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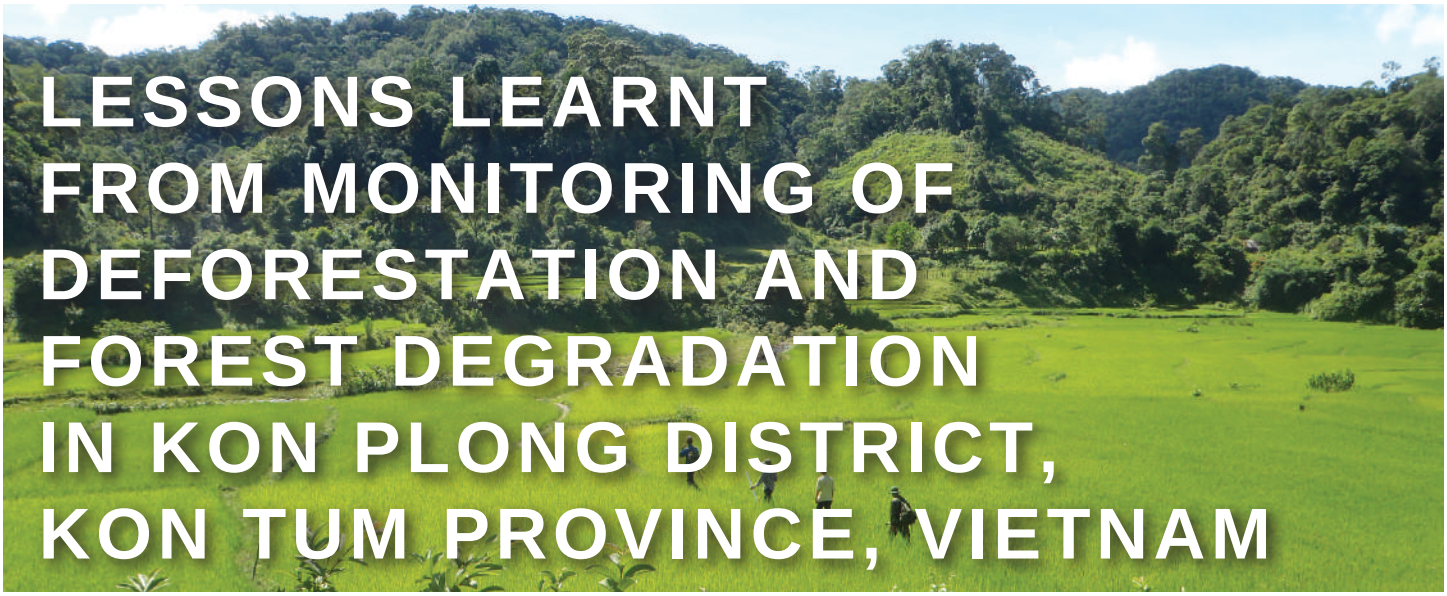
# REDD+ POLICY BRIEF

#005 January 2015



# LESSONS LEARNT FROM MONITORING OF DEFORESTATION AND FOREST DEGRADATION IN KON PLONG DISTRICT, KON TUM PROVINCE, VIETNAM

## Key Lessons Learned

#1 **REDD+ projects in Vietnam need to consider monitoring forest degradation:** Degradation represents a major threat to ecosystem function in the central highlands of Vietnam. This study presents a high-quality analysis of historical degradation in Kon Plong District, and by comparing this with the results of lower resolution analyses, it also considers the future needs for accurate detection of degradation in specific intervention areas in Vietnam.

#2 **Replicating Commune-level REDD+ pilots is a potentially feasible and valuable approach to scaling up REDD+ activities to sub-national jurisdictional level(s):** The results of FFI's work piloting REDD+ in Hieu Commune (Kon Plong District) demonstrate that there is future potential for emissions reductions to be achieved in Kon Plong District through replication of the Commune-level multi-stakeholder forest governance and management approach. This in turn also highlights the prospective value of developing and utilising District-level Jurisdictional (nested) REDD+ frameworks in Vietnam.

