season comes later and seems shorter, starting from March to June each year. The average temperature is from 130C-170C. January is the coldest month with an average temperature of 110C-150C. The average temperature of the hottest month is 24oC (April). The annual average humidity is high, from 84 to 85%, especially during the rainy season. The total number of sunny hours is low, around 800-850 hours/year.

As for topography and land, common topography is that of continuous average slope mountain ranges that make the topographical surface dissected and craggy. Narrow valleys along small streams are found between mountain ranges. The average altitude is of 800-1,000 m. Average slope is 200; the highest and lowest slope is 500 and 80 respectively. It is possible to divide into the 3 following terrain types according to the extent of elevation and slope:

- High mountainous terrain with slopes over 200 accounting for 70% of the total natural area, located along the eastern and western boundary.
- Medium mountainous terrain with average slope from 8-150 distributed continuous mountain strip along the highway No.24, accounting for 20%, and
- Valley terrain along streams with slopes varies from 3-80, covering 10% of the natural area.

Regarding soils, humic ferrasols is a dominant soil type of the entire region with a thick litter layer from 20-40 cm, soil layer varies from medium to thick, the ratio of organic content in soil is rather high with rich crude humus. The C/N ratio is high and could be reflected via soil analysis. The soils are acidic (PHkcl ~ 5,0).

As for vegetation types, evergreen broad leaves moist closed sub-tropical forest is dominant with common species such as *Castanopis*, *Manglietia* and Meliaceae. Some of the forests in the mountain peaks are characterized as mixed evergreen broad-leaved and subtropical coniferous forests with key species such as *Fokienia*, natural pine and *Dacrydium pierrei*. Due to over-exploitation in recent years, forest quality has declined. The majority of 3 storey-secondary forests were logged. As a result, species composition has become poor with small and low trees. Nevertheless, these forests have good rehabilitation potential if protection measures are put in place. At lower altitudes, vegetation is mainly secondary forest recovered from selective logging or slash and burn. In addition, there are also some pine plantations (*Pinus Khaoya*) along highway No. 24.

Biodiversity

Biodiversity surveys carried out by FFI in 2013 as part of a wider High Conservation Value assessment in the Hieu Commune detected 35 fauna and flora species listed in Vietnam's Redbook (2007), IUCN Red list (2013) and/or the CITES list (2012). Significant/charismatic species in the area include Endangered (IUCN Red List 2013) northern buffed-cheeked gibbons (*Nomascus annamensis*) and the Critically Endangered grey-shanked douc langur (*Pygathrix cinerea*). Furthermore, the wider Kon Plong District within which Hieu Commune is located, is a recognised Key Biodiversity Area[1] in Vietnam, and features in the Critical Ecosystem Partnership Fund (CEPF) Conservation Outcomes for Indo-Burma (2012)[2]. Kon Tum Province sits on the tri-border area with Laos and Cambodia. National parks in the surrounding region include; Chu Mom Ray National Park (Kon Tum Province), Kon Ka Kinh-Kon Chu Rang National Park in the south (Gia Lai Province), Ngoc Linh National Park to the north (within Kon Tum Province); and Dong Amphan National Protected Area in Laos and Virachey National Park in Cambodia. Kon Plong is a recognised Key Biodiversity Area (KBA) and Endemic Bird Area (EBA), due to the presence of the endemic and highly range restrict chestnut-eared laughing thrush (*Garrulax konkakinhensis*). The forest also forms a vital, and the only, habitat corridor in the eastern Annamites (a global biodiversity hotpot), maintaining connectivity between the

[1] Official source of KBAs in Vietnam: BirdLife International, Conservation International, and partners (2010) Global Key Biodiversity Areas. BirdLife International, Cambridge, UK and Conservation International, Arlington, VA USA.

[2] For further information see;
http://www.cepf.net/where_we_work/regions/asia_pacific/indo_burma/Pages/default.aspx and to download map see: http://www.cepf.net/Documents/Indochina_outcomes_map.pdf (VMN55 Kon Plong)

aforementioned protected areas.

B3 Recent changes in land use and environment conditions and drivers of degradation

Deforestation and degradation in the project area

Deforestation and degradation of mixed tropical dipterocarp and natural coniferous forests in Hieu Commune and the wider Kon Plong District are occurring as a result of the following drivers of deforestation and underlying causes;

Conversion of forest land to cropland to derive income and food from farming (slash and burn agriculture, cassava and coffee) - *Local ethnic minority villagers, implementing slash and burn agriculture*

Logging of timber for local/domestic uses, in particular traditional housing, and other construction needs (e.g. rice storage shelters) - *Local ethnic minority villagers selective logging for wood for local consumption*

Logging of timber for sale outside the project area: local community sell timber, or undertake logging for outside operators (illegal), selectively logging trees for timber trade - Vi Chring in particular, is adjacent to Tu Can and Vi Choong villages; whose forest is almost entirely degraded and are known to take timber. Illegal loggers from Quang Ngai province are also known to operate in this forest and are particularly persistent taking timber from this forest at all times of year, at day and at night.

Part C: Community and Livelihoods Information

C1 Describe the participating communities/groups (PV requirement 1.1, 7.2.1, 7.2.7, 7.2.8)

The target beneficiaries of this project are the M'nam ethnic minority communities of Đăk Lom, Đăk Liêu and Vi Chring villages, in the Hieu Commune. These subsistence farming, and forest dependent communities, are characterised by high rates of poverty and illiteracy.

Despite rapid development in Vietnam over recent decades, poverty and marginalisation rates remain significantly and disproportionately higher in ethnic minority populations than in rural Kinh populations in Vietnam as a result of a number of identified trends and factors disadvantaging these communities[1]. The majority of Hieu Commune villagers (90 – 95%) do not have strong Vietnamese language skills, and speak only their local ethnic minority dialect, which has no written form. This has thwarted attempts for them to benefit from state provided capacity building and training on advanced farming methods and animal husbandry. Furthermore, through surveys, FFI has recorded that only 25% of households in Hieu Commune have the literacy and numeracy skills required to open and manage bank accounts[2]. These barriers have in the past constrained the ability of local communities to manage funds and micro-finance loans and need to be considered carefully when developing additional sustainable livelihoods.

Prior programmes striving to improve ethnic minority community livelihoods and forest governance in Vietnam have faced a number of complex challenges. The proposed activities outlined in this proposal draw on the findings and recommendations of a study by the World Bank (2009)[3] and site data and observations compiled by FFI since 2011.

Dak Lom village: The former Dak Lom village was formed a long time ago and originally comprised of 5 M'Nam ethnic households residing along Dak Lieu stream. In 1950, it was split into 2 sub-villages Dak Lieu and Dak Lom. In 1997, Dak Lom villagers migrated to a different location (in close proximity to highway No.24 (Ngoc Bron and Kto Po Nong, which is around 2km from the previous residential area)). During 1994 - 2005, households increased to 17, including 1 Kinh ethnic migrant. So far, local people have relied on water paddy and traditional upland cultivation for subsistence needs. Since 2006 there have been significant changes in livelihoods strategies i.e. some households started collecting the leaf of Jewel orchid, the root of *Kadsura Coccinea* (Lem) and the bark of *Ilex Wallichii* to sell (mainly to the Chinese medicine market). New hybrid wet rice varieties were introduced under the state agriculture development program. Currently the village has 74 households, of which female headed households accounted for 11% (8 households). There are 73 ethnic M'nam and 1 Kinh household. The total population is 279 inhabitants, including 93 children under the age of 18 (33%). According to government data in 2017, there are 45 poor households (61%). According to the village, there are 4 poor households that face food shortages during 2-3 months a year.

Dak Lieu village: Dak Lieu village was established in 1950, as separate from the former Dak Lom village. Historically, its development is similar to Dak Lom. Nowadays, the village is located nearby highway No.24 and the centre of Hieu commune. It is the smallest of the three villages with 38 ethnic minority households (133 inhabitants), of which 8 are female-headed households and account for 21%, and with 2 Kinh households arriving in the early 1994. The village has 25 poor households (66%), with 8 poor households that face up to 2-3 months of food shortage in a year.

Vi Chring village: Established prior to 1945, the village originally only had about 15 households

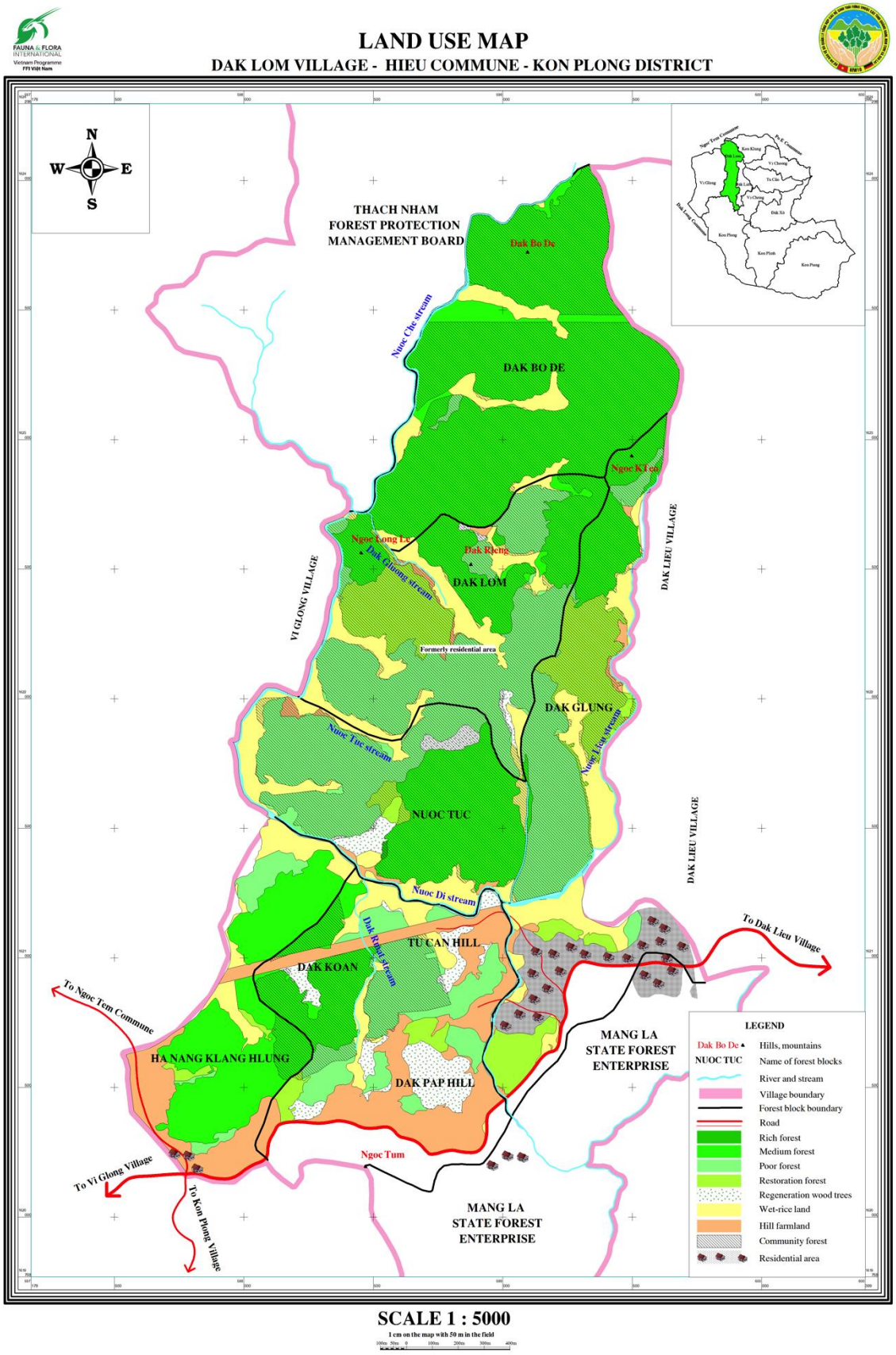
mainly living on wet rice cultivation in Dak Peac foot-hills. From 1946 to 1974, an inter-village road connecting the highway No.24 to remote villages Kon Pling and Kon Pieng in the South was built passing through Dak Xo and different clusters of Vi Choong and Vi Chring locals moved in establishing Dak Xo village. By this time, there were 20 households who started hilly farming with slash-and-burn to grow maize and cassava; while raising buffalo, pig and chicken. Such farming practices have been maintained until now. The village (which split from Plei Dak Xo in 1997) has a total of 38 ethnic minority households (141 inhabitants), of which 10 are female-headed (14%). The poverty rate is very high (73.7%). Three poor households regularly suffer from food shortages for 2-3 months every year.

[1] For further evidence see: Country social analysis, Ethnicity and Development in Vietnam, World Bank 2009
[2] These estimates are based on the socio-economic baseline assessment 2014, which is one of the outputs of FFI's EU-funded regional community carbon pools programme.
[3] The World Bank (2009) Country social analysis, Ethnicity and Development in Vietnam, Summary Report (Volume 1)

***Figure 2**. Participatory social impact assessment, 2013*

C2 Describe the Socio-economic context (PV requirement 7.2.2-7.2.5)

Dak Lom:



Income – Households rely on the sale of crops (wet rice, cassava and coffee), livestock (buffalo, cow, pig and chicken) and state payments for forest protection (PFES) for income. Wet rice farming is regarded as a regular and main source of income for 71 households (or 96%). The

average area farmed is 0.2 ha per households (with a maximum of 0.5 ha and a minimum of 0.1). The average yield is 5 ton/ha and the average price is 5,000 VND/kg, bringing about 5 million VND/household (214 USD). 26 households (or 46%) are involved in cassava farming as a secondary income, with on average 0.3 ha grown per household (with a maximum of 1ha and a minimum of 0.2 ha). Productivity is 12 ton/ha and this generates 2.9 million VND (800 VND/kg) per households. Coffee is a newly introduced cash crop, and it is only grown by 3 households (on average 0.5ha/household). In 2018, an additional 8 households registered to grow coffee, and received the support of the district authority to obtain seedlings and fertilizers.

21 households classed as "non-poor" (or 32%) are involved in animal husbandry, with 55 buffaloes and 12 cows in total (3 heads per household on average). Buffalos and cows are purchased in different years along a 4-year-business-cycle. Approximatively 25% of the cattle is sold annually to generate around 12 million VND/household (514 USD). Pigs are raised by both "poor" and "non-poor" households with about 100 pigs in total (3 heads per household on average). Pigs are sold alive, annually with a fluctuating price of 60,000-75,000 VND/kg (2.5-3 USD/kg), generating around 6.3 million VND per household. Chickens are also raised for subsistence but are rarely sold.

Other sources of income originate from Payments for Forest Ecosystem Services (PFES) programmes for: 1) the protection of community forest (260ha under red book) paid by the KFW10 project (this will be the case until 2020 – end date of the KfW project); and 2) the protection of state forest (1,006.9ha under green book paid by Mang La SFE and 494ha green book contracted with Thach Nham PFMB). Since 2017, each household received 1,440,000 VND (60 USD) from the KFW10 project, 2.3 million VND/ha/year (98 USD/ha/year) from the Thach Nham PFMB, and 2.8 million VND (120 USD) from the Mang La SFE (with price of 200,000VND/ha/year (8.5 USD/ha/year) according to the Decision No 2242/QĐ-TTg dated 11/12/2014). In total household income from these sources amounts to 5.25 million VND/year (225 USD/year).

Income from medicinal plants such as *Anoectochilus roxburghii* (Blume) - Jewel orchid and *Kadsurae coccineae* (Lem) has become less significant in recent times. Only a few households benefit from this, roughly generating 600,000 VND per year (1 million VND/kg). While valuable, these species have been overharvested and have become too rare for villagers to harvest them.

Living conditions

68 households (92%) live in traditional stilted houses, bungalows and constructed houses. The remaining households currently still live with their parents. 66 households (89%) source water from the stream, while only 41 households (55%) are equipped with latrines.

Village infrastructure

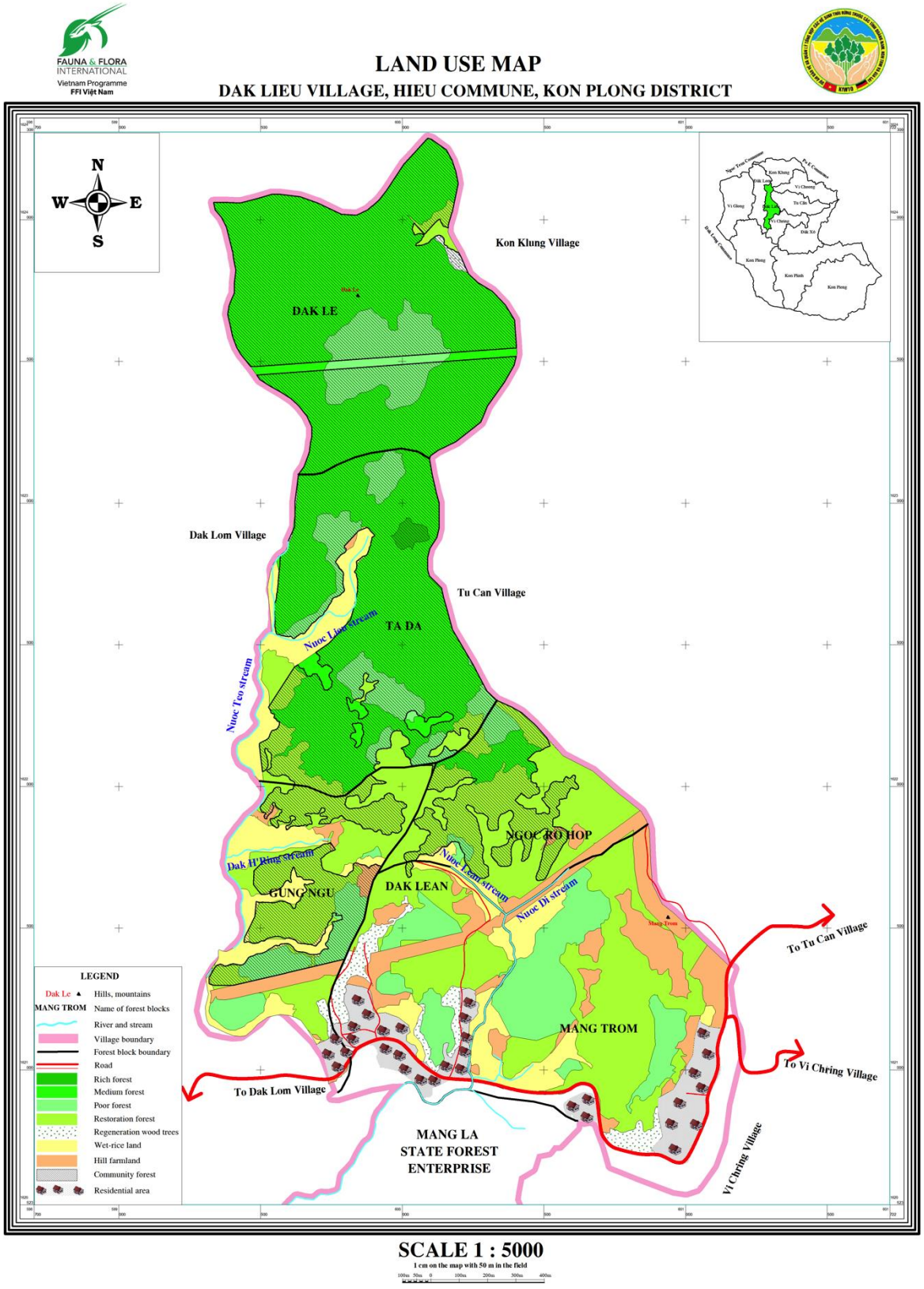
The village is remote, and difficult to access during the rainy season due to a 1.1km of in-residential quarter way on steep and muddy terrain. There is 3 km of pathway connecting the village population to the main productive areas/fields. The village has one kindergarten and a 4th grade school building with one classroom of 75 m^2, with a large playground of 300 m^2.

Education and health

Only 15 household heads (20%) are illiterate. 100% and 90% of men can speak and read Vietnamese respectively while the figures of women are lower at 70% and 50%. Malnutrition is a critical issue with 37% of children below 5 affected. Unhygienic drinking water directly collected from streams contributes to health issues. The village has an untrained health-care officer (short-term medical training course) in charge of annual vaccination in order to prevent

diseases such as poliomyelitic, whooping-cough, tenatus. All households freely enjoy health insurance provided by the state.

Dak Lieu village



Income - The structure of household income is similar to Dak Lom, with 100% of village households involved in wet rice farming. The average area of wet rice farmed is 0.3 ha per household with a productivity of 3.3 ton/ha and a price of 5,000 VND/kg, generating 5 million VND/year. Thirteen households are involved in cassava farming with an average of 0.3ha per a household, generating an income of 2.3 million VND (yield of 9.7 ton/ha/year at 800 VND/kg). In 2018, 2 households started growing coffee, on 0.8ha of land they converted from cassava farming.

The village is also involved in forest protection activities under 1) the KFW10 project for 170ha of community forest; and 2) the state programme (based on Decision No 2242 of the Prime Minister dated 11/12/2014) from the Mang La SFE for a contracted area of 519,2ha. Each household is paid 220,000 VND yearly by the KFW10 project. The village is paid 103,840,000 VND yearly (200,000 VND/ha and 2.8 million per household) by the Mang La SFE.

Living conditions

92% of village households (or 35 households) own traditional stilted houses. Twenty-two households (58%) have access to national network electricity. All households source water from the streams. Only 13 households (34%) are equipped with latrines (received through the support of Plan International).

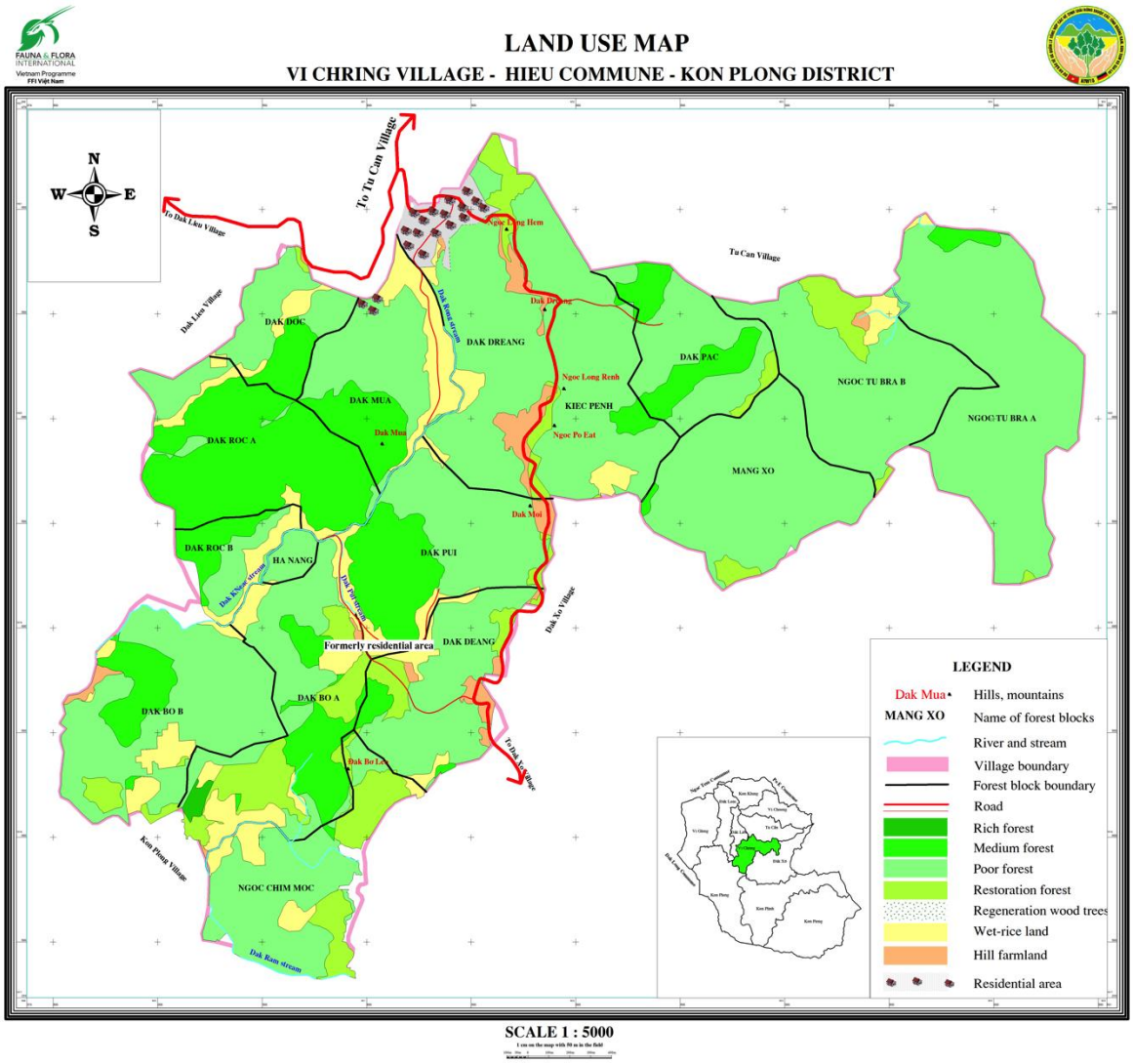
Village Infrastructure

The village has one communal house as a meeting and entertainment place. Village children benefit from a primary school that is located in the village. Similarly, one health-care station is there. A 3.3 km concrete path is available but 1.5 km connected from the village population to production areas is still unpaved.

Education and health

Over 14 households have illiterate household heads (37%). 90% and 80% of men can speak and read Vietnamese respectively while for women it is only 70% and 50%. Similar to Dak Lom village, malnutrition is a really critical issue, and affects 29.4% of children below the age of 5. Imported dried fish and unhygienic drinking water collected from streams contribute to poor health. All households freely enjoy health insurance provided by the state.

Vi Chring Village



Income - 36 households regard wet rice farming as a main income source. Other income sources include husbandry, hybrid cassava, perennial crop and PFES. On average 0.3 ha per household (0.6ha at max and 0.1ha at min) is allocated to wet rice farming and generates revenues of 6,000,000 VND (0.3 ha@4,000 kg/ha @5,000 VND/kg). 29 households are involved in cassava farming with an average area of 0.2 ha per household generating 1.5 million VND/year. There is no revenue yet from established coffee farms. Similar to Dak Lom, 18 households are involved in raising of buffalo and cows (5 heads per household), pigs and chickens.

The village is also involved in forest protection activities and households are paid 1.3 million VND and 2.3 million VND per year by the KFW10 project and the Mang La SFE respectively (red book issued on the 808ha community forest and green book covering 472ha of state forest (as per the other villages the price is 200,000 VND/ha/year under the Decision No 2242/QĐ-TTg dated 11/12/2014)).

Living conditions

31 households (82%) own traditional stilted timber houses. The remaining households still live either with their parents or in wet rice farm-houses. 29 households (76%) have access to national network electricity. All households stopped using stream water and shifted to using cleaner pipeline-based water sources. Only 7 households (18%) are equipped with latrines (provided by Plan International).

Village infrastructure – Context similar to the other two villages.

Education and health care

Over 23% of household heads are illiterate. About 95% and 85% men can speak and read Vietnamese language respectively. Levels of malnutrition are very high with 80% of children under the age of 5 exposed. At village level, there is one untrained health-care worker in charge of annual vaccinations to prevent poliomyelitis, whooping cough and tetanus. Medicines and mosquito nets are also regularly provided to the village and all households are free granted health insurance provided by the state.

Table 1. Household information for the three focal village

Village	Household number	Female-headed households	Poor households	Ethnic minority households	Population (individuals)
Dak Lom	74	8	45 (4 facing with food shortage 2-3 months in a year)	73 M'nam (1 Kinh)	279
Dak Lieu	38	8	25 (8 facing food shortages 2-3 months in a year)	36 M'nam (2 Kinh)	133
Vi Chring	38	10	28 (3 facing with food shortages 2-3 months in a year)	37 M'nam (1 Kinh)	141

Gender roles in livelihoods: Men are responsible for the most physically demanding work across different livelihood types, however women are responsible for all household duties, much of the farming and all of the childcare. For example, as for wet rice, men are in charge of soil preparation and harvesting while women are in charge of sowing, weeding and part of harvesting. In this case, roles of both men and women are equally regarded. Children sometimes have to give up their schooling to assist their parents.

Table 2. Gender roles in various types of livelihood activities

Type of livelihood activities	Husband	Wife	Children
Wet rice cropping	xx	xx	x
Coffee cropping	xx	xx	x
Cassava cropping	xx	xx	x
Buffalo/cattle grazing	xx	0	x
Pig and chicken	0	xx	0
NTFPs collection	0	xx	x
Forest patrol	xx	0	x

(Note: 0= not involved, x= partly involved, xx= fully involved)

C3 Describe land tenure & ownership of carbon rights

In Vietnam, all forested land belongs to the state by default. However, community land ownership and right of use, can be secured through land use certificates known as 'Red Books' usually issued for non-forested land, but increasingly also issued for forested land. Red Books are the strongest set of land rights available in Vietnam[1]. Red Books provide a right of use arising under law in accordance with relevant Vietnamese legislation and regulations under the Vietnam Land Law (2003). Green books are another type of certificate granted to communities for forest management purposes, but are not as significant by comparison, because they do not actually represent a transfer of tenure and their renewal is generally required on an annual basis. Green Books are often issued on government-owned watershed

management forest.

[1] Professor Thomas Sikor, *pers. comms.* May 2012.

Table 3. Forest land allocations in each focal village

Village	Forest Areas (ha)	Plan Vivo Forest area	Forest contracted with Kon plong Forest Ltd Company *(state-owned forest management and logging company)*	Forest contracted with Thạchnham FPMB (*watershed forest where communities receive state payments for forest protection) PFES*)
Total	*3,730.1*	***1,238.0***	*1,998.1*	*494.0*
Dak Lom	1,760.9	**260.0**	1,006.9	494.0
Dak Liêu	689.2	**170.0**	519.2	0.0
Vi Chring	1280	**808.0**	472.0	0.0

Land use rights for Dak Lom

The total land area under the Red Book[1] is 296.8 ha, including 260 ha community forest, 5.6 ha residential area (home and garden), 30.6 ha of wet rice and 0.6 ha of hilly farmland. In addition, there is also 0.2 ha of water surface in stream valley for fisheries production. Some additional hilly farmland for crops such as coffee, cassava and hybrid maize converted from forestland long ago was not included in the Red Book, so in terms of land ownership, it is still unrecognized, but will be legalized in the future.

Land use rights for Dak Lieu

The total area of land under the Red book is 195.1 ha, including 170 ha community forest, 3 ha residential land, 20.6 ha wet rice land and 1.5 ha of hilly farmland (cassava, coffee, etc). In addition, there are 0.1 ha water surface (small stream valley) used for fisheries production. In addition to the land under Red Book, a significant area of hilly farmland mostly for crops such as coffee, cassava and hybrid maize remains unrecognized (as in Dak Lom).

Land use rights for Vi Chring

The total land area with Red book is 833.6 ha including 808 ha community forest, 7.9 ha residential land, 9.2 ha wet rice crop, 8.4 ha hilly land for cassava, coffee, fruit trees and Acacia plantation, and 0.2 ha water surface as fish pond. As with the other two villages, some households own hilly farmland without red book scattered within the landscape. The ownership of these parcels of land is based on customary law but the team believes that this will be legalized in the not too distant future.

Vietnam is in the process of developing legislation around carbon ownership and transfer rights as well as horizontal benefit sharing – these have not been finalised yet, but we are hopeful that they may be by the time the PDD is approved. Currently, the legal background for the sales of credits on the voluntary carbon market for international and domestic buyers is described in article No 63, article 73, chapter No 8-Rights and Obligations of forest owners, forest law, No 166-General rights of land users, land law); (article 107 & 221, Civil law). Currently, an Emission Reduction Purchase Agreement (ERPA) is under development for World Bank funded subnational REDD pilots including 6 northern central coastal provinces.

[1] Red book is called for land use rights paper delivered to land owners that certifies land owners' land use rights in stable and long term (50 years).

Part D: Project Interventions & Activities

D1 Summarise the project interventions

The main project intervention is the prevention of unplanned deforestation over 1,238 hectares of forest. Baseline Deforestation in the Reference Area is approximately 0.54% p.a. Please see the technical specifications for details.

D2 Summarise the project activities for each intervention

Table D2 – Description of activities				
Intervention type	**Project Activity**	**Description**	**Target group**	**Eligible for PV accreditation**
REDD project level activities	Forest protection	Regular community-led patrolling in forest area, strengthening forest governance	Smallholder farmers/community	Yes
Improved land management	Agroforestry	Diversification from cassava farming	Smallholder farmers/community	No
REDD project level activities	Assisted natural regeneration	Enrichment planting and protection of natural regeneration of native species	Smallholder farmers/community	No
• Note that for each intervention eligible for PV certification, a technical specification must be included in Part G. Several project activities may contribute to a single project intervention • Please also list the project interventions (and major activities) for which Plan Vivo certification will not be sought				

D3 Effects of activities on biodiversity and the environment

Project activities will ensure the persistence of forest cover, key to the Grey-shanked douc langur and countless other species present in these forests. By maintaining forest cover, the project will support healthy ecosystem services, such as soil stability and avoidance of land-slides, clean water supply and micro-climate regulation.

Part E: Community participation

E1 Participatory project design

FFI's engagement in the project site started in 2011, under a programme where project level REDD FPIC consultation activities were carried out throughout the 11 villages of the Hieu Commune, including Vi Chring, Dak Lieu and Dak Lom. Since initial project scoping FFI has adjusted project design to make it suitable to the newly changed local context of the site (e.g. change of community forest boundaries and livelihoods). Taking into account specific economic, social and cultural context of the project site. Several field surveys and formal/informal meetings with the project communities have provided valuable inputs to design this project (Household surveys, key informant interviews, focus group discussions, PRA and PLUP, social impact assessment, wellbeing assessment etc.). Workshops were also held to introduce the key concept of project-level REDD (climate change, carbon trading, inter/national policy, FPIC, grievance mechanism) and all the basic steps in project development (identification of drivers, project activity, benefit sharing distribution).

Community groups were identified based on household characteristics for the Vi Chring, Dak Lieu and Dak Lom villages individually. The identification was based on differences in wealth, gender of household head, age and availability of productive land. It was revealed that there are significant differences between poor and non-poor households, female and male headed households, old and young aged headed households and finally young aged headed households with and without sufficiency of productive land. Refer to Figure 3 and 4 and to Annex I for more information.

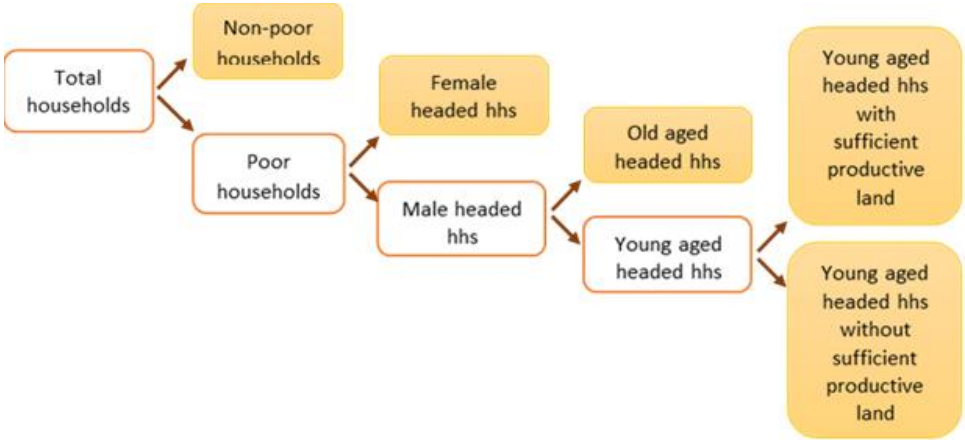


Figure 3. Identification of project stakeholders in Dak Lom village

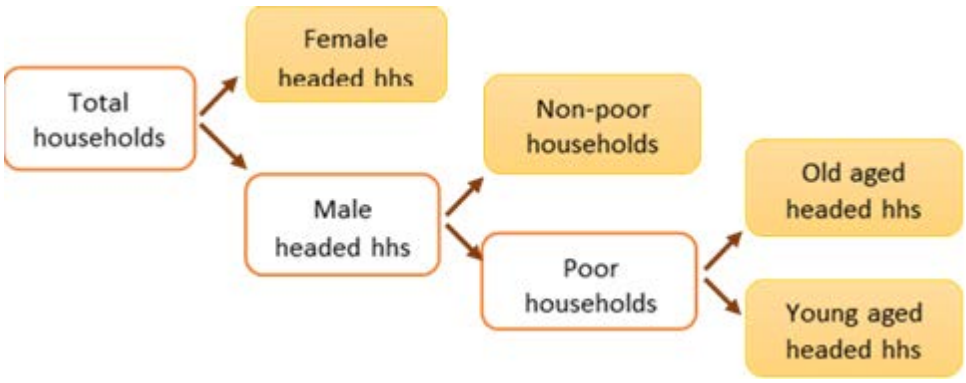


Figure 4. Identification of project stakeholders in Dak Lieu and Vi Chring villages

For the community consultations, CFMB members were selected as interlocutors to communicate with the project villagers in M'nam language; separate meetings were held for men and women, as well as other stakeholder groups. After all training and meetings, consent was secured by asking people to vote in their household (as opposed to during a plenary community meeting were participants may easily follow village leaders) to avoid external interference and ensure that the project design is fit for purpose for all stakeholder groups.

E2 Community-led implementation

Land use planning was carried out through a participatory approach in as simple, and straightforward manner. It was a five-step-process: (1) participatory village mapping, (2) land use survey, (3) community consultation/FGD, (4) awareness raising, realization of different project stakeholders on village land use mapping and reaching consensus. Indigenous knowledge/local ecological knowledge was explored and taken into consideration throughout this process. The exercise can only be done for communities' land tenure area including red books granted land and agricultural land which is not taken into cadastral measurement and red book issuance yet. The final result was a simple village land use plan in the form a sketch map for each village. PVLUP leaflets depicting the map were produced and delivered to every community member.

The village territories with a total of 1,439.2 ha have planned four main land use types throughout the project site.

1. 1,238 ha of community forest land (of which 1,238 ha constitute the Plan Vivo project) for community management and local use and under-forest canopy medicinal plants farming (1.8 ha);
2. 8.8 ha medicinal plants land converted from fallow land or farmland (mostly cassava);
3. 15.3 ha coffee land converted from cassava and fallow land;
4. 26.7 ha husbandry land for cattle-shed building (1.1 ha) and grass/fodder field (25.6 ha) converted from fallow land.
5. 69.0 ha wet rice (as is the case currently).
6. 30.9 ha farmland (mostly cassava).
7. 50.5 ha residential area.

Moreover, up to 10,000 fruit trees will be planted (either interplanted with coffee, cassava and medicinal plants or planted in farmland and fallow land).

Table 4. Land use plans for the project site

No	Land use types	Area of land use types by village (ha)			Total (ha)
		Đăk Lom	Đăk Liêu	Vi Chring	

1.	Community forest	260.0	170.0	808.0	1,238.0
2.	Coffee land	4.5	3.8	7.0	15.3
3.	Medicinal plants land	4.1	1.7	3.0	8.8
4.	Cattle-shed & grassland	9.1	8.4	9.2	26.7
5.	Wet rice land	24.0	23.0	22.0	69.0
6.	Hilly farmland	9.0	14.0	7.9	30.9
7.	Residential land	17.1	22.7	10.7	50.5
	Total (ha)	327.8	243.6	867.8	1,439.2

In summary, the proposed land use plan aims to protect the existing forest and reduce/minimise conversion of forestland into agriculture by the gradual shift from low income land uses which require land clearance (e.g. cassava) to higher income sustainable livelihoods which do not require land clearance. Household income would be potentially increased which motivates project villagers to change their forest practice in a sustainable way.

Implementation at village level will be channeled through the Community Forest Management Board (CFMB) already operational in each village. They are composed of 4 members in Dak Lom and Dak Lieu (Head, Vice head, Supervisor and an Accountant acting concurrently as the Treasurer), and 6 members in Vi Chring (Head, Vice head, Head of supervision and Vice head of supervision, Accountant and Treasurer) proportional with village size and predicted carbon revenues. They were elected by all community members through a plenary village meetings and approved by Kon Plong District People's Committee (DPC) in term of state administration. As per its regulations, the function of the Head and Vice head is to execute or coordinate project supported forest protection and management activities. The Accountant and Treasurer are in charge of the accounting work and community fund protection. The Head and Vice head of supervision, function as a focal point for grievance management, to oversee the operation of CFMB, mostly focused on benefit sharing.

With regards to the forest protection, 11 forest patrol teams were set up with involvement of all community members in the project site. There are 4, 3 and 4 patrol teams in Dak Lom, Dak Lieu and Vi Chring villages respectively. Each consists of 11-15 households which either have a family relationship, are neighbors or have joint farming practices, in the same place nearby the community forest. The majority of men, as representatives of family households, are directly involved in forest patrols. Women may partly contribute to the forest patrols informally, by detecting and informing the CFMBs of forest violation cases they encounter while farming, NTFPs collecting or cattle-grazing. Community members will be trained on forest patrolling, the use of GPS, monitoring and reporting requirements.

E3 Community-level project governance

Project Coordination

The key approach in project designing and implementation is through community-wide participation. As agreed following community consultations, the project villages will be responsible for managing and implementing the project activities, while FFI, as project coordinator, will be responsible for the carbon emissions reduction accounting and reporting work, as well as commissioning project audits (e.g. project validation, and periodical verification) and providing technical support to the project villages (see table 5). The coordination and management of activities at the local level will be provided by the CFMBs already operational in each village.

Table 5. Project activities and responsibilities of relevant actors

Project activities	*Responsibilities of relevant actors*	
	The project villages	*Project Coordinator (FFI)*

Forest patrol	1. Workplan 2. Field work including data recording	1. Technical support and training 2. Data aggregation and reporting 3. Monitoring
Afforestation	1. Seedlings procurement 2. On-field work (planting, tending, etc.)	1. Technical supports
5-years forest management planning	1. Forest inventory and planning 2. Field work and self-supervision	1. Technical support 2. Facilitate approval process 3. Forest monitoring
Project verification	1. Involve in field work	1. Technical support
Livelihood improvements (Coffee, livestock, medicinal plant, etc.)	1. Investment and implementation	1. Technical support and training 2. Support to participatory market system development
At village project management	1. Project execution 2. Community fund management 3. Grievance management	1. Support to capacity building of the project villages 2. Support to grievance management

Grievance Mechanism and grievance recoding system

The grievance mechanism was established following focus group discussions with the local communities. Capacity building efforts were realised for communities to understand their legal rights and capture a grievance mechanism that is workable and understandable due to language barriers and low literacy levels. The grievance mechanism developed operates in the following manner:

A grievance mechanism focal point person will be established by the project coordinator. They will be charged with assessing whether a grievance is valid, invalid, severe or non-severe.