#3 **There is a need to quantify the trade-offs between data quality and cost:** Amongst practitioners attempting to Reduce Emissions from Deforestation and forest Degradation (REDD+), it is acknowledged that a higher level of investment in quantifying forest cover change will produce more detailed and accurate results. However, determining the optimal and most cost-effective level of investment is a complex process, as it requires that many costs and benefits be weighed against each other. This case study presents the results of different methods and levels of investment for detecting forest cover change in Kon Plong District, covering an area of approximately 138,000 ha in the Central highlands of Vietnam. In doing so it provides an analysis of implications and tangible trade-offs for remote sensing investment for determining baseline reference emissions levels in Vietnam.

## Background

As part of FFI's work in developing the Hieu Commune REDD+ pilot project, under the Community Carbon Pool Programme, FFI have progressed forest cover change analyses of both deforestation and degradation.

## Determining reference emissions levels from deforestation and degradation

Forest cover monitoring methods and technology have progressed rapidly in recent years, in part as a by-product of the global application of REDD+ and related MRV frameworks. Since 2011, FFI has worked with partner organization Remote Sensing Solutions Germany to analyse forest cover change, considering both deforestation and forest degradation, at the Commune-level scale (pilot project) and the District-scale (sub-national jurisdiction) in Kon Plong District, Kon Tum Province, Vietnam.

This paper compares and discusses the results of FFI's analysis of forest cover change at two different stages of the pilot project. The first REDD+ project scoping phase used freely available information and low-cost data sources to consider historical deforestation. Later, the project's second phase progressed to a higher resolution and higher-investment forms of analyses, to capture the impact of both deforestation and forest degradation in detail as part of the REDD+ development (Table 2). FFI's work in analysing forest cover change in Kon Plong District provides insight into the added-value of measuring forest degradation in addition to deforestation. Further, it also provides insight into the governance frameworks and needs for considering different 'scales' of jurisdictional implementation under a national REDD+ scheme, from national to provincial, district and commune.

Map 1. Kon Plong District, Kon Tum Province, Vietnam. Source: RSS 2012


## Data sources and methods

Two forms of data collection were performed to estimate emissions from deforestation and degradation (see Table 1):

- *Remote sensing:* Remote sensing data collection and analyses were performed by FFI in partnership with international expert consultants Remote Sensing Solutions (RSS) Germany to develop activity data (AD) across Kon Plong District (see Box 2);
- *Field data collection:* FFI facilitated participatory forest inventories (biomass surveys), to accurately measure forest carbon stocks in Hieu Commune (see Box 1) and determine emissions factors (EF).

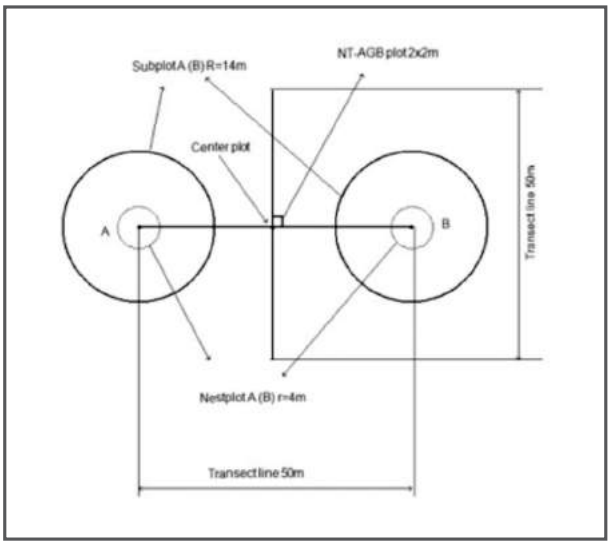
| Collect | | Calculate | | Produce |
|---|---|---|---|---|
| **Activity data (AD)**<br>*Area change data: Various categories of land; change over time* | X | **Emission Factors (EF)**<br>*GHG emissions or removals per unit area* | = | **GHG inventory (GHG-I)**<br>*Data sets and reports* |
| **Land use land cover and Satellite monitoring systems** | | **Carbon inventory Allometric equations and emissions factors developed from project forest inventory** | | **GHG Emission and Removals** |

### Box 1 – Participatory forest carbon inventories in Hieu Commune

FFI has facilitated the development and implementation of participatory carbon inventories in Hieu Commune over dry seasons in 2012 and 2013. This included both practical training and participation of local community members in forest inventory teams.

In total approximately 60 forest carbon inventory plots were measured by participatory forest inventory teams across different geographies and forest types in Hieu Commune. This included sampling of above ground tree biomass, non-tree biomass vegetation, and dead wood carbon pools.

Data quality monitoring through re-measurements of 10% of all forest inventory plots was also conducted by an FFI forestry expert. Consistent with the results of other global studies[1], FFI also detected improvements in the accuracy of the participatory inventory team measurements over time. In particular, the participatory field teams rapidly learnt to measure plots and achieve an error rate below the international best-practice norms of 5%.




Left: Sample Plot;
Below: Survey team members

1. Brofeldt et al 2014

**Table 2: Different data sources and how they were applied to analyse forest cover in Kon Plong District**

| Project Phase | Analysis objectives | Source of data and analysis method | Resources and investment |
|---|---|---|---|
| **Phase 1** | Preliminary analysis to consider pilot site selection, assess pilot project carbon viability, and design key project activities based on identified deforestation drivers and spatial pattern of deforestation in the landscape. | Freely available Landsat-7 ETM satellite imagery acquired from the USGS archive (30 x 30m resolution) was processed and interpreted using a forest cover classification algorithm combined with ground-truth data, applied using remote sensing software [2]. | Satellite images can be downloaded freely. A remote sensing expert was needed to select, download, format and process and analyse the satellite images. Time from satellite image procurement to final maps was approximately 2 months. |
| **Phase 2** | A detailed historical analysis to determine baseline rates of deforestation and degradation in accordance with requirements of third-party standards and international carbon accounting best-practice principles (see Box 2). | High-resolution satellite images from the SPOT-5 (5m resolution) satellite sensor were procured and an iterative classification algorithm developed based on ground truth datasets[3]. | A remote sensing expert was used to select, order, procure, process and analyse the satellite images. Time from satellite image procurement to final maps was approximately 6 months. |

### Box 2. International REDD+ requirements for mapping forest cover and determining baselines reference emissions levels from deforestation and degradation

Currently there are parallel developments in the requirements for remote sensing for REDD+ under both the UNFCCC and voluntary carbon standards.

Voluntary standards, such as the VCS, have developed guidelines primarily targeted at REDD+ pilots aiming to generate emissions reductions for the voluntary carbon market. More recently, the VCS has also published Jurisdictional and Nested REDD+ (JNR) Requirements[4] for REDD+ programs, in addition to projects.

The UNFCCC is also establishing its own set of rules under the Warsaw Framework for REDD+[5], commonly referred to as the 'REDD+ Rulebook', which sets out requirements for countries to access results-based finance in the future.

As an innovative conservation organisation, FFI strives to uphold scientifically sound, best-practice monitoring principles for REDD+ consistent with both UNFCCC and VCS requirements, where appropriate. FFI is also using the Plan Vivo Standard for some other REDD+ pilots, in Liberia and Indonesia. Once best practice has been established, the level of technical requirement may also be determined somewhat by the market, or ER buyer, with credits potentially available to both public and private sources of finance, voluntary or complaint modalities and in combination with PFES (Payment for Forest Ecosystem Serves).

2. Remote Sensing Solutions GmbH (2012)
3. Remote Sensing Solutions GmbH (2014). Satellite images used in this study include images granted to FFI by Spot Image under the Planet Action Initiative, ©CNES (2013), distribution Spot Image S.A
4. VCS JNR requirements; http://www.v-c-s.org/sites/v-c-s.org/files/Jurisdictional%20and%20Nested%20REDD%2B%20Requirements%2C%20v3.2.pdf
5. UNFCCC Decision 9/CP.19 paragraphs 5 and 6

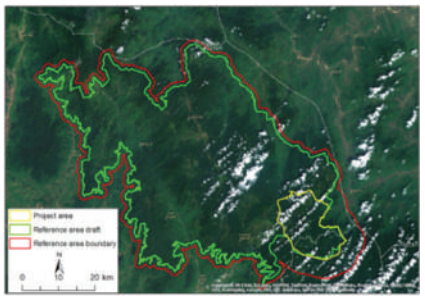
In order to produce accurate and consistent estimates of forest cover change over time, (deforestation and degradation), as well as maintain principles of transparency in results-based reporting , the following requirements were applied to the analyses of forest cover change and baseline reference emissions levels across Kon Plong District[6]:

**(i) Satellite imagery and forest cover change analyses key requirements (VCS Standard):**

- **Time series:** Historical images used were from three time-points, up to 10-15 years prior to the anticipated project start date.
- **Pre-processing:** Geometric corrections were applied and cloud shadows masked out and excluded from the calculation of deforestation rates (cloud cover did not exceed 20%).
- **Land cover classes:** Classes included the minimum six IPCC classes; Forest Land, Crop Land, Grassland, Wetlands, Settlements, and Other Land.
- **Land cover classification:** Forest stratification may be pixel or segment-based, and classes assigned using clearly defined rule-based forest stratification model.
- **Accuracy:** An independent accuracy assessment of the classification was conducted using at minimum systematically distributed 50 reference locations per land class (the minimum acceptable accuracy was 70%).

**(ii) Emissions factors calculations - Participatory forest carbon inventory field data collection and analyses key requirements:**

- **Sampling design:** A random sampling survey design using a randomised computer-generated design (FFI used a random sampling design based on a 1km grid).
- **Precision:** the sample number of plots measured was iteratively adjusted based on the variance in specific forest classes and a target precision of at least 15% at a confidence level of 95% in the mean estimate of forest carbon stocks . FFI completed a total of 60 plots across 2 defined forest strata.
- **Carbon pools:** The participatory forest inventory teams measured above ground tree biomass; standing and lying dead wood, and non-tree above ground biomass carbon pools in plots in Hieu Commune.
- **Field data quality:** A minimum of 10% of all inventory plots were re-measured by an FFI forestry expert (see also Box 1). The minimum acceptable measurement error rate was 5% and measurement methods were revised if this error limit was exceeded.
- **Emissions factors:** Net change in carbon stocks was calculated using post-deforestation land use carbon stocks derived from peer-reviewed published literature.