Communities can lodge a grievance through different channels by: speaking with project coordination staff when they are in the project villages or in the office in Kon Tum, calling the grievance mechanism number between certain hours or sending a text message to that number, and by speaking with the CFMB representatives at the village level. Grievances will be handled and addressed within 5 days. If a CFMB member has a grievance, a written letter will be handed to the CPC office for it to be addressed as per state regulations – within 15 days (Figure 5)

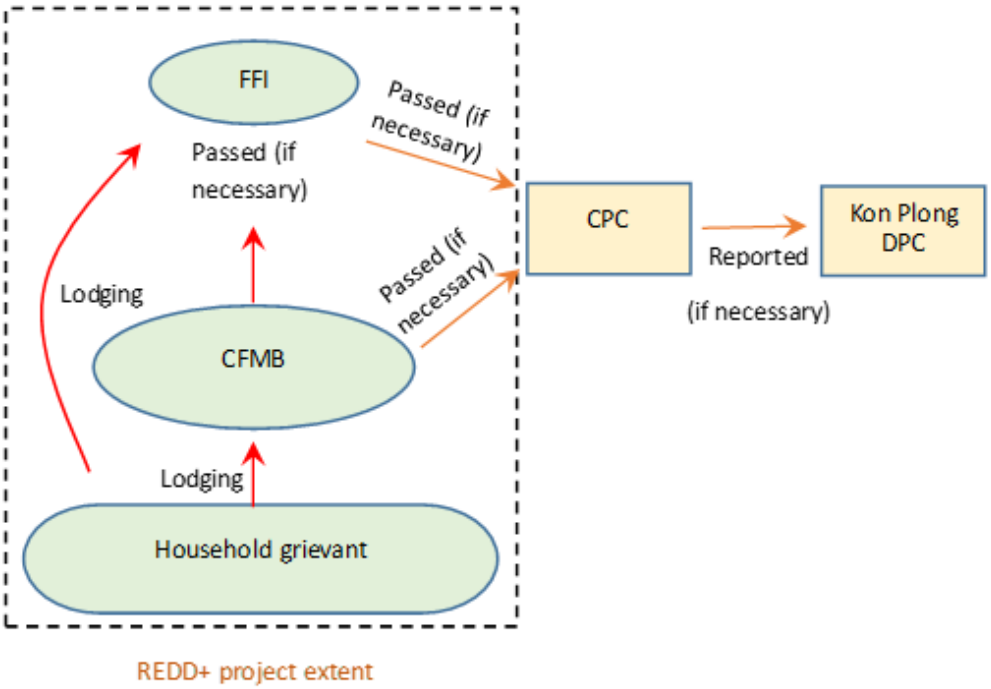


Figure 5. Grievance lodging for project-level REDD

Non-severe grievances can be resolved in the villages through traditional process: CFMB will convene a meeting with the relevant parties and traditionally resolve grievances by explanation and reconciliation against the village regulations on forest protection and management. Non-severe grievances can also be resolved through engagement by the project coordinator directly with the grievant to establish potential solutions or justifications and try to resolve the grievance through dialogue and negotiation. All severe grievances (and non-severe grievances that have not been resolved through traditional routine or engagement process) will be handled by the CPC who will determine the locally and culturally appropriate steps to take. For more detailed information on the process please refer to Annex I.

A suite of 4 document templates was developed to log, track and register grievances, as well as to provide community members with receipts acknowledging that grievances have been received/handled and have been resolved/are closed.

Part F: Ecosystem Services & Other Project Benefits

F1 Carbon benefits

Table F1 – Carbon benefits					
	1	2	3	((1-2)-3)*0.2	((1-2)-3)*0.8
Intervention type (technical specification)	Baseline carbon emissions i.e. without project (tCO_2e/ha)	Project Scenario carbon emissions (t CO_2e/ha)	Expected losses from leakage (tCO_2e/ha)	Deduction of risk buffer (tCO_2e/ha)	Net carbon benefit (tCO_2e/ha)
Avoided Deforestation	77.50	20.53	7.75	9.84	39.38
• Note that the underlying calculations in this table come from the technical specifications described in Part G • Normally there will be a technical specification for each intervention (in the case of project-level REDD a group of activities implemented together is treated as single intervention)					

F2 Livelihoods benefits

Table F2 – Livelihoods benefits							
Food and agricultural production	Financial assets and incomes	Environ-mental services (water, soil, etc.)	Energy	Timber & non-timber forest products (incl. forest food)	Land & tenure security	Use-rights to natural resources	Social and cultural assets
Source of water for rice field irrigation	Additional income from the sale of carbon credits	Prevention of natural disasters, especially landslides and flooding caused by the farming of cassava	Continued access to firewood	Continued access to timber for housing	Tenure clarified through the issuance of community Red Books	Land-use planning to promote forest canopy, medicinal plants and high income cash crops	Strengthen village level governance through capacity building
Source of water for livestock and vegetables	Additional income from livelihood activities	Micro-climate: less extreme weather events, more shade, and fresh air		Continued access to Increased availability of NTFPs			Social cohesion
Pollination	Increased saving and availability of credit through the VDFs						

F3 Ecosystem & biodiversity benefits

- Complete Table F3 to describe the ecosystem impacts of each project intervention (PV

requirement 5.13)

Table F3 – Ecosystem impacts				
Intervention type (technical specification)	Biodiversity impacts	Water/watershed impacts	Soil productivity/conservation impacts	Other impacts
Project-level REDD	Grey shank douc langur and other threatened species populations have sufficient habitat to persist	Clean water supply maintained	Soil stability maintained	Micro-climate regulation maintained

Part G: Technical Specifications

G1 Project intervention and activities

- Describe the intervention and show how it meets the applicability conditions (PV requirement 5.1.1)

The project intervention centres on reducing rates of deforestation in the project area, totalling 1,238.4 ha of forest as of 01/01/2019. The applicability or baseline conditions under which these technical specifications may be used are unplanned or mosaic deforestation, which may be caused by a mix of internal and external threats.

- Describe all the project activities and inputs for the intervention showing how they are applicable to local geophysical conditions (PV requirement 5.1.2)

Activities will include:

- FPIC guidelines for Community-based Forest Management have been developed as part of the project-level REDD activities, adapted from UN-REDD Vietnam materials to make them practical and enable local-level implementation in ethnic minority Communities in Vietnam
- Strengthening of collaborative community forest governance models: Village forest management boards in each of the 3 villages, and an overarching community forest management board, has been established and legally endorsed. Patrol teams have also now been formally established under the Village Forest Management Boards, which includes the involvement of representatives of a significant number of commune households;
- Local governance frameworks: Village forest protection and development regulations have been drafted.
- Sustainable livelihoods diversification and improvement of wellbeing: A participatory market systems development approach (including a market systems selection exercise) will be employed to identify best opportunities for these communities, both in terms of better linking them up to existing markets and of exploring additional NTFP-based enterprises that could allow them to access new markets, and diversification of income away from cassava farming.
- Establishment of small woodlots to fulfill local timber for construction needs.
- Funding avoids the potential for corruption through removing district-level administrative intermediaries and ensuring direct benefits are received directly at the village level. In particular, FFI has already established a community-centric funding model for forest protection patrols, which is deliberately designed to simplify the process of transferring money to villagers, through a 'bank for the poor' approach. FFI transfers funds to an account directly accessible by patrol teams, who can withdraw money with a simple endorsement from the commune authority. To date the model has reportedly been very successful and key community members have received training to improve their confidence and skills in financial management of these funds.

G2 Additionality and Environmental Integrity

- Describe relevant laws and regulations for forest and land management demonstrating how project interventions exceed these requirements (PV requirement 5.4.1)

Without this project, the lack of land tenure clarity and associated conflicts between resident communities, neighbouring communities and local authorities exacerbate forest clearance. By supporting communities to receive community forest permits, but also supporting them to

patrol regularly, diversify and pursue ever more sustainable livelihood opportunities, this project demonstrates clear additionality.

Financial, social, cultural, technical, scientific, and institutional barriers preventing the project from taking place are described in Table 6 below:

Table 6. Barriers to independent project development.

Type of Barrier	Description of Specific Barriers	How Barriers will be overcome by project activities
Financial	• Nationally high rates of poverty are observed in Kon Tum Province, with ethnic communities disproportionately affected • Community members are reliant on subsistence agriculture of rice, and increasingly cassava, for their livelihood • Increased international demand for hybrid cassava drives forest conversion • Prior government PES programmes have finished and/or are not sufficient to offset opportunity costs of forest conversion	• Sale of Plan Vivo certificates via the Hieu Commune PV project will reduce the opportunity costs of forest conservation these communities and generate a long-term incentive for forest conservation • Incomes from Plan Vivo certificates will decouple community members' incomes from forest conversion • Participatory market systems development approaches will diversity incomes into new markets and explore Non-Timber Forest Products
Technological	• Poverty and lack of technical assistance prevents diversification of income streams, improved management practices and to alternative crops. Increased output therefore only via agricultural expansion • use of agricultural inputs (i.e. fertilizer) that could increase yields on existing cultivated land	• FFI will develop a participatory market systems development approach (including a market systems selection exercise) to identify best opportunities to link these communities to existing markets and explore additional NTFP-based enterprises to diversify incomes
Social	• High illiteracy rates and poor access to education leave these communities with low capacity and alternative livelihood opportunities • Low capacity and rural location acts as a barrier to financial inclusion and access to micro-credit	• FFI will act as experienced project developer, and employ knowledge and experience in implementation, legal frameworks, administrative systems and strong partnerships with local government
Cultural	• The majority of ethnic M'nam people cannot speak Vietnamese and therefore excluded from general employment opportunities • Language barriers have prevented communities from benefiting from state provided capacity building and training on advanced farming methods and animal husbandry	• External finance inaccessible to ethnic M'nam communities will be brought to the landscape by FFI and employed in developing the project • Strong technical capacity and capacity building expertise of FFI Vietnam team will ensure communities are not excluded from training opportunities
Institutional & Governance	• Land disputes / conflicts exist between the government and local Ethnic Minority communities, focusing on whether agricultural land is theirs under 'traditional law' versus what is defined as legal by the government. These conflicts exacerbate forest clearance as there is limited motivation for the sustainable management of land without clear legal tenure.	• FFI's project partners will build upon strong relationships with local and national government to deliver secure land tenure to the communities through Red Books • FFI has strengthened community forest governance through the establishment and legal endorsement of collaborative Village forest management boards in each of the 3 villages • Patrol teams have been formally established under these Boards, including involvement of a significant number of commune households

- Provide evidence to show that the project area has not been negatively altered prior to the start of the project for the purposes of claiming payments from ecosystem services (PV requirement 5.8)

There is no evidence to suggest that the project area has been negatively altered prior to the project start. In determining the forest extent as of 01/01/2019 using Global Forest Watch data (Described in section G4), all forest areas showing a deforestation event 2000-2018 were excluded from classification as forest in 2019 (i.e. even should there have been a regeneration / reforestation event since deforestation). Plan Vivo forest area was estimated as 1,238.4 ha. This is a highly conservative approach.

- Give details of other projects or initiatives in the project area and any agreements that are in place to avoid double counting (PV requirement 5.14)

No other form of environmental credit has been generated from this project. It is possible that FFI or its implementation partners may wish to generate other forms of environmental credits (such as biodiversity credits) from the project area in the future. However, such credits would not be related to GHG crediting or offsetting, and consequently there is no risk of double-crediting.

Further, to ensure that this project nests effectively within any jurisdictional REDD+ frameworks in development at a sub-national or national level in Vietnam, wherever possible, the carbon accounting methodology has used data sources, equations and accounting procedures similar to those submitted in Vietnam's Modified Submission to the UNFCCC for REDD+ Reference Levels (2016) (e.g. the same allometric equation for estimating tree AGB).

G3 Project Period

- State the project start date and the period of time over which the climate benefits will be quantified with justification (PV requirement 5.5, 5.6 & 5.17)

The project start date is 01 January 2019. The project crediting period is 30 years starting on the project start date, 01 January 2019 and ending 31 December 2048. The Red Book Land allocation certificates are awarded for a length of 50 years, therefore this crediting period is within that timeframe, and may also be extended in the future. The project start date was chosen to match the year in which the communities received the Red Books for the Project Area (Q2 2019), and point at which effective patrols were implemented.

G4 Baseline scenario

Excel Spreadsheet Tool: Hieu_Commune_PV_TechSpec_May2019_v4.xlsx
- Tab: "10 Baseline Deforestation Rate"

Baseline

The most plausible baseline scenario is the continuation of historical trends in deforestation within the project boundary due to no new economically attractive opportunities available to local communities or material changes to the social, technical or cultural barriers preventing a reduction in deforestation. The historical rate of deforestation in this landscape was therefore considered representative of the projected, future deforestation rate.

Baseline Rate of Deforestation

The historic rate of deforestation in the Reference Area 2008–2018 was used as the baseline rate of deforestation for this project.

Reference Area

Chosen extent: The Reference Area (RA) for the analysis of deforestation was defined as the entire Hieu Commune as this is approximately in line with the "20-30km from the project

area" (Plan Vivo, 2015) requirement. The boundaries for the commune were downloaded from the GADM website (https://gadm.org/) in Q1 2019. The Project Area (PA) is completely contained and centrally located within the RA, and has an area 6% that of the RA total, and therefore the RA is considered of sufficient size for this analysis. The Reference Area (RA) for the analysis of deforestation was defined as the entire Hieu Commune as this is approximately (but not entirely) in line with the "20-30km from the project area" (Plan Vivo, 2015) requirement. The project has chosen to use Hieu Commune as the reference area – as the same policies and socio-economic contexts are broadly applicable. In its narrowest section, the Reference Area extends for between 5 to 10km to the north of the project area and up to about 30km in the southern section. The areas that could have been included to reach the ideal target (20-30km all the way around the project area) in the Plan Vivo Approved approach were Quang Ngai and Binh Dinh Provinces to the North and Southeast, respectively. Both of these provinces are part of the South Central Coast Region of Vietnam, and have different dynamics of land-use change compared to Hieu Commune. Extending the RA into these Provinces would have substantially increased the baseline rate of deforestation and therefore estimates of carbon benefits would have become less conservative.

In addition, to the south of the PA, and Hieu Commune, lies the Kon Chu Rang Nature Reserve, an IUCN Category IV managed National Park. As a strictly protected area, management practices differ too substantially from the rest of the reference area for this to be included.

Evaluating management and topographical similarities between project area and reference area:

1) We followed the PV approached methodological approach of using GFW forest canopy cover data. While these data are not of sufficient resolution to look at forest type or condition, they provide details of forest canopy cover. We used the Hansen 2000 forest cover dataset and applied the forest loss dataset 2000-2018 to estimate forest cover at each time point (For consistency of dataset across the years, rather than introducing a different dataset into the 2008-2018 analysis). Using both the 2000 and 2010 Hansen forest cover datasets, forest with a canopy cover >80% is ≥90 of the forest area within the Hieu Commune. We can conclude, therefore, that forest in the reference area has similar forest cover to that in the project zone.

To evaluate topography – we downloaded SRTM 1 arc second (30 m resolution) DEM data (2014) in GeoTIFF for the Hieu Commune from USGS EarthExplorer. We calculated zonal statistics (mean altitude per pixel) as a table for each polygon (Hieu Project Area and Hieu Commune Buffer) – (values are in metres). As seen in the tables below, mean altitude in the buffer zone is 1,185m ± 67.4m while average altitude in the project area is about 1,220 ± 39.5. We do not consider a difference of 35m on average to be significant ecologically and therefore conclude that project and buffer area forests are of similar altitude.

Hieu Commune Buffer zonal statistics

ObjectID	Min	Max	Range	Mean	Standard deviation	Sum	Variety	Majority	Minority	Median
1	856	1426	570	**1185.737662**	**67.4929**	9629612 7	547	1206	856	1199

Hieu Project Area zonal statistics (mean elevation)

ObjectID	Min	Max	Range	Mean	Standard deviation	Sum	Variety	Majority	Minority	Median
Vi Chring	1087	1311	224	**1220.697661**	**39.58985**	1059443 5	223	1216	1095	1220
Dak Lieu	1180	1335	155	**1252.809621**	**31.964486**	2447990	152	1247	1180	1252
Dak Lom	1168	1291	123	**1212.89207**	**18.610358**	3135326	114	1207	1168	1211

**Majority/minority – most/least frequently occurring value*

2) Land tenure: From a land tenure perspective the reference area is a mix of different types of management regimes – the three main types are (1) Thachnham Protection Forest Management Board (PFMB), (2) Kon Plong State Forest Enterprise (SFE) and Communal People's Committee (CPC) managed forest in term of legal status. Although the official management license in these three areas differs – the day to day management or lack of, pressures and drivers on the land are the same: agricultural-driven clearance and illegal logging. Under all types of management, local community groups or households are paid to patrol the forest – but on the ground implementation of patrols is not checked and mostly not practiced. Therefore, although all of these forest management types are different, the management actions on the ground are equivalent.

Remote Sensing / GIS Data Used to Analyse Historic Deforestation

Estimates of baseline deforestation were calculated according to the Plan Vivo Approved Approach (PV AA) for Estimating Reference Emissions Levels (Plan Vivo, 2015). Hansen *et al*. (2013) data (as used by Global Forest Watch) on percentage tree canopy cover for the year 2000 and forest loss for years 2000-2018, for Vietnam were downloaded in raster file formats in 1 arc minute pixel size (approximately 28 x 28 m at the RA location) directly from the Google Earth Engine website. The forest loss 2000-2018 layer records transition events from forest to non-forest (i.e. deforestation) on an annual, pixel-by-pixel basis, with pixels either being coded as 0 (no deforestation event 2000-2018) or numbers 01-18, relating to the year in which the deforestation event occurred. Full technical specifications can be found in Hansen *et al.* (2013).

Forest Definition

The Vietnamese definition of forest was used, as per the Vietnam's Ministry of Agriculture and Rural Development's (MARD) Modified Submission to the UNFCCC for REDD+ Reference Levels (2016). In short, forests have a minimum tree / canopy cover of 10%, minimum height of 5 m (at maturity) and area of 0.5 ha. A single forest stratum was applied to the entire forested area within the RA, given that approximately 90% of forest extent in the Commune had a forest canopy cover of ≥80% in the year 2000.

Analysis of historic deforestation rate

All analyses were conducted in ArcMAP GIS software (ArcMAP version 10.6.1, ESRI 2017), with GIS layers projected in the WGS 1984 UTM Zone 49N coordinate system. Baseline deforestation rates were calculated over an 11-year period immediately prior to PV project start date, between 01/01/2008 and 31/12/2018. Pixels within the RA documenting a forest loss event between these dates were classified as deforestation events. The annual rate of deforestation was calculated as per the Plan Vivo Approved Approach (PV AA) for Estimating Reference Emissions Levels (Plan Vivo, 2015), Section A4 "Estimate the baseline deforestation rate".

Detailed description of deforestation calculations

All pixels coded as having a forest lost event between 2001 and 2007 were selected from the forest Hansen loss layer (Using Raster Calculator in ArcMap version 10.6.1; ESRI 2017). These were subsequently removed from the forest cover 2000 layer, to create a new layer with forest cover as of beginning of 2008 (Using Raster Calculator in ArcMap). This process was repeated, selecting all pixels with loss codes 8-18 (loss events between 2008 and 2018), which were then removed from the 2008 forest cover layer, to generate a forest cover layer as of beginning

of 2019. The total forest areas as of 2008 and 2019 were calculated by multiplying the number of pixels by the pixel resolution squared, to provide an estimate of forest area in m^2. This was converted to hectares by dividing by 10,000. Deforestation over the 11 year period was calculated as the change in total forest area between 2008 and 2019, which was divided by 11 to produce the mean annual deforestation. This is an estimate of gross deforestation, as no new forest areas were added to the year 2000 forest cover layer. It also ensures that the forest as of beginning of 2019 represents old growth forest (i.e. not secondary), as it has remained forest for a full 19 year period.

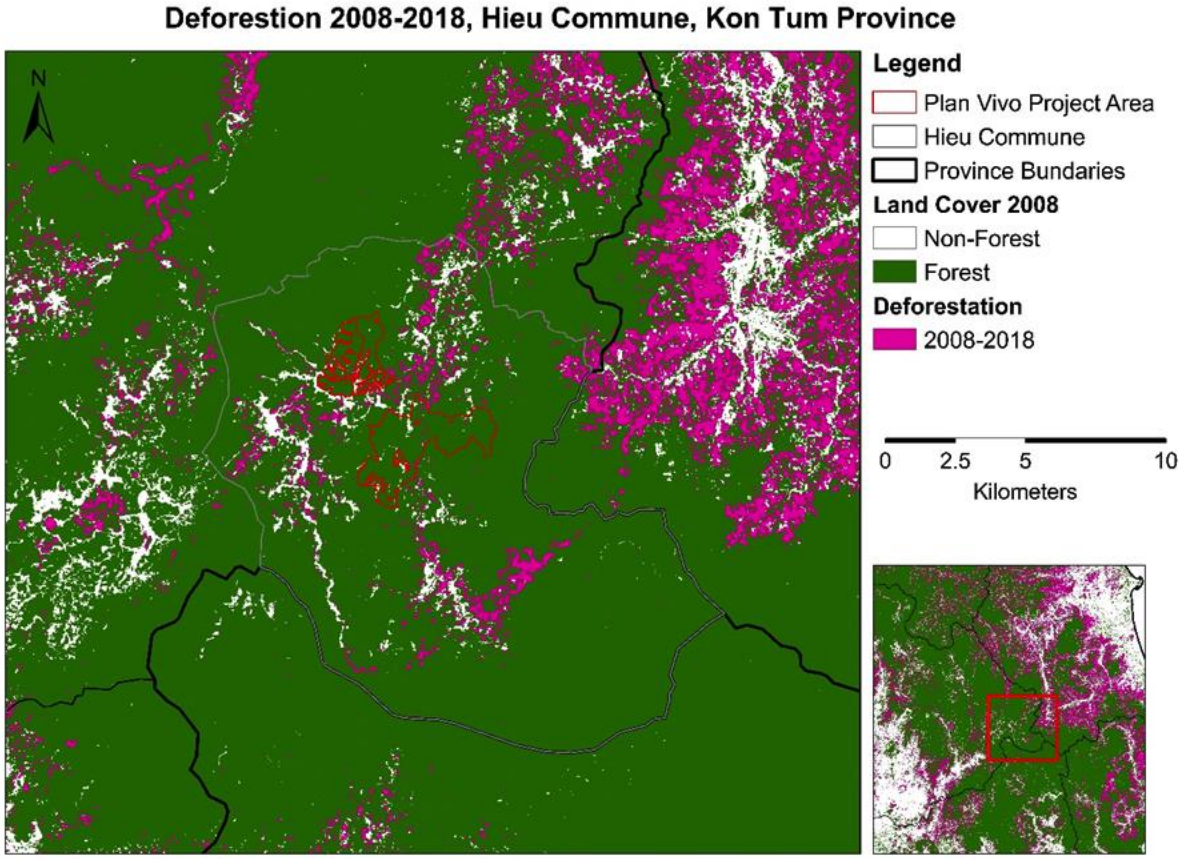


FiGURE 6. Deforestation in Hieu Commune 2008-2018

The baseline rate of deforestation in the RA 2008-2018 (inclusive) was 0.54% per annum (Table 7).

Table 7. Historic forest areas within the Reference Area and baseline deforestation rate.

Land Cover	Area 01/01/2008 (ha)	Area 01/01/2019 (ha)	Baseline Deforestation		
			Forest loss 2008-2019 (ha)	Deforestation Rate (ha/yr)	Deforestation Rate (% p.a.)
Forest	19,680.71	18,515.08	1,165.63	105.97	0.54%
Non-Forest	966.44	2,132.07	NA	NA	NA
Total	20,647.15	20,647.15	NA	NA	NA

The full calculation is provided in the excel spreadsheet documented above.

- Carbon Pools. List the carbon pools and emissions sources that will be accounted for and justify why any others have been excluded. (PV requirement 5.15)

Carbon Pools

The carbon pools sampled, and justification for inclusion or exclusion, are listed in table 8.

Table 8. Carbon pools selected for measurement and/or incorporation into carbon stock calculations

Main Carbon pool	Sub-pool	Rationale – why this pool was included or excluded
Above-Ground Live Biomass (AGLB)	Above-Ground Biomass (AGB)	Included: This is the most dominant source/sink of carbon in the project area. Required and significant carbon pool.
	Non-Tree Above-Ground Biomass (NTAGB)	Included: Cost-effective to sample and measure this pool, despite the fact this pool is probably not significant.
Dead wood (DW)	Dead Standing Wood (DSW)	Included: It was considered cost-effective to sample and measure this pool.
	Dead Lying Wood (DLW)	Included: It was considered cost-effective to sample and measure this pool.
Below-Ground Biomass (BGB)	N/A	Included: This pool is calculated as a proportion of AGB and is therefore cost-effective to include.
Soil organic matter (SOM)	N/A	Excluded: It was not considered cost-effective to measure this pool. This pool should increase under the project scenario and therefore exclusion is conservative.
Biomass of Post-Deforestation (PDAGB)	Above-Ground Biomass (AGB)	Included: Estimates for this pool were obtained from literature sources.
	Below-Ground Biomass (PDBGB)	Included: This pool is calculated as a proportion of Post-Deforestation AGB and is therefore cost-effective to include.
Long-Term Wood products (LTWP)	Long-Term Wood products (LTWP)	Included: Sustainable management plans have been developed for all three projects and timber long-term Wood products have been considered in carbon calculations.

- Baseline methodology. Quantify the initial carbon stock for each carbon pool and describe how this was assessed (PV requirement 5.18)

Excel Spreadsheet Tool: Hieu_Commune_PV_TechSpec_May2019_v4.xlsx
- Tabs: 1–7

Excel Spreadsheet Tool: Hieu_Commune_AGB_NestedPlots_v1.3
Excel Spreadsheet Tool: Hieu_Commune_AGB_NoNestedPlots_v1.2
Excel Spreadsheet Tool: Hieu_Commune_NTAGB_v1.2
Excel Spreadsheet Tool: Hieu-Commune_Deadwood_v1.4
Excel Spreadsheet Tool: Hieu_Commune_DominantTreesWoodDensity_v1.1
Excel Spreadsheet Tool: Hieu_Commune_GWDDSpWoodDensities_v1.1

Baseline Methodology – Quantification of Initial Carbon Stocks

The quantification of initial carbon stocks followed Option D "Carrying out a biomass survey (inventory) using sample plots" of the PV Approved Approach for Estimating Reference Emission Levels (2015). A total of 60 forest inventory plots were established in 2013 and 2014. Plots were stratified over the whole of the forest area in the Reference Area (Entire Hieu Commune). This sampling approach was taken because the project was originally conceived to cover all villages within Hieu Commune; the project scope was narrowed to Vi Chring, Dak Lom and Dak Lieu villages subsequent to this. The estimates of initial forest carbon stocks are therefore considered representative of forest carbon stocks for the entire landscape (including project area). Data from all 60 plots were used in this Technical Specification as there is a future aim to again expand the project to the entire commune.

Forest Inventory plots were established following FFI's Standard Operating Procedure (SOP) for the Estimation of Above-Ground Biomass (2013). This SOP is based upon the Winrock International Standard Operating Procedures for Terrestrial Carbon Measurement (Walker et al. 2012). In all plots the Above-Ground Tree Biomass, Above-Ground Non-Tree Biomass, Standing and Lying Deadwood carbon pools were sampled.

Above-ground live tree biomass

Fifteen plots were composed of two subplots of 14 m radius, located 25 m West and East of the plot centre point. Within each subplot all trees with a DBH ≥ 5 cm were measured and identified to species (or genus where species could not be identified). The remaining 45 plots were also composed of two subplots of 14 m radius, located 25 m West and East of the plot centre point; however, only trees with a DBH ≥10 cm were IDed and measured within the entirety of the subplots. Trees with DBHs 5-10 cm were measured in separate 4 m radius nested plots.

Tree AGB (kg dry matter) was calculated from tree DBHs using an allometric equation developed (below) from 115 trees destructively harvested in Vietnam's Central Highlands region, in which the project area is also located[3]. The forest community composition and structure is therefore comparable to that of the project area, and this equation is used in national level carbon accounting.

$$AGB\ (kg) = 0.222 * DBH2.387$$

The equation was modified to include species wood densities as follows, on the basis of recommendations within Ketterings et al. (2001)[4]:

$$AGB\ (kg) = 0.222 * Species\ Wood\ Density * DBH2.387$$

Species wood densities were estimated from the Global Wood Density Database (GWDD)[5]. Where no species data were available the wood density for the genus was used. For species lacking data on species or genus wood density, the weighted mean wood density of all trees ≥30 cm DBH in the inventory plots was used (0.575 g/cm3). Estimates of tree AGB were converted to carbon by applying a factor of 0.47 as per PV Approved Approach for Estimating Reference Emission Levels (2015).

Non-Tree Above-Ground Biomass (NTAGB)

NTAGB was sampled using destructive harvesting techniques, whereby all live biomass ≤ 5cm DBH was cut and weighed from one 2x2m sample area. A sub-sample of the first 30 samples collected was taken for laboratory analysis to determine the average wet-weight to dry-weight ratio. This ratio was then applied to the wet-weights of NTAGB sampled from the subsequent 30 plots.

Standing dead wood

Standing dead trees were categorised into Class 1 standing dead trees, with a similar structure

[3] Phuong, V.T., Xuan, N.X., Trieu, D.T., D., Trung, P.D., Giap, N.X., Thanh, P.N. (2012) Tree allometric equations in Evergreen broadleaf, Deciduous, and Bamboo forests in the Central Highland region, Viet Nam, in (Eds) Inoguchi, A., Henry, M. Birigazzi, L. Sola, G. Tree allometric equation development for estimation of forest above-ground biomass in Viet Nam, UN-REDD Programme, Hanoi, Viet Nam.

[4] Ketterings et al. (2001) Reducing uncertainty in the use of allometric biomass equations for predicting above-ground tree biomass in mixed secondary forests. Forest Ecology and Management, 146, pp.199-209

[5] A.E, Zanne, & Lopez-Gonzalez, Gabriela & Coomes, David & J, Ilic, & Jansen, Steven & Lewis, Simon & R.B, Miller, & Swenson, Nathan & M.C, Wiemann, & J, Chave,. (2012). GlobalWoodDensityDatabase. 10.5061/dryad.234.

as live trees (i.e. with branches and fine twigs), and Class 2 dead trees, with few or no branches. The biomass of Class 1 was estimated using the same procedures for live trees and the weighted average wood density of all trees with DBH ≥30 cm. The AGB of Class 2 dead standing trees was calculated by multiplying the bole volume (based on the equation for estimating the volume of a truncated cylinder) by the weighted average wood density of all trees with DBH ≥30 cm.

Fallen dead wood

Fallen dead wood was measured using the line transect method (Harmon & Sexton, 1996), whereby the diameter and dead wood density class (hard, medium or soft) was recorded for each piece of dead wood intersecting with a 50m transect. The carbon density of lying dead wood was calculated using the equation by Warren and Olsen 1964, modified by Van Wagener 1968.

Below Ground Biomass (BGB)

BGB (tC/ha) was calculated by multiplying the Live tree AGB estimate by 0.37, as per the PV Approved Approach for Estimating Reference Emission Levels (2015).

Post-deforestation Biomass (PDAGB)

The Post-deforestation Above-Ground Biomass (PDAGB) used the IPCC 2006 default value For Tropical Shrublands (Continental Asia) of 60 tAGB/ha. The shrubland default value was conservatively chosen over the cropland default to reflect the time-weighted average of cassava crop-fallow agriculture. The BGB of the Post-Deforestation land was calculated using a root-to-shoot ratio of 0.4, as per the IPCC 2006 Guidelines. This ratio is higher than the PV Approved Approach for Estimating Reference Emission Levels (2015) value of 0.37, and is therefore conservative.

Initial carbon stocks are presented in table 9.

Table 9. Initial forest and post-deforestation carbon stocks

Parameter	Forest Carbon Pools					Post-deforestation carbon Pools					Unit
	AGB	NTAGB	DW	BGB	Total	AGB	NTAGB	DW	BGB	Total	
Mean	117.4	4.0	10.3	43.4	175.1	28.2	0.00	0.00	12.0	40.20	tC/h
Standard Deviation	42.8	2.7	7.3	15.8	59.54	NA	NA	NA	Na	NA	tC/h
Half-width 95% Confidence Interval	11.1	0.7	1.9	4.1	15.4	3.0	0.0	0.0	1.2	4.0	tC/h
Confidence Interval as % of the mean	9.4	17.4	9.4	18.2	8.8	NA	NA	NA	NA	NA	%

- Baseline Emissions. Estimate the changes in carbon stocks for each carbon pool under baseline conditions i.e. without project. Refer to any approved approaches that you have used for this. (PV requirement 5.18)

Excel Spreadsheet Tool: Hieu_Commune_PV_TechSpec_May2019_v4.xlsx
- Tabs: 8–13

Table 10. Emissions sources included

Emissions source	Gases	Included?	Justification/Explanation

Conversion of forest to non-forest	CO_2	Yes	This is the dominant source of carbon emissions in the project area. Required and significant carbon source.
Burning Biomass	Non CO_2	Yes	Methane (CH_4) and Nitrous oxide (NO_2) emissions from burning biomass were calculated, and added to the final emissions factor.
Fossil fuel combustion	CO_2	No	No activities within the project scenario will lead to increased fossil fuel combustion, therefore excluded
N_2O from fertilizer use	N_2O	No	No activities that increase fertilizer will be implemented, therefore excluded

Emissions from Deforestation
Emissions from deforestation per carbon pool are shown in Table 11.

Table 11. Changes in individual carbon pools, forest to non-forest transition

Parameter	AGL	NTAGB	DW	BGB	Total	Unit
Mean Forest Carbon Pool	117.4	4.0	10.3	43.4	175.1	tC/ha
Mean Post-deforestation Carbon Pool	28.2	0.0	0.0	12.0	40.2	tC/ha
Change in Carbon Pool	-89.2	-4.0	-10.3	-31.4	-134.9	tC/ha
CO_2e Emissions from deforestation	327.2	14.7	37.9	115.3	495.2	tCO_2e/ha

Forest in the Project Area is typical cleared through slash-and-burn. Methane (CH_4) and Nitrous oxide (NO_2) GHG emissions from burning biomass were calculated, following Equation 2.27 from the 2006 IPCC Guidelines for National GHG Inventories. Estimates of each t/ha of GHG were converted to tCO_2e by multiplying by their global warming potential factors (28 for methane and 265 for nitrous oxide; as per the IPCC Fifth Assessment Report, 2014 values).

Table 12. Estimating non-CO_2 Emissions from Burning Biomass

Emissions by GHG	tCO_2e	Unit
Methane (CH_4)	18.05	tCO_2e/ha
Nitrous oxide (N_2O)	5.03	tCO_2e/ha
Total CO_2e emissions from burning biomass	**23.1**	**tCO_2e/ha**

- Data Sources. Give details of all data sources, methodologies, default factors and assumptions used and give justifications for their use (PV requirement 5.2)

Details of all data sources, methodologies, default factors and assumptions used are provided in:

Excel Spreadsheet Tool: Hieu_Commune_PV_TechSpec_May2019_v4.xlsx
- Tabs: SUMMARY

G5 Ecosystem service benefits

Excel Spreadsheet Tool: Hieu_Commune_PV_TechSpec_May2019_v4.xlsx
- Tabs: 12–13

Project climate benefits were calculated according to the Plan Vivo Approved Approach for Climate Benefit Estimation (2017). The climate benefits for the project scenario were calculated using a stock-difference method[6], whereby the difference in carbon stocks before

[6] IPCC 2006, 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Prepared by the National Greenhouse Gas Inventories Programme, Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds). Published: IGES, Japan.

and after deforestation (i.e. forest to shrubland) are calculated for both the baseline and with project scenario on annual basis for the projected duration of the project (30 years). These differences were summed with the CO_2e's of non-CO_2 GHGs created from burning biomass to create a per hectare Emissions Factor (EF) using the equation below:

$$\text{Emissions Factor (EF)} = (\text{CFOR} - \text{CPD}) + \text{LFIRE}$$

Where:
CFOR = Forest carbon stock (sum of all carbon pools, tCO_2e/ha)
CPD = Post-deforestation carbon stock (sum of all carbon pools, tCO_2e/ha)
LFIRE = Non-CO_2 GHG emissions from burning biomass (tCO_2e/ha)

The change in carbon stocks per pool for deforestation, and final emissions factor (EF), are given in table 13.

Table 13. Carbon stocks per pool

Parameter	AGL	NTAGB	DW	BGB	Total	Unit
CO_2e Emissions from deforestation	327.2	14.7	37.9	115.3	495.2	tCO_2e/ha
CO_2e Emissions from burning of biomass	NA	NA	NA	NA	23.1	tCO_2e/ha
Emissions Factor: forest to non-forest	**NA**	**NA**	**NA**	**NA**	**518.3**	**tCO_2e/ha**

- Expected climate benefits. Estimate the climate benefits (carbon benefits) for each carbon pool showing how these were calculated relative to the baseline (In G4) (PV requirement 5.1.3, 5.7, 5.15 & 5.18)

The expected climate benefits for each carbon pool forming the total forest carbon stock are presented in Table 14. The total expected climate benefits were estimated on an annual basis (year = t) by multiplying the forest area from the previous time period (i.e. *t*-1) by the baseline rate of deforestation, and subtracting this value from the forest area at *t*-1 (effectively calculating the area deforested in ha/yr). The same calculation was made, substituting the baseline rate of deforestation for the projected with project rate of deforestation, to calculate the project scenario deforestation (ha) in year t. The products of both calculations were multiplied by the Emissions Factor presented above to calculate the baseline and with project CO_2e emissions for year t. The annual with project CO_2e emissions were subtracted from the baseline CO_2e emissions to calculate the project emissions reductions in year *t*.

- Summary. Calculate the total benefits for all carbon pools combined. Present figures as tCO_2 per year. Include these figures in Table F1. (PV Requirement 5.15 & 5.18)

The expected climate benefits are presented in Table 14.

Sustainable harvesting plans have been presented by each village. Although it is unclear if these will be implemented because of uncertainties in the law (there is currently a moratorium), we have conservatively decided to take these estimates into consideration and subtracted them from project benefits for each village, using principles in approved VCS methodology VM0015.

Biomass density is calculated from Volume Over Bark (VOB) by multiplying this value with the Biomass Conversion and Expansion Factor (BCEF) based on default values provided in the IPCC GL AFOLU. This approach assumes that the definition of VOB in this context is consistent with the definition: "Inventoried volume over back of tree bole, i.e. from the stump or buttress to

crown point or first main branch".

The steps used to convert timber volumes (m^3) into carbon stocks (tC/yr) are the following:

1 – Calculate Volume Expansion Factor (VEF):

for trees with Volume over Bark < 250 m^3 : *Exp(1.300 - 0.209*ln(VOB30))*
for trees with Volume over Bark > 250 m^3: *VEF = 1.9*

2 – Calculate VOB10
3– Calculate Biomass Expansion and Conversion Factor (BCEF) based on values provided in the IPCC GL AFOLU
4 – Calculate above ground biomass density (t/yr)
5 – Calculate aboveground biomass carbon (tC/yr)

Table 14. Baseline and net emissions reductions.

Project Year	Emissions (tCO2e)			Net Emissions Reductions (tCO_2e)	Net Emissions Reductions - Risk Buffer (and long-term wood products) (tCO_2e)
	Baseline Scenario	Project Scenario	Leakage		
0	3,201.62	800.40	320.16	-	-
1	3,184.38	799.33	318.44	2,081.05	598.17
2	3,167.23	798.25	316.72	2,066.61	586.45
3	3,150.18	797.18	315.02	2,052.26	574.81
4	3,133.22	796.10	313.32	2,037.99	563.23
5	3,116.35	795.03	311.63	2,023.79	551.72
6	3,099.57	793.96	309.96	2,009.68	540.27
7	3,082.88	792.89	308.29	1,995.65	528.89
8	3,066.28	791.83	306.63	1,981.70	517.57
9	3,049.77	790.76	304.98	1,967.83	506.32
10	3,033.35	789.70	303.34	1,954.03	495.13
11	3,017.02	788.63	301.70	1,940.32	484.00
12	3,000.77	787.57	300.08	1,926.68	472.94
13	2,984.62	786.51	298.46	1,913.13	461.94
14	2,968.55	785.45	296.85	1,899.64	451.01
15	2,952.56	784.39	295.26	1,886.24	440.13
16	2,936.67	783.34	293.67	1,872.91	429.32
17	2,920.85	782.28	292.09	1,859.66	418.57
18	2,905.13	781.23	290.51	1,846.48	407.88
19	2,889.49	780.18	288.95	1,833.38	397.26
20	2,873.93	779.13	287.39	1,820.36	386.69
21	2,858.45	778.08	285.85	1,807.41	376.18
22	2,843.06	777.03	284.31	1,794.53	365.74
23	2,827.75	775.99	282.78	1,781.72	355.35
24	2,812.53	774.94	281.25	1,768.99	345.02
25	2,797.39	773.90	279.74	1,756.33	334.75
26	2,782.32	772.86	278.23	1,743.75	324.54
27	2,767.34	771.82	276.73	1,731.23	314.39
28	2,752.44	770.78	275.24	1,718.79	304.30
29	2,737.62	769.74	273.76	1,706.42	294.26
30	3,201.62	800.40	320.16	1,694.12	284.29

30 years total:	88,913.32	23,549.29	8,891.33	56,472.70	13,111.16
Mean:	2,963.78	784.98	296.38	1,882.42	437.04
Project per starting hectare:	77.50	20.53	7.75	49.22	11.27

G6 Leakage & Uncertainty

Leakage

The Project area is fully located within the administrative boundaries of Dak Lom, Dak Lieu and Vi Chring Villages. The majority of forest outside of the Project Area within these three villages is under contract with state-owned companies or local authorities, and the villagers receive Payments for Forest Ecosystem Services (PFES) for their protection and sustainable management. Opportunity for leakage is therefore considered low, as displacement of deforestation to forest areas within the village administrative boundaries but in the project area could lead to reductions in PFES. An *ex ante* leakage estimate of 10% of baseline deforestation is therefore applied to the calculation of net climate benefits (Table 14).

A leakage belt has been created by forming a 2 km wide buffer around the PV area, with the PV area subsequently clipped out. FFI surveys revealed that slash and burn/forest clearance has only taken place within the 2 km leakage management area of each village. Due to simple harvesting tools and extremely difficult terrain (i.e. very steep slopes) for timber transport by truck, the logging is restricted to populated areas only. While the national route No.24 may seem convenient for timber haulage by trucks from other regions (over 2 or 10 km), harvesting timber from forests farther way from the national road (if legally and socially acceptable) would be extremely difficult because these forests are far from the national route. So, there is no evidence of any kind of timber haulage trucks accessing the project site, unlike other areas in the Central Highlands.

The project is committed to address leakage by planting timber tree species in agricultural systems and degraded forests. There is a budget for establishment of a native tree nursery that will provide saplings for integration of fast-growing native tree species in agroforestry parklands, homegardens and plantations, and for enrichment planting of economic tree species in degraded mosaic forests. Tree-based land use systems including agroforestry parklands, homegardens and plantations are common practices, which villagers have implemented in the region. The project will also ensure villagers have the skills to establish and manage nurseries, and plant trees in different land use systems. The benefits of increased agricultural yields and other ecosystem services of integrating trees in various land use systems and carbon revenue from forest conservation and restoration will incentivise farmers to conserve their forests.

Each monitoring period the rate of deforestation in the leakage belt will be measured ex post (using the updated Global Forest Watch forest lost data set). Any deforestation above the baseline rate of 0.54% per year (which cannot be attributed to pressures separate from the project) will be considered leakage, and the GHG emissions from this deforestation will be subtracted from the observed GHG emissions reductions from the PV area. Adjustments will not therefore need to be made, as PV certificates will be issued *ex post*.

Monitoring Leakage

Deforestation in the Project Area will be monitored on an annual basis, upon the release of updated data on yearly forest cover loss by Global Forest Watch. The high temporal (annual) and spatial (30x30m) resolution of the GFW data will allow climate benefits, and potential leakage, to be calculated ex post on an annual or bi-annual basis. Local communities are entirely reliant on walking and motorbikes for transport through the landscape to deforest land, and they have a strong community-centred approach to their daily activities, and do not usually spend more than one day away from their home villages. Community members are therefore considered to have a 'cost threshold', which represents the maximum cost-distance local community members will travel, of 2 km. A leakage belt formed of a 2 km buffer around the administrative boundaries of the 3 villages combined will therefore be analysed to measure ex post project leakage.