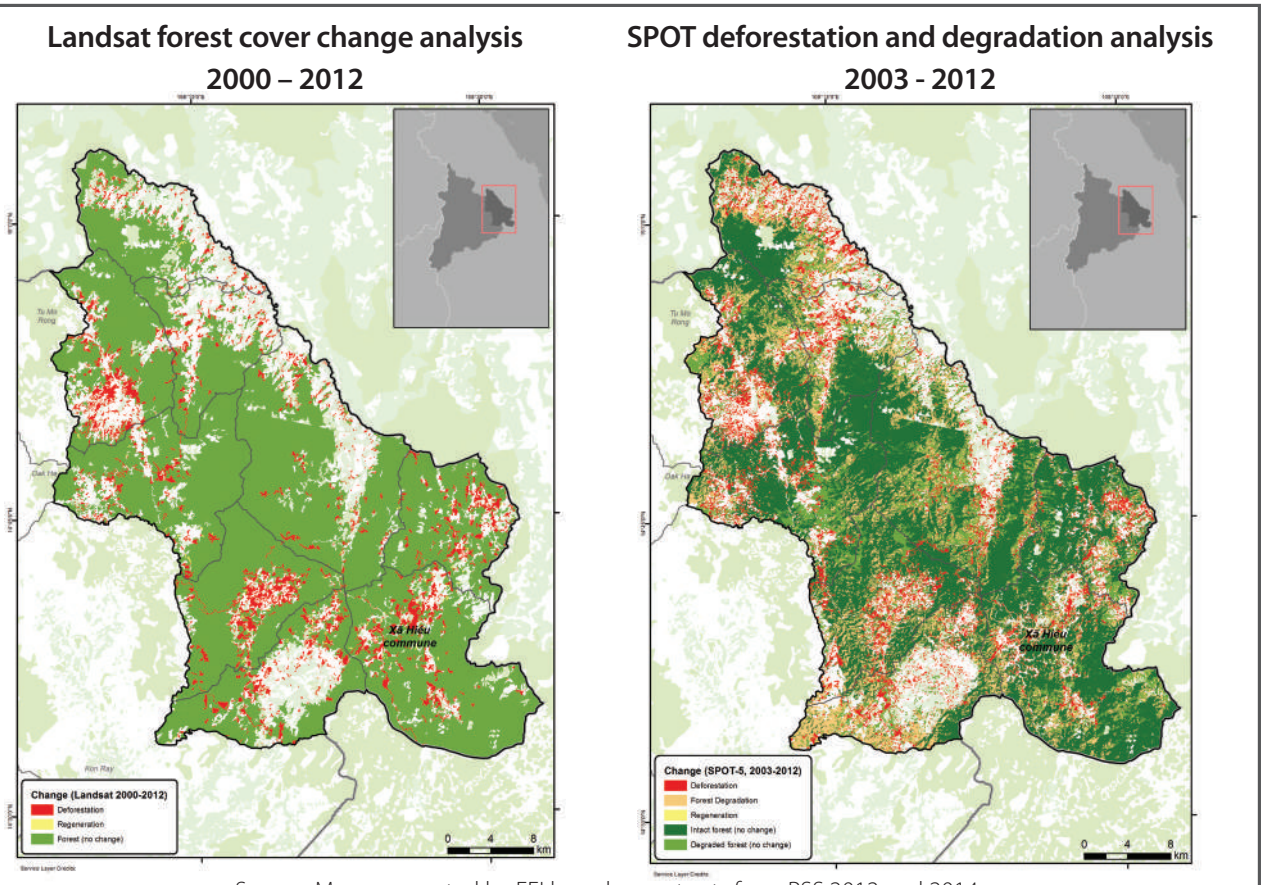


Source: RSS 2014

Source: FFI 2013

6. These requirements are based on those VCS methodologies and the VCS JNR requirements because at the time of writing the technical details in the current UNFCCC requirements are mostly at a higher level of detail (than the VCS requirements), and a recent study indicates that *'jurisdictions applying and meeting the [VCS] JNR requirements would most likely automatically satisfy the majority of the UNFCCC requirements with no or minimal additional effort'* (Gibbon et al 2014).

**Table 2. The results of forest cover change analysis in Kon Plong District using different data sources**




Source: Maps generated by FFI based on outputs from RSS 2012 and 2014

**Table 3. A comparison of estimates for Kon Plong District***

| Data source | Imagery Resolution | Classification accuracy | Annual deforestation rate | Annual degradation rate | Annual regeneration rate | Annual net emissions in Kon Plong District (indicative range) |
|---|---|---|---|---|---|---|
| **Low-resolution Landsat phase 1 analysis 2000-2012** | 30m | Minimum: 89.3% | 0.6-0.8% | n/a | 0.1% | 0.21 – 0.28 MtCO2-e per year |
| **High-resolution SPOT phase 2 analysis 2003-2012** | 5m | Minimum: 81.7% | 1.0 - 1.2% | 2.0 - 2.5% | 0.1% | 0.33 – 0.49 MtCO2-e per year |

*Historical deforestation and degradation rates are calculated as the average rate of over the historical reference period (the 'historical averages' approach). The deforestation and degradation percentage rate is calculated as the proportion of forest lost each year on average over the historical reference period, as a proportion of forest at the start of the reference period. Deforestation is defined as a transition from forest to non-forest, and degradation is defined as a persistent decrease in canopy cover for at least 3 years. These estimates are made by FFI and are approximate only.

## Discussion

### The trade-offs: investing in higher resolution remote sensing analyses

Using lower resolution and reduced quality land use cover change analyses is able to produce information on deforestation rates, spatial patterns and trends. However, these analyses are limited in the extent to which they can provide information about forest degradation.

A large part of the investment in detecting degradation is because classifying forest to the detail whereby degradation can be accurately detected is technically complex, and requires finer, more expensive images. While FFI facilitated participatory monitoring with communities on the ground, it relied on specialised technical experts to process satellite imagery and to apply complex algorithms, software and skills required to accurately detect forest degradation.

While FFI's procurement and analysis of higher resolution imagery was approximately 35 – 40% more expensive than the lower resolution analyses (on a per-hectare basis)[8], the high resolution analysis detected a substantially higher average historical deforestation rate (see Table 3) and was able to be used to quantify the substantive contribution of emissions from degradation (see next section). The total estimated reference levels from the high resolution analysis are also 35 – 50% higher than those derived from the low-resolution analysis (see Table 3). These results support the case for ongoing efforts and oversight by international remote sensing experts amongst government agencies at the national level in Vietnam to support local level capacity building for potentially complex remote sensing analyses needed to detect degradation, such as those progressed under Vietnam's UNREDD programme. Simplified remote sensing for degradation detection is increasingly possible and should be explored further[9].