- Identify where uncertainty exists in the calculations and how this has been taken into account to give a conservative estimate of climate benefits (PV requirement 5.2)

Uncertainty

Uncertainty in the forest carbon stocks (tC/ha) was calculated using simple error propagation (Winrock International, LEAF Technical Guidance Series for the Development of a National or Subnational Forest Monitoring System for REDD+). The 95% confidence interval half width as a percentage of the mean value was calculated for each of the individual carbon pools. The following equation was then used to calculate the total percentage uncertainty:

$$U_{total} = \frac{\sqrt{(U_1 * x_1)^2 + (U_2 * x_2)^2 + \cdots + (U_n * x_n)^2}}{|x_1 + x_2 + \cdots + x_n|}$$

Where:
U_{total} = the percentage uncertainty in the sum of the quantities
X_i = the mean estimate for the pool
U_i = the percentage uncertainties (95% C.I. as a percent of the mean) for the pool

The total percentage uncertainty in the initial forest carbon stocks was calculated as: 6.83%. The project originators consider this level of uncertainty in the initial carbon stock, for a project of this spatial scale, as acceptable, and not requiring of any uncertainty deduction.

The baseline rate of deforestation is based on the long-term average historic deforestation rate in the Reference Area over an 11–year period at 30 m^2 resolution (Section G4). Uncertainty around this parameter is therefore considered zero.

- Identify and list key assumptions used in these calculations. Describe the approaches that will be used to validate these assumptions over the course of the project (including updating the technical specifications) (PV requirement 5.3 & 5.9.5)

The key equations and their assumptions are listed in the excel spreadsheet tool listed below.

Excel Spreadsheet Tool: Hieu_Commune_PV_TechSpec_May2019_v4.xlsx • Tabs: SUMMARY

References

Excel Spreadsheet Tool: Hieu_Commune_PV_TechSpec_May2019_v4.xlsx • Tabs: REFERENCES

Part H: Risk Management

H1 Identification of risk areas

The main risks in this project revolve commodity price fluctuations and how this may affect the continued commitment of communities to remain engaged in sustainable forest management.

H2 Risk buffer

The risk buffer for this project is 20%, as determined by the project risk assessment presented in Table 15 below.

Table 15. Risk buffer

Risk Category	Risk Factors	Risk Mitigation Activities	Risk Category Score
Social	Land tenure rights are disputed	Risk level: Low Project partners will secure Red Books for the project partners in Q2 2019. Red Books are the strongest land tenure rights in Vietnam, and are valid for 50 years.	2
	Carbon rights are disputed	Risk level: Low Rights to carbon will accrue to the villages via the Red Books.	
	Political or social instability	Risk level: Low Levels of Political or social instability are relatively low in Vietnam. Since 2000 Vietnam has consistently ranked above the global mean on the World Bank's Political Stability Index	
	Community support for the project is not maintained	Risk level: Medium FFI has a long-term presence in the project area and has supported various capacity building and technical trainings, and the development of improved community forest governance structures.	
Economic	Insufficient finance secured to support project activities	Risk level: Low FFI (Project coordinator) has a strong track record of securing funding in the project landscape.	3
	Alternative land uses become more attractive to the local community	Risk level: Medium The attractiveness of alternative land uses depends heavily on external market forces, which cannot be mitigated by Project Coordinators. FFI will provide technical support for sustainable livelihoods diversification using a participatory market systems development approach.	
	External parties carry out activities that reverse climate benefits	Risk level: Low Training and initiation of effective community-led forest patrol will deter external parties. There is no wide-scale immigration into the project area.	
Environmental	Fire	Risk level: Low Natural fire poses low threat to the forest type present in the Project Area.	1
	Pest and disease attacks	Risk level: Low Species rich natural forests are not typically threatened by outbreaks of pests and disease. No afforestation/reforestation with single species mixes will be conducted.	
	Extreme weather or geological events	Risk level: Low The Central Highlands Region rarely experiences extreme weather/geological events	
Technical	Project activities fail to deliver expected climate benefits	Risk level: Low FFI's model suite of interventions – including improved community forest governance, securing land tenure, effective forest patrolling, and participatory market systems development – has proven effective in reducing deforestation	2

		in multiple community led projects.	
	Project activities fail to deliver expected livelihood benefits	Risk level: Low FFI's model suite of interventions – including improved community forest governance, securing land tenure, effective forest patrolling, and participatory market systems development – has proven effective in reducing deforestation in multiple community led projects.	
	Technical capacity to implement project activities is not maintained	Risk level: Low FFI maintains experienced project coordinators in Kon Tum Province and full-time biodiversity finance and carbon specialists at the UK HQ. Freely available and easy to use Global Forest Watch data will be used to monitor forest change	
Administrative	Capacity of the project coordinator to support the project is not maintained	Risk level: Low FFI (project coordinator) has a long-term presence in Vietnam and maintains an experienced field team and administrative staff	2
		Total Risk Score:	**20**

Part I: Project Coordination & Management

I1 Project Organisational Structure

- Project coordinator and legal status (PV requirements 3.1 & 3.5)

Land Use Certificates (red book) for stable and long-term use[1] are granted to three villages in the project site, represented by Community Forest Management Boards (CFMB) which were established under the approval of Kon Plong District People's Committee. CFMBs are responsible for conducting forest management activities to ensure compliance with laws and regulations pertaining to the LUCs. The CFMBs will function as the legally recognised community forest management institutions for the purposes of the Plan Vivo project.

FFI has worked in Vietnam since 1997, specifically in Hai Phong, Ha Giang, Cao Bang, Son La, Yen Bai and Kon Tum as per the registration license on the establishment of project offices issued by National Department of Foreign Affairs, Ministry of Foreign Affairs for every five years. With strong focus on primate conservation, FFI currently works on the conservation of seven species of Critically Endangered primate in Vietnam. The programme in Kon Plong district, Kon Tum province has focused on Key Biodiversity Areas where Grey shank douc populations were discovered, FFI has started with the pilot project "Community Carbon Pools Development" since 2011 in partnership with Kon Tum Department of Agriculture and Rural Development (DARD), Kon Tum Forest Protection Department (FPD), DARD, FPD and Kon Plong DPC and that the component contracted with KFW10 is still ongoing to seek carbon certification and climate finance sources for sustainable forest management and biodiversity conservation.

FFI Vietnam has managed many projects in line with governance principles of transparency, accountability, participation, etc; strictly following national regulations and donor requirements. FFI's field staff in Kontum are experienced in facilitating Community Forest Management; and benefit from strong partnerships with the local government.

- Describe the organisational structure for the project and the roles of each organisation involved (use diagrams and tables if necessary) (PV requirement 3.2)

FFI will act as a focal point for project coordination and facilitation, providing a link to the Plan Vivo Foundation, fulfilling administrative, monitoring, reporting and marketing tasks linked the production, verification and sale of Plan Vivo certificates on behalf of communities. As per current regulations, a number of additional organizations will directly or indirectly be involved

as project partners including Kon Tum Department of Agriculture and Rural Development (DARD), Kon Plong District People's Committee and Hieu Commune People's Committee, mostly supporting with coordination and alignment of the project with national and sub-national requirements. None of the partners have commercial interests in the project.

Table 16. Organisations involved in the management of this project

Institutions	Responsibilities	Capacity and experiences
The Community Forest Management Boards (CFMBs)	All aspects of project implementation and periodic monitoring and reporting	• Indigenous knowledge at the project site/community forests; • Growing patrolling, and forest governance skills through trainings provided • Experience and knowledge of opportunities and challenges in livelihoods development
FFI Vietnam	Project coordinator	• FFI's REDD staff team established in Kon Tum in 2011 • Experienced in LUP/FLA, CFM, SFM, REDD, VPA/FLEGT and PFES; • Experienced in project management and implementation; • Knowledgeable in legal frameworks, administrative systems and strong partnerships with local government • Skilled in community engagement, project monitoring and benefits from experience of designing and implementing REDD across 3 continents
District and Commune People's Committees	Support project with various administrative, technical and legal needs, to align project with government priorities and current legal framework.	• Legally capable to support communities with forest patrols and resolving violation cases; • Administratively capable to support in approval procedure e.g. community forest management planning or timber harvesting for local use; • Financially and technically capable to support in piloting sustainable livelihood improvements, e.g. coffee and medicinal plants;
Provincial Department of Agriculture and Rural Development	Administrative support at provincial management level as per the current laws/legal framework.	• Politically willing to support such a pilot project (administrative procedure for carbon contracting process, scaling up, etc.)

- Stakeholder analysis (diagram) (PV requirement 3.6)

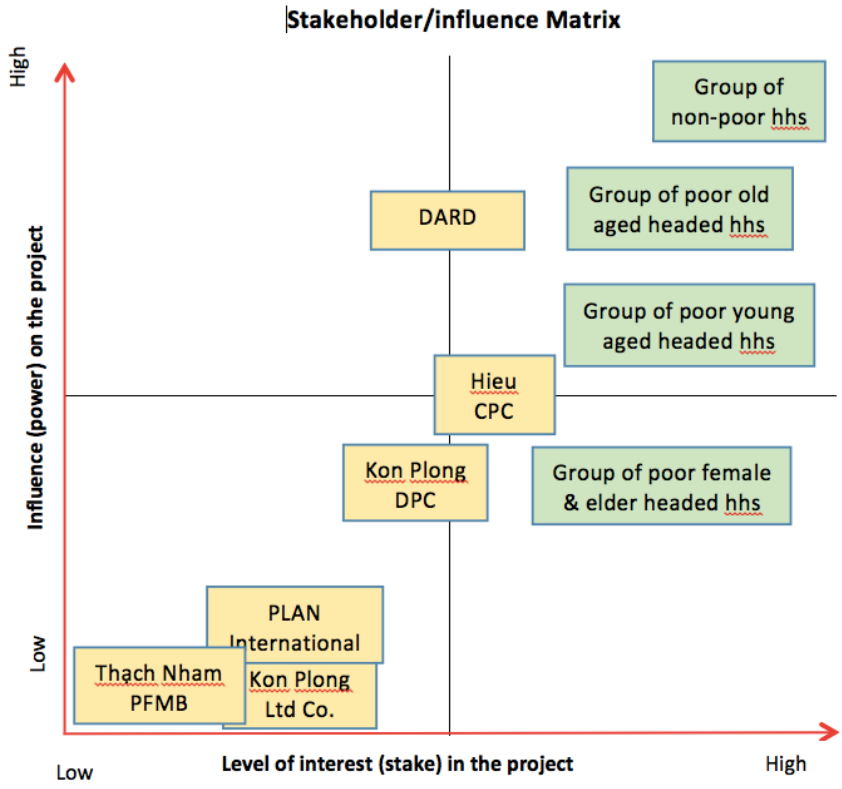


Figure 7. Stakeholder analysis

I2 Relationships to national organisations

- Describe how the project coordinates and communicates with national organisations (especially government)

FFI Vietnam, in particular the country director and Kontum REDD+ project manager are members of the national REDD+ network and therefore regularly communicate with the Vietnam REDD Office (VRO), MARD/ VNFOREST which was established for REDD+ readiness/ preparedness under UNREDD+ support programme. Recently, the Department of Science, Technology and Environment under MARD is in place assigned to manage the mitigation in Agriculture and LULUCF (Land Use, Land Use Change and Forestry).

In Plan Vivo carbon project particularly, FFI has not directly contacted with the Department. Instead, National Management Board of Forestry Projects (NMBFP) as a contractual partner of FFI under MARD is responsible for directly liasing with the Department i.e submitting the contract and project deliverables to the Department for verification and approval: Contract, inception report, benefit sharing mechanism and PDD. It means that the Department on behalf of MARD administers project level REDD+.

At the subnational level, it has its field office in Kontum and works closely with relevant state organizations (DARD, FPD, Kon Plong DPC, Kon Plong DPC managed CPCs, Thach Nham Protection Forest Management Board) through a long-standing and collaborative partnerships.

- Describe (if any) linkages between the project and other government schemes or projects.

The project will fit under Decision No 419/QD-TTg dated April 5, 2017, approving the national

program on GHG emission reduction from deforestation and degradation, conservation and enhancement of forest carbon stocks and sustainable forest management planned until 2030. The project can also be regarded as a pilot on payment for the regulated service of five PES "Absorbing and storing carbon of forests; reducing greenhouse gas emission by limiting forest loss and degradation; sustainable forest management and green growth" that MARD is responsible for, according to the article 57, Decree No.156/ND-CP dated 16/11/2018 on specific regulations on the implementation of forest law.

I3 Legal compliance

- Describe how the project will meet any legal requirements of the country. Include any written approval from government for the project if required. (PV requirements 3.7 & 3.8)

Currently, there is still no law which describes the ownership and transfer of carbon rights in Vietnam. However, the authority over voluntary market carbon transactions (internationally or domestically) is covered in the principle No.3 for the payment for forest environmental services, forest law[2]. That is currently the legal basis for project development. Furthermore, the project is supported by the contract coded 42/HDTV-KFW10 dated March 30, 2018 made between FFI and Management Board of Forestry Projects, the Department of MARD.

With regards to Vietnam NDC, it ever had 254 Clean Development Mechanism (CDM) projects accredited and registered by the CDM Executive Board (EB) as of June 2015. By this time, Viet Nam is ranked number four internationally for number of projects, with a total GHG reduction amount of approximately 137.4 million tCO2e in the credit period. Among the 254 projects, reforestation and afforestation projects account for 0.4%.

Viet Nam has made significant efforts in forest protection, afforestation and reforestation, and is one of the countries participating in Reducing Emissions from Deforestation and Forest Degradation, sustainable management of forests, conservation of forest carbon stocks and enhancement of forest carbon stocks and enhancement of forest carbon stocks (REDD+). Viet Nam is developing and preparing for the implementation of Nationally Appropriate Mitigation Actions (NAMAs), as well as the registration and implementation of carbon credit projects according to the Verified Carbon Standard (VCS) and the Gold Standard (GS).

FFI will support target communities to secure the necessary permits and approvals to comply with carbon trading requirements.

- Outline the policies of the project coordinator to ensure equal opportunities for employment and any other legal compliance (PV requirements 3.13-3.15)

FFI values diversity and is committed to equality of opportunity. FFI is committed to making full use of the talents and resources of all its employees, and to ensuring that no job applicant or employee receives unjustified less favourable treatment on the grounds of their colour, creed, nationality, descent, race, religion, ethnic origin, political opinions, disability, gender, gender identification, age, height, weight, marital status, part-time or fixed term status, parental responsibilities or sexual orientation.

I4 Project management

- Give a timeline (approximate) for project establishment, piloting, scaling up and monitoring

Since the contract was officially signed in early 2018, FFI has started with project design

including community consultation, carbon survey/accounting, PDD preparation, registration & validation, Plan Vivo certificate issuance, fundraising and marketing. In parallel, the KFW10 project is responsible for part of it by securing land use certificates and CFM activities (I.e. forest patrol, community forest management planning, microfinance, etc.). The table below presents a proposed timeline towards landscape-level subnational REDD implementation.

Time frame	Roadmap for sustainable pilot modelling and subnational REDD development and biodiversity conservation
4/2018 - 3/2020	Project establishment: Community consultation, Forestland allocation, Forest protection, Sustainable forest management planning, carbon survey/accounting, PDD preparation, registration & validation, Plan Vivo certificate issuance, fundraising and marketing
4/2021 - 4/2025	Scaling up: to the total 11 villages in Hieu commune (approximately 19,000 ha forestland) and gradually working toward the whole Kon Plong district where are 89 villages which have similar environmental, cultural, social and economic conditions. However, it will not happen until more financial resources are secured e.g. the Green Climate Fund/FAO funded project "Achieving emissions reduction in the Central Highlands of Vietnam to support National REDD+ Action Programme" in the period 2020-2025.
3/2020 - 4/2025	Monitoring: This activity is carried out as per the project monitoring plan every year.

- Describe the project record keeping system (PV requirements 3.11 & 3.12)

As part of the project record keeping system, FFI will develop the project database system. Electronic and hard copies of project files and documentations such as village forest zoning map, GIS/SMART software and smartphone with Cybertrackers for patrol data storage, records of community consultation, results of survey and monitoring, photos, reports of project activity, PES agreement, and financial disbursement records, and records on grievance handling will be stored at CFMB office and FFI field office. Additionally, the electronic files will also be stored at FFI Hanoi office. The data base system will be checked updated on monthly and/or quarterly basis.

At the same time, FFI Vietnam usually possesses different projects in different locations and that each is named a code particularly. In term of financial project management, FFI has its own accounting system with transparent, specific, and accountable procedure including regulations (e.g. cost-norm, voucher/invoice, delegation of approval authority) for disbursement.

Annual workplan including budgeting is developed, and the disbursement based its own cost-norm is followed with monthly documentation of operational costs and backup as per its financial regulations. The share of FFI from carbon sale is not enough for its operation for sure; and fundraising need to be continued to secure additional sources to sustain the project and to scale it up as well.

- Describe who will be in charge of business development, sales and managing transactions on the Markit environmental registry (Markit)

I5 Project financial management

- Describe the mechanisms for disbursement of PES funds (PV requirement 3.9)

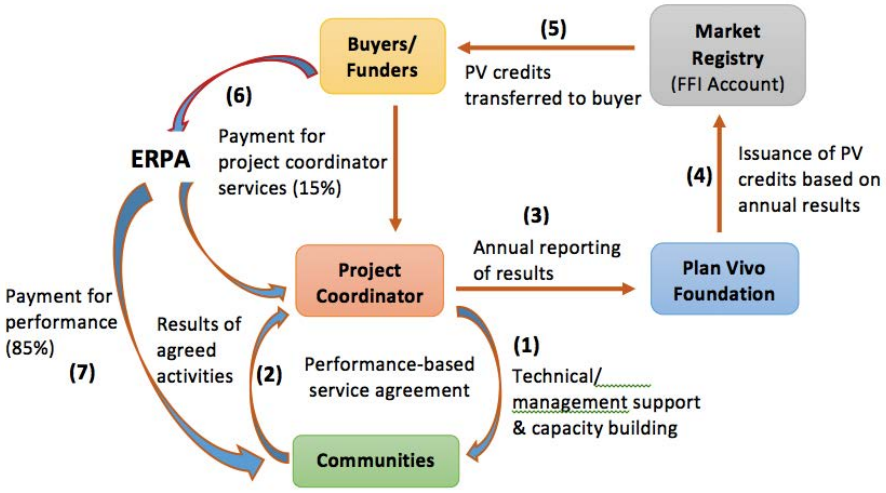


Figure 8. Contracting structure

Under Vietnamese law, International NGOs (INGO) operating in Vietnam are not allowed to conduct profit-based activities. As a carbon sale agreement is regarded as a commercial activity, FFI cannot receive direct payments for carbon credits. FFI has therefore set up two potential payment models. In the first model (Figure 8), the CFMBs of Dak Lom, Dak Lieu and Vi Chring villages would sign ERPAs directly with buyers, while communities and FFI would enter a performance-based service agreement. Although FFI would not be a signatory in the ERPA, there are various safeguards included in the text of the ERPA, to ensure that FFI provide project coordination support and to ensure adherence to the requirements of the Plan Vivo Standard.

As legally regulated, the project village community represented by the CFMB legally approved by the district authority, is recognized as a legal entity/Civil law, a forest owner/Forest law and a land user/Land law over the located forestland that is able to enter into sale agreements. The CFMBs have set up a bank account with Agriculture and Rural Development Bank in Kon Plong district under their names. In this model, a 'performance-based service agreement' is signed by FFI and the community. This includes all the key components that would have been in the PES agreement with the only exception that there is no transition of carbon rights to FFI and sales of carbon credits are not made directly by FFI. Communities then sign an ERPA with a buyer. It is purely a transaction, and FFI is not a signatory. However, there are various safeguards included in the text of the ERPA, such as the requirement that FFI provide project coordination support to the project, to ensure adherence to the requirements and recommendations of the Plan Vivo Standard[1]. Both the performance-based service agreement and the ERPA should be legal documents.

The performance-based service agreement must provide assurance that the requirements and recommendations of the Plan Vivo Standard are met. Examples of key elements that should be included are as follows (not an exhaustive list):

Roles and responsibilities of the two parties:

- Agreed community activities under the Plan Vivo and expected outcomes
- Agreed technical and administrative support activities by FFI
- Performance monitoring targets, procedures, and timetable
- Payment schedule
- Details of link between performance thresholds (100% target met; 50% target met, etc.) and payment thresholds

What will make this document different from a 'traditional' PES agreement is that it will

include:

- Commitment by FFI to market the project and facilitate negotiation of ERPAs directly between buyers/funders and communities;
- Commitment by FFI to guarantee a minimum payment (60%) to communities from grant funds ('minimum payment'), in the case that a buyer is not found - this would be a grant to the community with donor funds and it should be made clear in the contract that there is no link to carbon credits. It should be clarified to PV how the level of the 'minimum payment' has been set to ensure that it is sufficiently meaningful to the communities. At a minimum, this payment will need to cover all forest patrolling costs.
- If an ERPA is signed between the community and a buyer that is of greater value than the FFI 'minimum payment', then this will replace the 'minimum payment' for the duration of the ERPA.
- If a 'minimum payment' using grant funds is paid by FFI, but an ERPA is signed shortly after (in the same reporting year), the grant funds should be returned into the FFI managed PES Fund once the larger ERPA payment has been received to avoid over payments in a single year. This will also enable the stock of grants funds to be replenished to provide guarantee in future years. The two streams of finance (minimum grant payment and actual income from a buyer) will be treated separately.

As the carbon benefits achieved, are not transferred to FFI in the proposed model, Plan Vivo cannot issue PVCs into an account owned by FFI. As discussed, this could be easily resolved by a) issuing into an account owned by the participant or by b) including a waiver in the performance-based service agreement where FFI waive any claim to the PVCs. Option b will still be viewed by the Vietnam Government as FFI holding rights over the carbon. In addition, only communities are likely to be able to open Markit accounts as community forestland certificates (license) and PES license holders. Therefore, FFI will adopt option a.

FFI is responsible for overseeing project MRV and reporting to the Plan Vivo Foundation, and needs to retain its role in ensuring that certificates are only issued upon performance targets being met. For this reason, the request for certificate issuance will not be made by communities, and PV will in practice be issuing into community Markit accounts on the instruction of FFI. FFI can demonstrate permission to make this request by writing a clause into its performance-based service agreement with the communities. FFI will also include a short letter of confirmation (or other form or declaration) that the request is being made on behalf of the communities in the annual reports.

It is definitely understood that buyers may want to transfer one or more years of payments upfront, and also prefer not to make transfers to two different entities; i.e. community (min 60%) and FFI (max 40%). FFI proposes that funds are paid into an Escrow account, managed by a third-party Escrow service, and money is held there until targets are met, monitored and reported on and the time has come for payments to be made.

It is also understood that being very clear about performance thresholds and payments levels in the ERPA may make risk of non-delivery more obvious to potential buyers. However, this risk will exist with any project and probably it is better to look for buyers that understand that. Definitely all ERPAs should be very carefully examined to ensure buyers do not try to introduce clauses that put communities at risk in situations of non-delivery.

The language in the ERPA could refer to FFI providing project coordination services in support of the community. The text of the ERPA would need to make clear this support contributes to FFI's core conservation mission and contributes to meeting direct costs of project support at zero profit to FFI. Any income to FFI from this type of agreement would be defined as 'primary

purpose' (i.e. contributes to FFI's core mission), and would not be subject to income tax in the UK. At the time of writing, FFI is still discussing the finer details of this contracting structure with the Plan Vivo Foundation and it is understood that some revisions to this proposed model are likely to occur.

[1] Note that under this model, it would be preferable if communities could sign an ERPA with a SINGLE buyer. This would be a lot less complex to administer than the community entering multiple ERPAs for different amounts and timeframes. Therefore, the aim should be to find buyers that are large enough to absorb credit total annual credit generation capacity of one/more communities for duration of the ERPA.

- Show the project budget and financial plan (PV requirement 3.10)

Because the project is expected to scale up to 11 villages. Table 16 presents a conservative estimate of the annual budget for development and expansion as well as potential revenues from sales of Plan Vivo certificates.

Table 17. Annual Project Budget and Financial Plan (in USD)

No	Description	Unit	Total	Financed by FFI
1	**Project areas:**			
1.1	No. of village/community forests (CF)	CF	1	
1.2	Area	Ha	1,238	
1.3	ER's (CO2-e) estimated	Tonnes	546	
1.4	Risk Buffer	percent	20%	
1.5	ER's (CO2-e) for sale per year	Tonnes	437	
1.6	Carbon price	per tonne CO2-e	18	
2	**Project costs:**			
2.1	Project development	USD		83,333
2.2	Project replication/expansion (USD 50,000 per CF)	USD		350,000
	AgroForestry (Coffee and medicinal plants)			37,601
	Assisted Natural Regeneration			13,824
	Annual ongoing costs			
2.3	Estimated Payments for Ecosystem Services	USD	6,686	
2.5	Project management/coordination (USD 5,000 per CF)	USD	5,000	
2.6	Plan Vivo issuance fee (0.4 USD per tonne)	USD	219	
2.7	Verification (estimated at 4,500 USD every 5 years)	USD	900	
	Sub total	USD	12,805	
3	**Annual project revenues**			
3.1	Carbon sales	USD	7,866	
3.2	Donor funds already secured for PES payments	USD	16,000	
	Sub total	USD	23,866	

Initially it may be anticipated that the ongoing incomplete disbursement of KFW10 funds (CFM & VDF) supported to the project communities (Dak Lieu: 18,028 EURO, Dak Lom: 28,771 EURO and Vi Chring: 67,051 EURO) would leave a part of it for each village after the project terminated in year 2021; and that is regarded as a co-fund source for the Plan Vivo project. Additionally, KFW Village Development Fund are available to develop agroforestry plot and enrichment planting in the three sites. Besides, FFI has still been seeking fundraising for additional support to the project and enlargement of the pilot model at subnational REDD.

Project Financial Sustainability:

At the current pilot stage of the project, FFI will provide grant funding to cover the PES payments during the year 2021. From 2022, the revenue from carbon credits sales will be sufficient to cover PES payments. FFI will continue to provide staff time in-kind to cover the project monitoring costs. By 2025, annual surplus over the 5-year period (2021-2025) is estimated to cover the verification cost. In case this surplus is insufficient, FFI is committed to securing fund to cover the verification cost in 2025.

	CASH INFLOW							
1.1	Carbon revenue	-	-	-	7866	7866	7866	7866
1.3	Grant funding : KFW REDD+ project dev	41667	56667	-	-	-	-	-
1.4	Grant funding: KFW Village Dev Fund	-	-	12534	12534	12534	-	-
1.5	Grant funding : KFW Enrichment (ANR)	-	-	4608	4608	4608	-	-
1.6	FFI in-kind staff	-	-	5000	5000	5000	5000	5000
1.7	FFI Grant support	-	-	16000	-	-	-	3000
	TOTAL CASH INFLOW	41667	56667	38142	30008	30008	12866	15866
	CASH OUTFLOW							
	Project Expenses							
2.1	REDD+ Project Development	41667	41667	-	-	-	-	-
2.2	Project Replication	-	-	-	-	-	-	-
2.3	Agro-Forestry (coffee, medicinal plant)	-	-	12534	12534	12534	-	-
2.4	Assisted Natural Regeneration (ANR)	-	-	4608	4608	4608	-	-
	REDD+ Project On-going expenses							
3.1	PES payment	-	-	6686	6686	6686	6686	6686
3.2	Project monitoring	-	-	5000	5000	5000	5000	5000
3.3	Plan Vivo issuance fee	-	-	-	218.5	218.5	218.5	218.5
3.4	Validation cost	-	15000	-	-	-	-	-
3.5	Verification cost	-	-		-	-	-	15000
	TOTAL CASH OUTFLOW	41667	56667	28828	29046	29046	11905	26905
	Opening Balance	0	0	0	9314	10275	11237	12198
	Net Cash Flow	0	0	9314	10275	11237	12198	1160
	Closing Balance	0	0	9314	10275	11237	12198	1160

I6 Marketing

FFI has a multi-pronged approach to the marketing of the project and eventually its Plan Vivo certified ERUs or 'credits'. FFI will undertake marketing primarily through FFI's own communication and social media channels, and via our vast network of supporter, donors, partners and counterpart. We may also explore options for third-party marketing support, and/or brokerage services. In terms of potential buyers, FFI has identified the following as being the best (most likely) candidates, and then where FFI will also decide its time and energy, in terms of marketing and in some cases approaching potential buyers directly:

1) The National Payment for Forest Ecosystem Services (PES) system, and within that the new Carbon-PFES (C-PFES) pilot. Under this pilot, which is not (yet?) in Kon Tum, emitters from transport and cement industries will pay for forest protection, much like the current system with hydro-dams paying for watershed protection. These are huge funds, putting more money into forest protection than the normal state budget, and now carbon is going to be the next 'big thing'. It is basically going to be a domestic carbon market;

2) Domestic (Vietnamese) corporate buyers: FFI may not need to go via any designated 'market-place' and instead may find buyers among Vietnamese companies and corporations. The FFI Vietnam Programmes already has philanthropic relationship with some of Vietnam's largest companies, and through them also the contacts and networks of a very significant number of additional companies. Our current donors include travel companies, airlines, retail, banks, etc

3) FFI's global network, trusts, foundations, private donors etc. – as referenced above.

4) The voluntary carbon market - OTC / via brokers

I7 Technical Support

- Describe how continued technical support and capacity development will be provided for project participants

Technical support will be provided primarily by the field team and the Conservation Finance and Enterprise Team based in the UK through ongoing sustainable livelihoods and enterprise development support.

Part J: Benefit sharing

J1 PES agreements

PES agreement signing will take place after the completion of the following steps have been achieved:

1. Formal tenure/management right under the form of Red Books has been approved by the government or progressing toward finalisation for all three villages;
2. Zoning and delineation of boundaries of project area (Plan Vivo) are completed, in line with the Red Book 5-year forest management plans;
3. Calculation of estimated net emissions reductions is finalised and communicated to project participants;
4. Completed project designing phase (drivers and project activities identified; benefit sharing inc. performance indicators and payment thresholds, monitoring, and governance structure developed).
5. Project participants understand the requirements of and consent to a PES agreement (FPIC);

In parallel, intensive facilitation will be provided to ensure the CFMB members are able to perform community-level coordination functions. These include planning, implementation, and reporting of project activities. Specific attention will be given for the CFMB to be able to assess and report project performance against target indicators that will trigger payment. This includes undertaking corrective actions as necessary. In the case of failure of meeting performance targets, the duration of PES agreement will be

extended to allow corrective actions.

The main risks identified pertain to market uncertainty, and internal conflict within the communities. To mitigate against the potential difficulty in finding buyer of carbon credits or in securing a high enough carbon credit sale price, FFI aims to continue to secure grant funding to support the site. To mitigate against the possibility that financial benefit sharing distribution leads to internal conflict within the communities, FFI has put in place a grievance mechanism to be able to resolve any issues as soon as they arise.

J2 Payments & Benefit Sharing

As results of community consultation exercises, the project villages are consent to the benefit sharing mechanism as described below.

i. **Objective:** The revenue from the sale of carbon credits (including other fund sources to the project villages in the same purposes) is used for forest protection and livelihood improvements associated with well-being enhancement.
ii. **Manner of payment:** Payments will be in cash, and directly delivered to every households to cover the expenditures of the CFMB and forest patrols; and the remainder will be for livelihood improvements and transferred to community bank accounts.
iii. **Schedule of payment:** June and December each year.
iv. **Transaction account**: the VDF accounts already established in the three villages (under a KfW10 project).

Payment structure

Due to the small scale and limited carbon revenue of this project, the project villages will receive 85% of the proceeds in order to provide sufficient spending for the project activities e.g. forest patrol. The project coordinator (FFI) will finance its activities, partly through carbon revenues (15% of the proceeds), and partly through grant financing. FFI will further consult the local government to scale the project to the level of the whole Hieu commune, or larger (for Kon Plong district or Kontum province) in order to achieve economies of scale.

The project villages manage the protection of forest blocks of varying sizes and carbon content, the allocation of revenues from the sale of carbon credits will be proportional to that. Due to this, the payment structure is different between villages, especially the expenditure of the CFMB operations, the project activities (i.e. forest patrol) and the livelihood improvements Dak Lom and Vi Chring, allocate most of the revenues to livelihood improvement, made available through the VDF. Dak Lieu however, in reflection of the lower amount of carbon revenues, see most of those allocated to forest patrols with only optional payments into the VDF by any household inclined (see Figure 9). A series of community consultations will be launched for communities to devise performance indicators, post validation.

To ensure transparent and equitable benefit sharing distribution, regular community consultation meetings will be organised to discuss issues as they emerge. Any individuals in the community is also encouraged to raise questions, complaints and/or suggestions trough the agreed grievance mechanism.

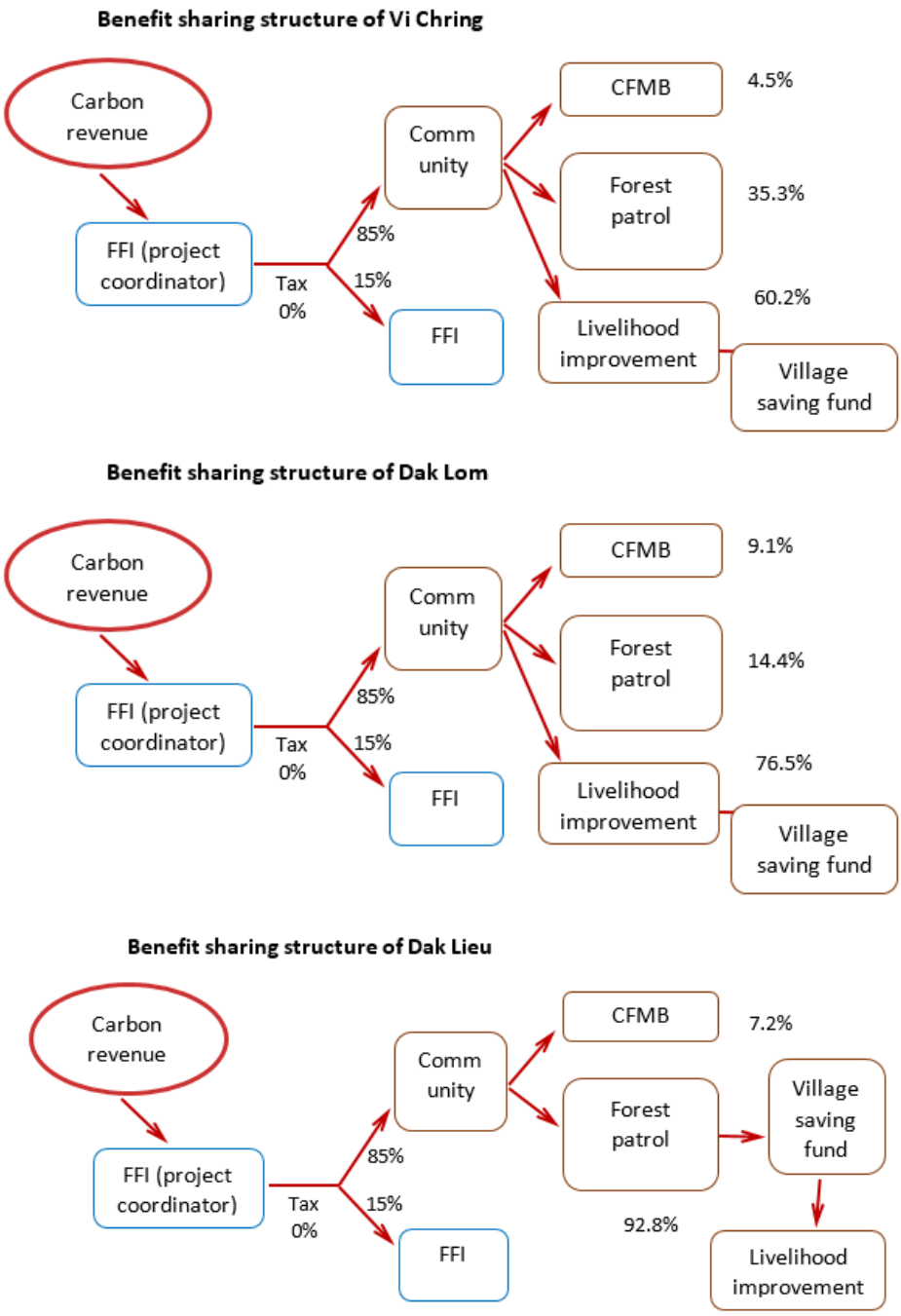


Figure 9. Benefit sharing structures in the three focal villages

Part K: Monitoring

K1 Ecosystem services benefits

Project monitoring will be carried out monthly and annually through a community based and participatory monitoring approach. The monitoring activities will not only be conducted in the project area (protection zone), but also in the leakage zone (rehabilitation zone) to minimise the risk of leakage, and to ensure forest protection goals are achieved.

Two periodic monitoring activities will be performed, specifically the monthly monitoring and the annual monitoring. The monthly monitoring will be conducted by the communities that form the forest patrol teams. Forest cover and presence/absence of trees will be the related monitoring indicators, with deforestation measured by area of forest cleared, and degradation measured by the numbers and diameter at base of trees

felled for carbon monitoring.

The monthly monitoring carried out by the aforementioned community forest patrols will mark the location of cleared forest and trees. The patrols will record perimetre coordinates for calculation of cleared forest areas and the location and diameter at base of felled trees using Cybertracker/smartphone on/offline GIS/SMART system. As online condition is available (at Hieu CPC Office only), smartphone stored data by the patrol teams will be automatically uploaded onto the GIS/SMART system. The project coordinator/FFI will aggregate quarterly monitoring reports and submit an annual report to the Plan Vivo Foundation for approval.

To check the robustness of forest patrols and patrol data, the project will provide ongoing oversight via FFI's full-time SMART/Community Patrol Team Coordinator. The SMART Coordinator will check and support analysis of all data collected, and will also compare monthly SMART and GPS records to ensure that patrols are taking place, in accordance with the contracts and patrols protocols. The SMART Coordinator, along with other project / field staff, will also undertake regular visits to check and support the CFMBs (i.e. on their patrol performance, data collection, recording and reporting). Additional training will also be provided to build capacity.

The annual monitoring will be carried in conjunction with the FFI team, who will visit the Permanent Sampling Plot (PSPs). The annual monitoring will resurvey 20% of all PSPs so that, within five years, the whole PSPs will be monitored entirely. At least three PSPs will be monitored annually. PSPs will be randomly selected. The use of remote sensing analysis to monitor land cover changes will also be conducted annually with Landsat 8 satellite image (30m spatial resolution – Hansen/Global Forest Watch). Field monitoring will be used to validate remote sensing analysis in the project areas.

Along with the satellite images, habitat photos will also be analysed. Habitat photos will be taken at fixed points that capture PSPs and other forest conditions. Photos are taken and compared every year. This technique is called Fix Photo Points (FPPs).

K2 Socio-economic impacts

A participatory well-being assessment (PWA) will be completed in the 1st year of the crediting period. PWA will be repeated every 5 years. The result of the assessment is locally defined well-being categories and indicators (Table 2). The number of households belonging to each well-being categories was subsequently assessed. The monitoring will focus on the change in number and percentage of households falling into the most vulnerable category (poor). The project is expected to improve community well-being by contributing to reduction in the number of poor households. The results of the monitoring will be used to inform improvement of project design (e.g. project activities, benefit sharing, and grievance mechanism).

Household surveys conducted at the beginning of the project will be repeated every 5 years. These surveys assess household assets, income, and spending; and are followed by an assessment on how change is affecting and affected by project activities. The result of household surveys will complement the results of PWA to inform overall project design improvement.

Table 18. Socio-economic monitoring plan

Type of monitoring	Indicator	Methods	Indicator unit	Frequency	Intensity	Responsibilities
Socio-economic	Alternative livelihoods increasingly introduced Percent of households involved	Data are recorded periodically	Number of hectares of coffee Number of hectares of medicinal plants Total number of buffalo, cow and pig	Annual	Community-wide	Head of CFMB
Social	Strengthening of Community	Keeping a record of	Number of problems	Annual	Community-wide	Head of the CFMB with

	Forest Management Board/law enforcement	village meeting attendance and minutes in which forest management is discussed	encountered and number of problems solved			technical support of FFI team (Excel Database)
Social	Strengthening of law enforcement in partnership with local governments	Keeping a record of violation cases which are legally resolved by CPC & DPC	Number of violation cases reported by CFMB Number of violation cases resolved by CPC & DPC	Annual	Community-wide	Head of the CFMB with technical support of FFI team (Excel Database)
Socio-economic	PES funds spent as agreed on BSM	Book keeping and financial reporting	Number of Vietnamese Dong (VND) spent for different purposes	Annual	Community-wide	Head of CFMB
Socio-economic	PES fund and other financial sources mobilized for livelihood improvements	Data is recorded periodically	Number of hhs who loan from Village Saving Fund (VSF) and the Bank for the Poor Total sum of loaned money	Annual	Community-wide	Project coordinator
Socio-economic	Household survey	Questionnaire survey	Assets, income and expenditure and participation in activity groups	Every 3 to 5 years	Across the whole community	Project coordinator
Socio-economic	Well-being assessment	Participatory approach	Based on criteria identified by the communities themselves	Every 3 to 5 years	Across the whole community	Project coordinator
Leakage mitigation	Awareness raising and capacity building activities	Training and awareness raising events	Number of participants with attention to representation from all activity groups and when possible members from adjacent communities and local authorities	On-going	Community-wide and when possible including neighbouring communities	Project coordinator, local partners and local authorities

Table 19. Well-being indicators used as part of the socio-economic monitoring plan

Dak Lom Village

Criteria	Non-poor	Old age headed Poor	Young age headed Poor with sufficiency of productive land	Young age headed with insufficiency of productive land	Female headed poor
House	Good stilt house	Good stilt house	Homeless (shared with	Homeless (shared with	Degraded stilt house

			their parent)	their parent)	
Productive land	Sufficient (with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)	Sufficient (with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)	Sufficient (with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)	Insufficient (less than 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)	Sufficient (with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)
Buffalo/cow	3-4/hh	2/hh	0	0	2/hh
Motorbike	1 motorbike/hh	No motorbike	1 motorbike (50%)	1 motorbike/hh (50%)	No motorbike
Food security (paddy)	Adequately self-subsidized	Adequately self-subsidized	Adequately self-subsidized	50% is adequately self-subsidized	Adequately self-subsidized
Nutrition (fresh meat or fish meals)	3-4 fresh meat or fish meals per week	2-3 fresh meat or fish meals per week	1-2 fresh meat or fish meals per week	1-2 fresh meat or fish meals per week	1-2 fresh meat or fish meals per week

Dak Lieu village

Criteria	Non-poor	Old age headed Poor	Young age headed Poor	Female headed poor
House	Good stilt house	Good stilt house	Good stilt house (50%)	Degraded stilt houses
Productive land	Sufficient (i.e with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)	Sufficient (i.e with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)	Insufficient	Sufficient (i.e with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)
Buffalo/cow	>=3/hh	1-2/hh	1-2/hh	1-2/hh
Motobike	1 motobike/hh at least	1 motobike/hh (30%)	1 motobike/hh	None
Food security (paddy)	Adequately self-subsidized	Adequately self-subsidized	Lack of food within 1-2 months a year	Adequately self-subsidized
Nutrition (fresh meat or fish meals)	3-4 fresh meat or fish meals per week	2-3 fresh meat or fish meals per week	1-2 fresh meat or fish meals per week	1-2 fresh meat or fish meals per week

Vi Chring village

Criteria	Non-poor	Old age headed Poor	Young age headed Poor	Female headed poor
House	Good stilt house	Good stilt house	Good stilt house (50%)	Degraded stilt houses
Productive land	(80%) sufficient (i.e with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)	Sufficient (i.e with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)	Insufficient land	Sufficient (i.e with 0.2-0.3ha wet-rice and 0.2-0.3ha hilly farmland/hh)
Buffalo/cow	1-2	1-2	1-2 (50% only)	1-2
Motobike	1 motobike/hh (100%)	1 motobike/hh (60%)	1 motobike/hh (60%)	1 motobike/hh (50%)
Food security (paddy)	Adequately self-subsidized	Adequately self-subsidized	Adequately self-subsidized	Adequately self-subsidized
Nutrition (fresh meat or fish meals)	5 fresh meat or fish meals per week	2-3 fresh meat or fish meals per week	2-3 fresh meat or fish meals per week	1-2 fresh meat or fish meals per week

K3 Environmental and biodiversity impacts

Monthly biodiversity monitoring carried out by community forest patrol teams will mark the location and number of encounters with high conservation value (HCV) species and threats to biodiversity (e.g. cleared forest and trees, poaching, fire). The patrols will record geo-coordinates for the location using smartphone/Cybertrackers. These monitoring indicators are presence-absence of HCV species and incidence of threats.