### The value of investing in forest degradation monitoring

Results of FFI's analyses of the participatory inventory field data and the historical deforestation and degradation rates across Kon Plong District to date indicate the following;

- **Degradation is prevalent and is causing permanent damage to forest ecosystems in Kon Plong District.** FFI's high-resolution analysis did not detect any regeneration of degraded forests back to a more intact forest class structure from 2003 - 2012.
- **Degradation, contributes a significant increase to estimated annual baseline emissions from deforestation in Kon Plong District**. FFI's analyses to date indicate that emissions from degradation add up **to approximately 22% of emissions** (additional to those from deforestation) historically in Kon Plong District.

These findings concur with a growing body of research recognising that greenhouse gas emissions from degrading forests are both relatively poorly understood and new remote sensing approaches are needed (in combination with community-based monitoring) to set forest degradation reference levels[10]

7. Reference RSS reports and Box 2
8. Note: This cost increase is related to the image source and resolution, as well as the fact the low resolution analysis included only two historical time-points, while the higher resolution analysis included 3 historical time-points.
9. Buki et al 2012
10. See I-REDD policy brief No. 1: http://www.i-redd.eu/sites/default/files/IREDD_policy-brief4.pdf

## Deforestation drivers in a mosaic landscape

The results of FFI's high-resolution SPOT analysis across Kon Plong District indicates that the District is typical of an upland mosaic landscape, with a complex mix of forest and land cover transitions. The analysis detected that approximately 42% of deforestation was the result of forest being converted directly to cropland, and 58% as a result of forests degenerating to a vegetative non-forest 'shrubland' (see photos below). Of these deforested shrublands there are three eventualities:

Photo: FFI 2013 – mosaic landscape in Hieu Commune

1. A large majority of the 'post-deforestation' vegetative shrublands area remained as such across Kon Plong District from 2003-2012 (approximately 80-90%);
2. A portion of the shrublands area were annually converted to cropland (approximately 10 – 20%), indicating the prevalence of a two-stage deforestation process whereby firstly forest is degraded to a non-forest state, and then is subsequently cultivated for crops.
3. A very small portion of vegetative shrublands recovered sufficient forest canopy to regenerate back to a degraded forest state (approximately 0.1%).

These findings concur with past research which has already highlighted both the significance of degradation and regeneration in mosaic landscapes, and further needs for continuing the development of remote sensing methods and models that detect and describe changes in such landscapes[11].

## The Hieu commune REDD+ model

FFI began developing a program of activities from 2012 - 2014 in collaboration with local communities and Government stakeholders, aimed at developing strategies to mitigate deforestation and degradation drivers in one Commune (municipal-level jurisdiction) of Kon Plong District; Hieu Commune (see Table 2 above); with a view to scaling up REDD+ frameworks from Commune-level to District-level.

To date this has initiated a range of activities including:

- Establishment of village forest management boards, one in each of the 11 Ethnic Minority villages in Hieu Commune. FFI has facilitated institutional capacity building of these boards and their training and operationalization of village forest patrol teams.
- Establishment of a multi-stakeholder forest governance framework through a Commune-level inter-village Community Forest Management Board and strengthening its coordination with the Hieu Commune PPC, the Kon Plong District Forest Protection Department, and the Thach Nham Watershed Forest Management Board.
- Initiation of a programme of support for progressing village-level land tenure security, sustainable land use management planning and sustainable forest harvesting

FFI's monitoring of forest cover change as part of the EU REDD+ Community Carbon Pool programme between 2012 and 2014 already has detected deforestation and degradation rates in Hieu Commune which are 25% and 44% lower (respectively) in comparison to the historical average rates across Kon Plong District, indicating that there are potential emissions reductions that have occurred which can retrospectively become certified REDD+ emissions reductions carbon credits.