Biodiversity monitoring will be focused on Vi Chring village only where Gibbons (Northern yellow-cheeked Gibbon) and monkeys, especially Grey-Shanked Douc, the project's flagship species were previously discovered under EU-REDD+ project, and detected during forest patrols recently. As for plants, *Cinnamomum parthenoxylon*, *Talauma Gioi, Dacrydium pierrei/*red pine as commercially valued species are endangered. These animal and plant species will be monitored by CFMB every year. A comprehensive list of forest/carbon, and biodiversity indicators are listed in Table 3 below.

Biodiversity monitoring as a part of forest patrol and its data collection, collation and reporting process is as aforementioned.

Monitoring type	Indicator	Methods	Indicator unit	Frequency	Intensity	Responsibilities
Forest	Forest cover change	satellite imagery data	Number of hectares of cleared/burnt forest	Monthly	Dak Lom & Dak Lieu: 7km and Vi Chring village: 10km long patrol route 5 batches at least every month	Community patrol with technical support of FFI team
Forest	Forest condition (degradation)	SMART patrols	Number of felled trees	Monthly	Dak Lom & Dak Lieu: 7km and Vi Chring village: 10km long patrol route 5 batches at least every month	Community patrol with technical support of FFI team
Forest	Leakage monitoring	SMART patrols and satellite imagery data	Number of hectares of burnt and cleared trees in leakage zone	Monthly	Dak Lom & Dak Lieu: 7km and Vi Chring village: 10km long patrol route 5 batches at least every month	Community patrol with technical support of FFI team
Forest	Carbon stock monitoring	Re-measurement of permanent sample plots (PSPs)	Number of hectares of cleared forest and number of felled trees	Annual	20% of PSPs	Community patrols with FFI team
Forest		Plot conditions as documented by fix-point photography (PSP).	Extent of cleared areas/intact areas	Annual	20% of PSPs	LDPHD and FFI
Forest	Leakage mitigation	Data is recorded periodically	Number of community members involved in	Every 5 years	Forests of Mang La SFE and Thachnham	FFI

			livelihood and rehabilitation activities		PFMB under contract with three villages	
Biodiversity	Primates and particularly Grey shank douc population	SMART patrols	Number of recorded individuals	Annual	Vi Chring community forest only	Community patrols with technical support of FFI team
Biodiversity	*Cinnamomum parthenoxylon*, *Talauma Gioi*, *Dacrydium pierrei*/red pine	SMART patrols	Number of recorded individuals with diameter >=30cm (commercially valued diameter)	Annual	Vi Chring community forest only	Community patrols with technical support of FFI team
Biodiversity	Reduced threats (encroachment, poaching, illegal, logging, human wildlife conflict, fire)	SMART patrols	Incidence of	Monthly	Dak Lom & Dak Lieu: 7km and Vi Chring village: 10km long patrol route monthly	Community patrols with technical support of FFI team
Biodiversity	Encounter rates of high conservation value species – HCV (see list in biodiversity section of this document)	SMART patrols	Frequency of sightings per HCV species	Monthly	Dak Lom & Dak Lieu: 7km and Vi Chring village: 10km long patrol route monthly	Community patrols with technical support of FFI team

All above indicators will be monitored to compile annual reports. The first and third environmental indicators - forest cover change and leakage monitoring - will be the main indicators used to quantify the project's emissions reductions and therefore be used to establish the number of credits issued. Every year, deforestation rates for the previous year will be recalculated, with the expectation that the project will be able to achieve a reduction of approximately 75% in deforestation rates against a 0.54% deforestation rate baseline. This means we can expect a decrease from 6.7 hectares of conversion per year to about 1.7 hectares of conversion per year within the project site.

A number of both environmental and socio-economic indicators, but the results from the SMART patrols in particular will be used to re-assess whether the main driver of deforestation remains clearance for cassava fields.

Annexes

Annex 1. List of key people involved with contact information

Mr Dang Thanh Liem, National Coordinator, FFI Vietnam

Liem has been working with FFI since the inception of the Community Carbon Pools Programme in Vietnam in May 2011 acting as National Project Manager/National Coordinator. He has a Bachelor of Science in Forestry and 20 years' experience working in the forestry sector, including in the areas of Natural Resource Management, Community Forest Management, Land Use Planning, Land Allocation, Forest Policy Development, Forest Law Enforcement Governance and Trade (FLEGT), Monitoring and Evaluation, lately especially related to REDD. He has held project management positions for 10 years with much experience in human resource management, project planning, supervision and reporting. He has technical expertise in the preparation of training materials, guidelines and policy briefs; and training/coaching of local partners and project staff in community forest management, land use planning, land allocation and social thematics in REDD. He has in-depth knowledge of Vietnam legal frameworks mostly for land tenure and forest management.

Mr Pham Hai Giap, Carbon Inventory Officer, FFI Vietnam
Assigned to take the responsibility for carbon work. He has a Bachelor of Science in Environment and Forest Resources Management. He has 5 years' experience in forest inventory while he has worked for subFIPI (Forest Inventory and Planning Institute in the Northern-Central Region), specifically expertised in using inventory equipment and software application for mapping Mapinfo, Arcview and GPS as well. He has experienced working with multi-governmental organizations and forestry development projects. He has recently proved to be very capable in carbon inventory and possesses a high sense of responsibility e.g. independently working to provide training/coaching, elaboration of carbon inventory guideline and mapping.

Miss Nguyen Thi Tien, Biodiversity Conservation Officer, FFI Vietnam
Assigned to take the responsibility for HCVF assessment and planning, and community-based biodiversity monitoring schemes. She has a Bachelor of Science in Biology. She has 3 years' experience in wildlife conservation, mostly primates, with a combination of knowledge and practical skills. Since Tien has worked for FFI, she has successfully conducted field surveys and applied an ongoing community-based biodiversity monitoring demonstration with SMART software application.

Mr Nguyen Van Phuong, Community Facilitator, FFI Vietnam
Assigned to assist in field implementation of community work. He has a Bachelor of Science in Forestry. He has knowledge of Land Use Planning, Land Allocation and Community Forestry after 4 years working for the local Forestry Consultancy Companies in Kontum Province. He is skilled in working with local communities. Under training/coaching by the National Coordinator, he has successfully conducted Free, Prior and Informed Consent (FPIC) based community consultations, community forest management, institution development, land use survey and planning, forest patrol and Social Impact Assessments. Further he is skilled in GIS based mapping, using Mapinfo software. Concurrently he was assigned to take responsibility for project finance and administration based on avail of experience of statutory grant management (contract making, estimation of budget, etc) for four years since employment on the FFI project.

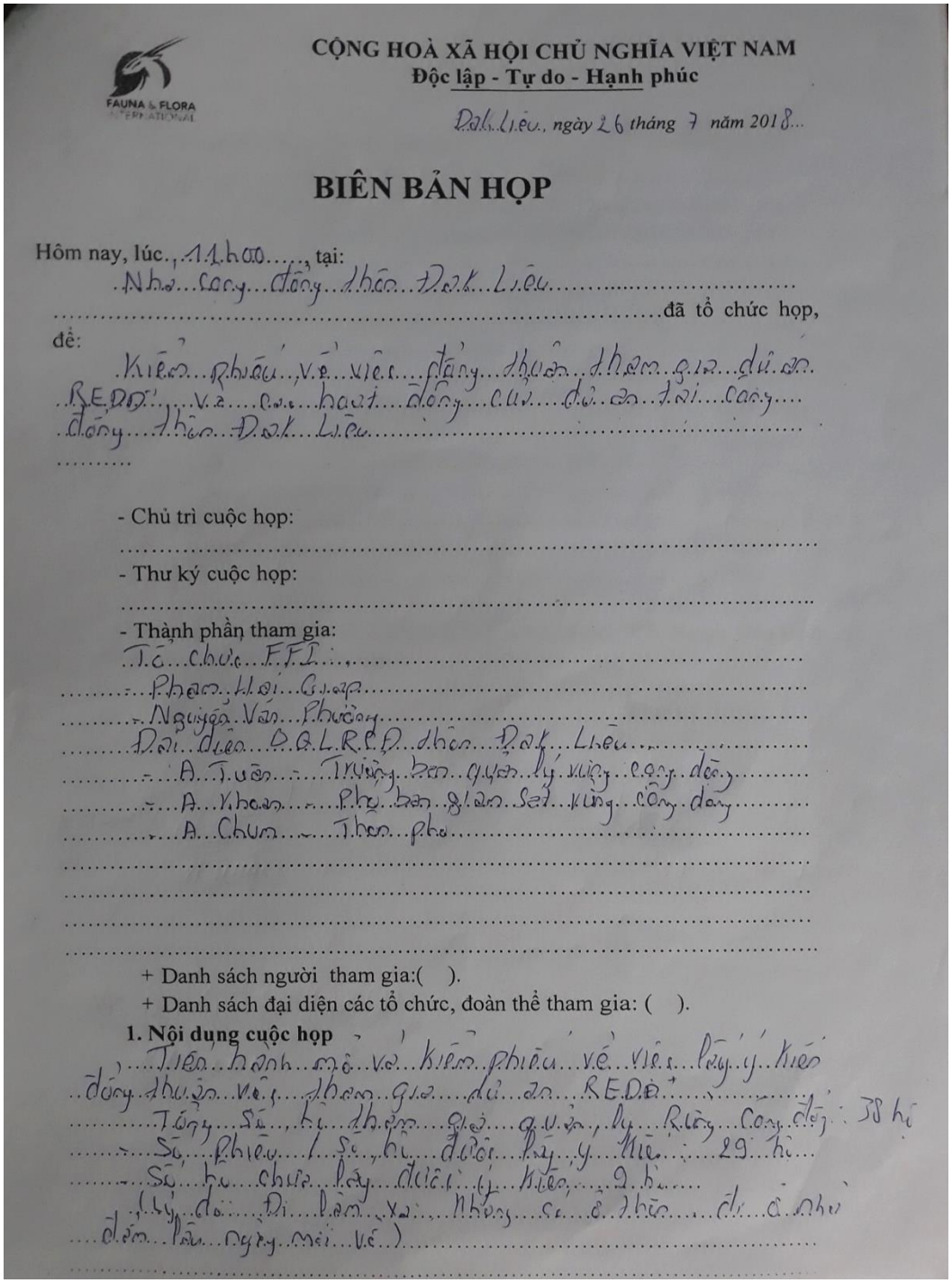
Josh Kempinski, Vietnam Country Director, FFI Vietnam
Benefits from in-depth understanding and experience designing REDD projects, and will be providing management oversight.

Vanessa Evans, Responsible Investments and socio-economic specialist, FFI UK
Vanessa brings a wealth of knowledge acquired in Liberia, Cambodia, Indonesia and Vietnam in FPIC, establishing grievance and benefit-sharing mechanisms as well as optimising wellbeing assessments and other types of socio-economic surveys.

Dr James Smith, Forest Carbon Specialist, FFI UK
James will lead all technical carbon accounting (and monitoring) work required for the development of the PV technical specification.

Dr Dorothea Pio, Biodiversity Finance Specialist, FFI UK
Experienced in coordinating Plan Vivo projects from PIN/PDD development and revision, validation, monitoring, annual reporting, as well as achieving registration, issuance and sale of Plan Vivo certificates.

Annex 2. The community's agreements on the project (Example of minutes on aggregation of votes as a result of household based voting after FPIC in Dak Lieu Village)



CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc lập - Tự do - Hạnh phúc

Dak Lieu, ngày 26 tháng 7 năm 2018

BIÊN BẢN HỌP

Hôm nay, lúc 11 hoo, tại:
Nhà cộng đồng thôn Dak Lieu
đã tổ chức họp,
để:
Kiểm phiếu về việc đồng thuận tham gia dự án REDD và các hoạt động của dự án tại cộng đồng thôn Dak Lieu

- Chủ trì cuộc họp:
- Thư ký cuộc họp:
- Thành phần tham gia:
Tổ chức FFI
Phạm Hải Giáp
Nguyễn Văn Phương
Đại diện BQLRPD thôn Dak Lieu
A Tuấn Trưởng ban quản lý rừng cộng đồng
A Khoan Phụ ban giám sát rừng cộng đồng
A Chun Thôn phó

+ Danh sách người tham gia:( ).
+ Danh sách đại diện các tổ chức, đoàn thể tham gia: ( ).

1. Nội dung cuộc họp

Tiến hành mở và kiểm phiếu về việc lấy ý kiến đồng thuận về tham gia dự án REDD
Tổng số hộ tham gia quản lý Rừng cộng đồng: 38 hộ
Số phiếu / số hộ đồng ý: 29 hộ
Số hộ chưa lấy được ý kiến: 9 hộ
(Lý do: Đi làm xa không ở thôn đi ở nhờ đến tận ngày mai về)

2. Kết quả cuộc họp Kiểm phiếu:

Trong 29 Phiếu lấy ý kiến: Thì có 24 Phiếu đồng ý và 5 Phiếu trống. Như vậy có 82,76% số hộ đồng thuận tham gia dự án.

Cuộc họp đã kết thúc hồi ...11h30.....cùng ngày. Các thành viên tham dự đã thống nhất nội dung biên bản./.

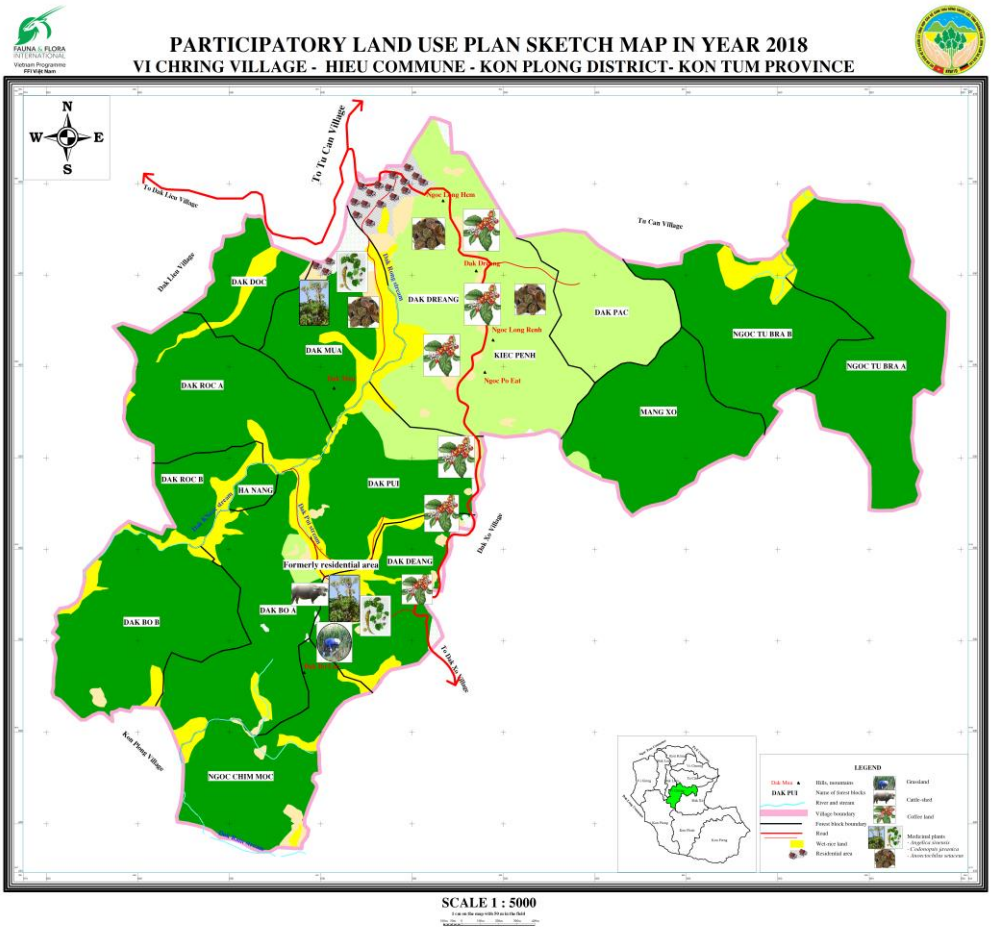
Chủ trì *(ký, họ tên)*	**Thư ký** *(ký, họ tên)*
T.Ban Quản lý rừng cộng đồng: A Tuấn	Nguyễn Văn Phương

Phó ban Giám sát QLRCĐ

A Khoak

Annex 3. Example forest management plans/*plan vivos*

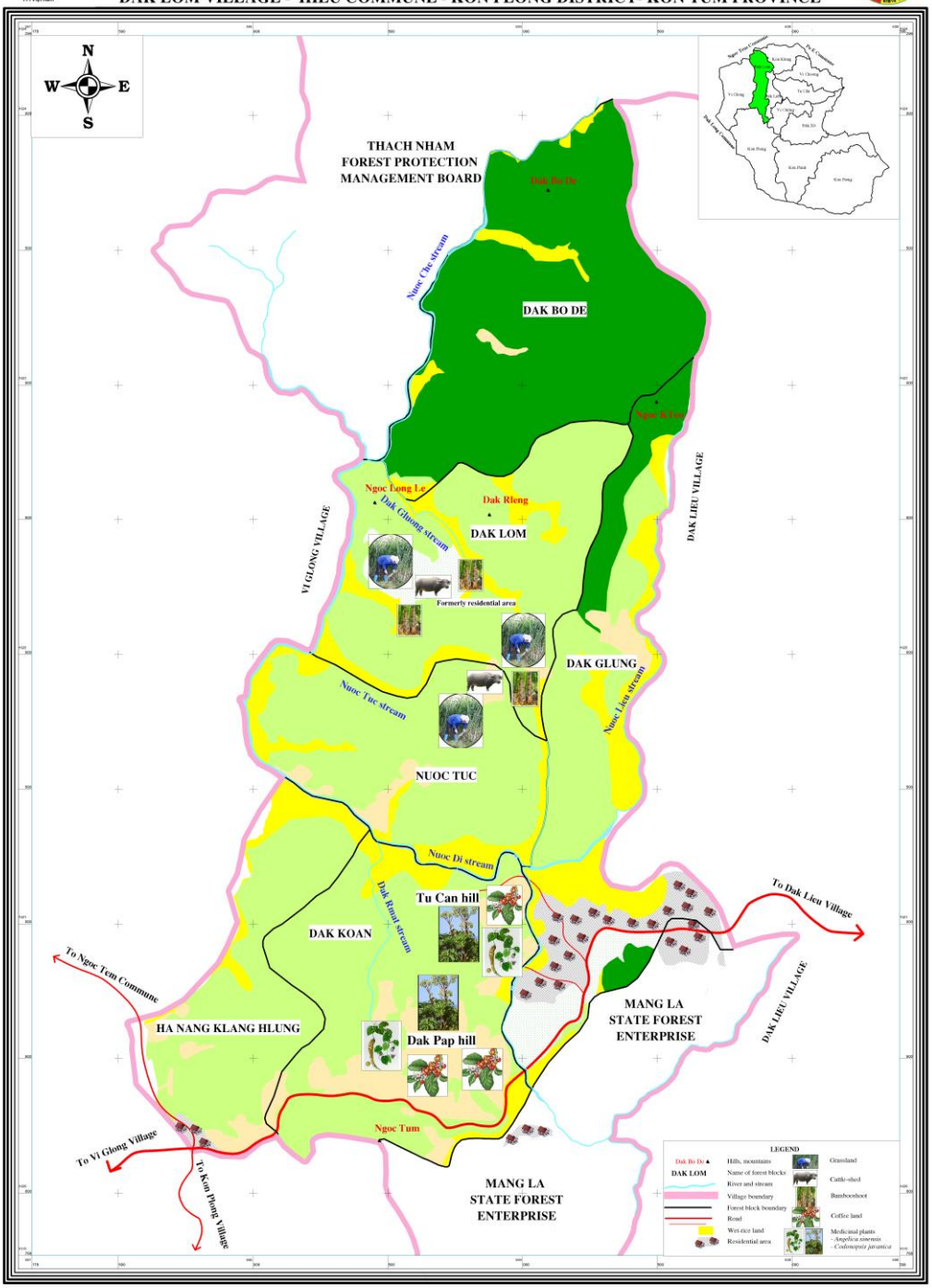
- Include real examples of *plan vivos* (PV requirement 4.10)



Land Use Planning Map of Vi Chring village

PARTICIPATORY LAND USE PLAN SKETCH MAP IN YEAR 2018

DAK LOM VILLAGE - HIEU COMMUNE - KON PLONG DISTRICT- KON TUM PROVINCE



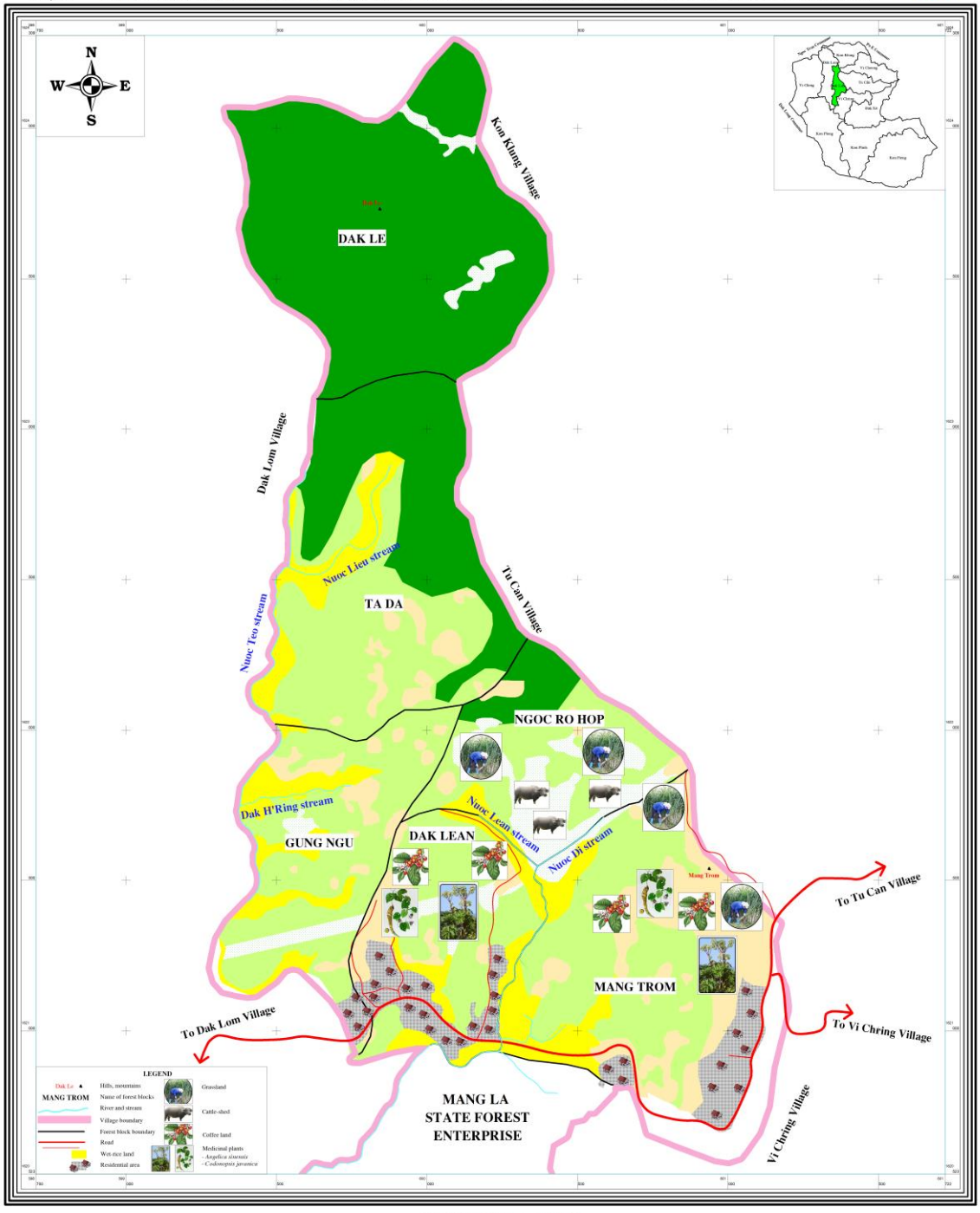
SCALE 1 : 5000

1 cm on the map with 50 m in the field

FAUNA & FLORA INTERNATIONAL
Vietnam Programme
FFI Việt Nam

PARTICIPATORY LAND USE PLAN SKETCH MAP IN YEAR 2018

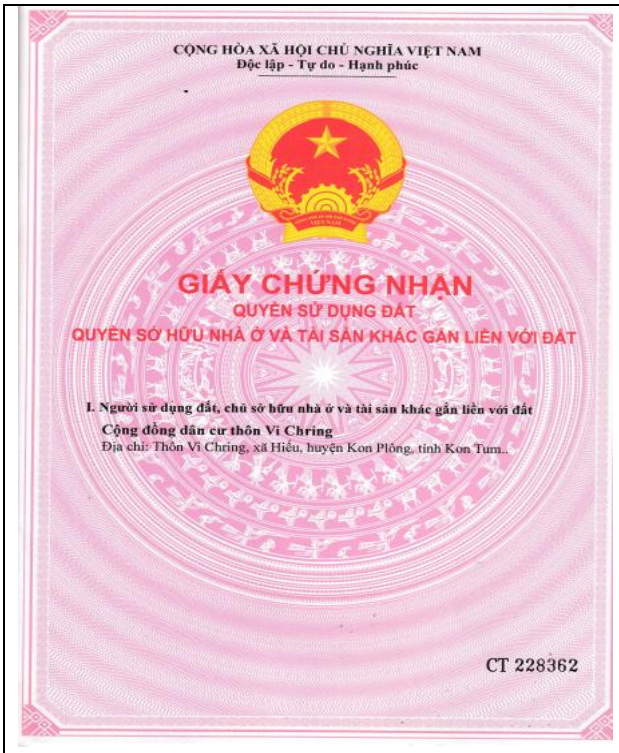
DAK LIEU VILLAGE - HIEU COMMUNE - KON PLONG DISTRICT- KON TUM PROVINCE



SCALE 1 : 5000

1 cm on the map with 50 m in the field

Annex 4. Permits and legal documentation (Red book of Vi Chring village on community forestland)

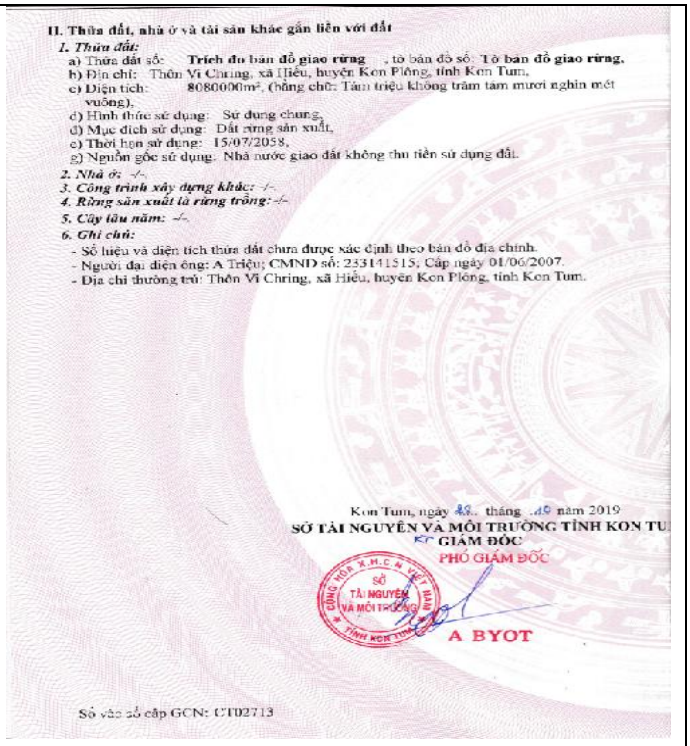


CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM
Độc lập - Tự do - Hạnh phúc

GIẤY CHỨNG NHẬN
QUYỀN SỬ DỤNG ĐẤT
QUYỀN SỞ HỮU NHÀ Ở VÀ TÀI SẢN KHÁC GẮN LIỀN VỚI ĐẤT

I. Người sử dụng đất, chủ sở hữu nhà ở và tài sản khác gắn liền với đất
Cộng đồng dân cư thôn Vi Chring
Địa chỉ: Thôn Vi Chring, xã Hiếu, huyện Kon Plông, tỉnh Kon Tum.

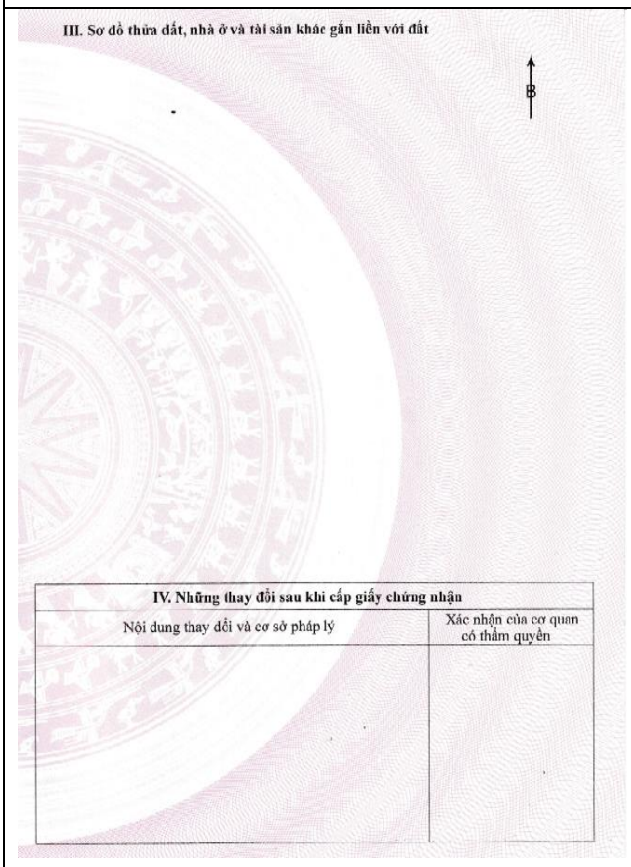
CT 228362



II. Thửa đất, nhà ở và tài sản khác gắn liền với đất
1. Thửa đất:
a) Thửa đất số: Trích đo bản đồ giao rừng , tờ bản đồ số: Tờ bản đồ giao rừng,
b) Địa chỉ: Thôn Vi Chring, xã Hiếu, huyện Kon Plông, tỉnh Kon Tum,
c) Diện tích: 8080000m², (bằng chữ: Tám triệu không trăm tám mươi nghìn mét vuông),
d) Hình thức sử dụng: Sử dụng chung,
đ) Mục đích sử dụng: Đất rừng sản xuất,
e) Thời hạn sử dụng: 15/07/2058,
g) Nguồn gốc sử dụng: Nhà nước giao đất không thu tiền sử dụng đất.
2. Nhà ở: -/-
3. Công trình xây dựng khác: -/-
4. Rừng sản xuất là rừng trồng: -/-
5. Cây lâu năm: -/-
6. Ghi chú:
- Số liệu và diện tích thửa đất chưa được xác định theo bản đồ địa chính.
- Người đại diện ông: A Triệu; CMND số: 233141515; Cấp ngày 01/06/2007.
- Địa chỉ thường trú: Thôn Vi Chring, xã Hiếu, huyện Kon Plông, tỉnh Kon Tum.

Kon Tum, ngày 23 tháng 10 năm 2019
SỞ TÀI NGUYÊN VÀ MÔI TRƯỜNG TỈNH KON TU
KT. GIÁM ĐỐC
PHÓ GIÁM ĐỐC
A BYOT

Số vào sổ cấp GCN: CT02713

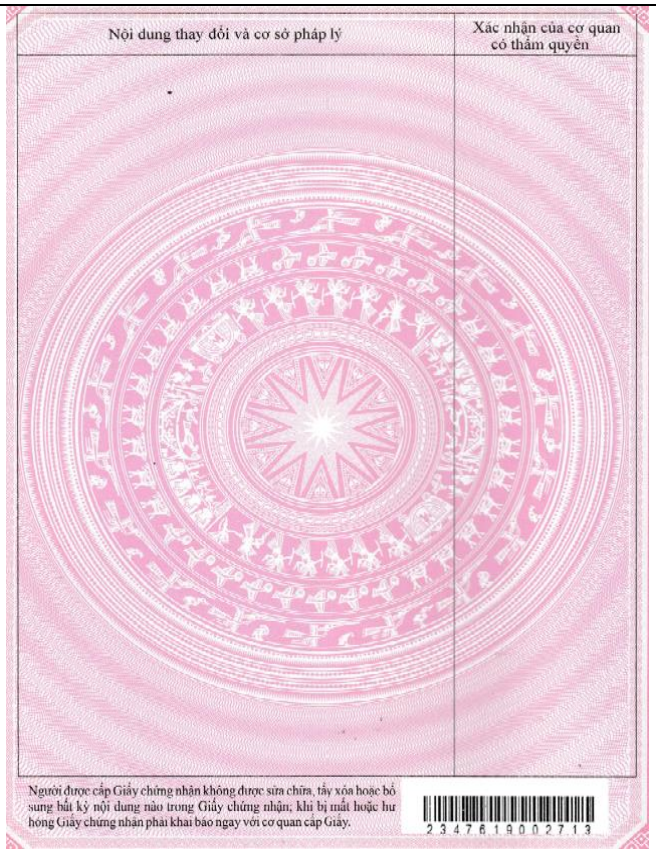


III. Sơ đồ thửa đất, nhà ở và tài sản khác gắn liền với đất

B

IV. Những thay đổi sau khi cấp giấy chứng nhận

Nội dung thay đổi và cơ sở pháp lý	Xác nhận của cơ quan có thẩm quyền



Nội dung thay đổi và cơ sở pháp lý	Xác nhận của cơ quan có thẩm quyền

Người được cấp Giấy chứng nhận không được sửa chữa, tẩy xóa hoặc bổ sung bất kỳ nội dung nào trong Giấy chứng nhận; khi bị mất hoặc hư hỏng Giấy chứng nhận phải khai báo ngay với cơ quan cấp Giấy.

2347619002713

Annex 5. Evidence of community participation

- Photographs/videos of the planning processes with communities (PV requirement 4.10)

Vi Chring's patrol team was using binocular to observe wild animals

Votes audit for REDD project at Dak Lom Village

Well-being Assessment exercise in Vi Chring

FPIC consultation village meeting in Dak Lieu village

Annex 6. Description of project stakeholder groups

Description of project stakeholder groups in Dak Lom village

No	Name of stakeholder groups	Description/characteristics
1.	Non-poor group (20 households)	Male headed household; traditional stilt house; sufficient productive land; 15 households have 3-4 buffalos but the rest do not; food is produced in sufficient quantity to feed the family with 3-4 meals with fresh meat or fish per week.
2.	Female and elder headed poor households group/the most vulnerable (13 households)	Traditional stilt house; sufficient productive land; 2-3 buffalos/cows; no motorbike; 1 or 2 meals with fresh meat and fish per week. 1 household lacks food for 1-2 months a year frequently.
3.	Old aged headed poor households group (>30 years old) – (16 households)	Traditional stilt house; sufficient productive land; 2-3 buffalos/cows; 2 motorbikes; 2-3 meals with fresh meat and fish per week, and only one household lacks food for 1-2 months per year.
4.	Young aged headed poor households group with sufficient of productive land (12 households)	Home shared with their parents; sufficient productive land; only 4 households have 1-2 buffalos; only 5 households have motorbikes; only 2 households lack food for 1-2 months per year; 1-2 meals of fresh meat or fish per week.
5.	Young aged headed poor households group with lack of productive land (13 households)	Home shared with their parents for 5 households; lack of productive land; only 3 households have 1-2 buffalos/cows; 7 households have motorbikes; 6 households lack food for 1-2 months per year; 1-2 meals with fresh meat or fish per week.

Description of project stakeholder groups in Dak Lieu village

No	Name of stakeholder groups	Description/characteristics
1.	Non-poor group (8 households)	Traditional stilt house; sufficient of productive land; 2-5 buffalos/cows; 1 motorbike; food is produced in sufficient quantities to feed the family.
2.	Female and elder headed poor households group/the most vulnerable (9 households)	Traditional stilt house; sufficient productive land; lack of labour force; 8 households have 1-3 buffalos/cows; no motorbikes; food produced in sufficient quantity to feed the family.
3.	Old aged headed poor households group (>30 years old) – (10 households)	Traditional stilt house; sufficient productive land; 1-3 buffalo/cows; only 3 households have motorbikes; ; food produced in sufficient quantity to feed the family.
4.	Young aged headed poor households group (<=30 years old) – (9 households)	Traditional stilt houses available for 5 households only and shared with their parents for the rest; lack of productive land; 1-2 buffalos/cows; motorbike available for all households; lack of food for 1-2 months per year.

Description of project stakeholder groups in Vi Chring village

No	Name of stakeholder groups	Description/household characteristics
1.	Non-poor group (12 households)	Traditional stilt house; sufficiency of productive land; 1-3 buffalos; motorbike available for all households; food sufficiently secured; 5 meals with fresh meat or fish per week.
2.	Female and elder headed poor households group/the most vulnerable (11 households)	Traditional stilt house available for 8 households; productive land enough for 10 households; 1-2 buffalos/cows; motorbike available for 5 households; food sufficiently secured for all households; 1-2 meals with fresh meat or fish per week.
3.	Old aged headed poor	Traditional stilt house available for 8 households; sufficient

	households group (>30 years old) – (10 households)	productive land; 1-2 buffalos; motorbike available for only 6 households; food produced in sufficient quantity to feed the family; 2-3 meals with fresh meat or fish per week.
4.	Young aged headed poor households group (<=30 years old) – (6 households)	Traditional stilt house available for 3 households; sufficient productive land; 1-2 buffalos for 3 households only; motorbike; food produced in sufficient quantity to feed the family; 2-3 meals of fresh meat or fish per week.

Annex 7. Grievance Mechanism

a. Establishment of valid grievances

A grievance is valid or invalid, and villagers firstly should establish whether the grievance is valid or not. A grievance that is valid relates to decisions and actions which FFI or cooperating partners are directly responsible for and that are within the control of FFI or cooperating partners in the context of the Hieu Commune Plan Vivo Project. Valid grievances relate to:

1. Project decisions, including the design of project activities, the provision of support (such as training) and any goods provided under the project;
2. The appropriateness (quality and/or quantity) of the services and/or goods provided under the project;
3. Equitable distribution of benefits under the project (e.g. timber for housing, payments, access to financing from the Village Saving Fund, etc…);
4. Village Forest Regulations establishes as part of the project;
5. Behaviour of FFI and cooperating partners within the community;
6. Misuse of FFI or cooperating partners' funds, or the Village Saving Fund by the CFMB, or project households.

b. Establishment of grievances at different levels of severity

Each valid grievance received will be categorized as **severe** or **non-severe**. This categorization will enable the grievances to be resolved in the most appropriate and effective way possible.

Non-severe Grievances

Non-severe grievances are usually project-related concerns about what we do and how we do our work, or the implementation of our activities and project decisions. There is no animosity or perceived threat between the grievant and FFI or cooperative partners, and these grievances can be resolved without the presence of the CPC. If the grievance cannot be resolved in mutually acceptable way it will be referred to the CPC as per 'Severe Grievances'. Non-severe grievances include:

1. Quality or quantity of services or goods provided by the project;
2. Beneficiaries selection process;
3. Lack of information e.g. not receiving project information, not being aware or meetings, not understanding the content of the meetings, etc.;
4. Timing of meetings or project activities;
5. Not being invited to meetings or able to partake in project activities;
6. Benefit sharing agreement.

Severe Grievances

Severe grievances concern matters that are grave or serious, and may require project activities to be modified or stopped temporarily. Severe grievances, relate to grievances that cannot be addressed or resolved by CFMBs and FFI. All grievances categorized as severe will be immediately referred to the CPC or even to DPC. Severe grievances include:

1. Severely violated matters to village land use plan, village regulations and even laws being broken (for example, number of cutting trees surpassed the approved letters, etc.);
2. Allegations of fraud, corruption or gross misconduct by FFI or cooperating partner staff (e.g. CFMB);
3. Someone's life being threatened or endangered in relation to the project;
4. Lack of full FPIC consultation
5. Harassment, exploitation or abuse
6. Any type of abuse of power
7. Discrimination

c. Lodging a grievance

As consulted, the project communities agree to have multiple channels to raise grievances, in order to make

the process easier, more inclusive and convenient. Grievances by community members may be lodged through the following channels:

1. Speaking with FFI staff when they visit the project villages;
2. Speaking with FFI staff when they are in the office in Kon Tum;
3. Calling the allocated grievance mechanism number between the hours of 8:30am – 5:00pm;
4. Sending a text message to the allocated grievance number;
5. Speaking with the CFMB representatives at the village level.

Grievances received by an FFI staff or a CFMB members will be transferred to the '*Grievance Mechanism Focal Point Person'* , e.g. the supervisor of CFMBs, in order for it to be handled and resolved within 5 days. If the CFMB members have a grievance, a written letter will be handed over to CPC Office to be resolved. As per state regulations, grievances are handled within 15 days.

d. Handling and resolving a grievance

The '*Grievance Mechanism Focal Point Person'* will be responsible for handling and resolving grievances, with the support from other FFI staff members. There are several options to handle valid grievances:

Non-severe Grievance Handling – Traditional Routine:
In some situations, it will be more appropriate to resolve grievances through the traditional routine. The CFMB will convene a meeting with the relevant parties and traditionally resolve grievances by explanation and reconciliation against the village regulations on forest protection and management; and fund management, including customary law. If they cannot be resolved by the CFMB, FFI can be involved, and/or act as a mediator if invited. Depending on the nature of the grievance, and if it is not able to be resolved through the traditional routine, it will be passed to FFI as per the 'Engagement Process'.

Non-severe Grievance Handling - Engagement Process:
In some situations, it will be more appropriate for FFI to engage directly with the grievant to establish potential solutions or justifications, and try to resolve the grievance through dialogue and negotiation. If it is not able to be resolved through the engagement process, it will be passed to the CPC as per 'Severe Grievances'.

Severe Grievances – Government Process:
All severe grievances (and non-severe grievances that have not been resolved through traditional routine or engagement process) will be handled by the CPC who will determine the locally and culturally appropriate steps to take.