11. See I-REDD policy brief 3: http://www.i-redd.eu/sites/default/files/Policy_brief2013_final_reduced_size.pdf
12. See I-REDD+ policy brief 4: http://www.i-redd.eu/sites/default/files/IREDD_policy-brief4.pdf

Even given the early stage of REDD+ activity implementation, this indicates that the Hieu Commune REDD+ pilot activities have already begun to achieve effective multi-stakeholder cooperation on forest protection and law enforcement, and improvements in village-level sustainable land use planning at the commune level to mitigate deforestation drivers. However, the complex mix of underlying causes of the drivers of emissions, in particular those related to commodity markets, may be particularly challenging to mitigate through REDD+[12]. FFI is continuing to work with communities and Government counterparts in Hieu Commune to both further develop sustainable livelihoods for local communities and strengthen multi-stakeholder forest governance frameworks.

**The potential replicability of Commune-level REDD+ activities for scaling up REDD+**

These outcomes, combined with the data on deforestation and degradation across Kon Plong district, raises and highlights the potential for REDD+ emissions reductions across Kon Plong District at scale through model replication.

Although at this stage Vietnam's piloting of jurisdictional REDD+ are all at the province-level, this work demonstrates the potential interim utility for sub-provincial jurisdictions[13]; including District-level Jurisdictional REDD+ piloting in Kon Plong District, for the following key reasons:

***1. Emissions reduction potential***

Based on FFI's current analysis on deforestation and degradation rates, emissions factors and the potential for reducing deforestation through improved community-based governance models in Hieu Commune, the potential for achievable emissions reductions over the next 20 – 30 years is estimated to be around 1 – 1.2 Million tCO2-e.[14] If REDD+ activities can be replicated and also combined with other low-carbon green economy development measures, for example climate smart agriculture, the emissions reductions potential of Kon Plong District could be increased even further.

***2. Replicability***

Kon Plong District is representative of remaining tracts of intact, high carbon stock and biodiverse (HCV) watershed forests, and also threats operating in the Central Highlands of Vietnam. Across Kon Plong District's communes, there is a similar mix of ethnic minority communities (the population here is 97% ethnic minority), maintaining traditional forest management practices based on village-level, customary tenure, mountainous forest types, road networks and deforestation drivers, indicating there is good potential for the Hieu Commune model for REDD+ development to be effectively replicated across other communes in the District. The Commune model, as described in some detail above, is addressing drivers of deforestation and forest degradation through a highly participatory process of developing sustainable agriculture and agroforestry-based livelihoods, with funding from climate finance, which provide both the alternatives to traditional forest conversion and incentives for behaviour change, and renewed forest stewardship.

***3. Scale and size***

In line with the UNFCCC Warsaw Framework for REDD+ and COP guidance decision 1/CP.16, which recognises subnational REDD+ implementation as an interim measure to national implementation, there is growing international support for REDD+ implementation across jurisdictions of a minimum area size and multiple tiers

13. As per above, findings to date indicate there is a high level of consistency between the VCS JNR requirements and the developing UNFCCC REDD+ rule book; see Gibon et al 2014. At this stage FFI is not necessarily committing to supporting JNR implementation in Kon Plong specifically under the VCS standard (versus UNFCCC or FCPF), although it is a possibility and requires further research
14. This is a very high-level estimate, based on the assumption that approximately 50 – 70% of baseline emissions from deforestation and degradation across Kon Plong District could be measurably reduced over the next 20 – 30 years (i.e. 50 – 30% of baseline emissions continue to occur either due to leakage and/or 'un-avoidable' deforestation).
15. As per VCS JNR requirements: http://www.v-c-s.org/sites/v-c-s.org/files/Jurisdictional%20and%20Nested%20REDD%2B%20Requirements%2C%20v3.2.pdf
16. See: http://www.biocarbonfund-isfl.org/sites/biocf/files/documents/BioCF%20ISFL%20CSO%20Session%20Bonn%20June%209%202014.pdf

below the national-level . For example, the Verified Carbon Standard Jurisdictional and Nested REDD+ Requirements allow jurisdictions two tiers below the National level to become jurisdictional REDD+ programmes certified[15], and the World Bank currently defines a 'landscape level' approach at the jurisdictional level as having a minimum size of 100,000 hectares[16] (Note: Kon Plong District is approximately 138,000 ha).

This is in part because in many cases provincial jurisdictions with low forest cover can have a similar forest extent as a highly-forested district-level jurisdiction. For Kon Tum Province, the highly forested Kon Plong District (138,000 ha) provides a logical place to begin REDD+ MRV implementation within the province.

***4. Multi-tiered forest governance under a national mechanism***

There are logical arguments to apply REDD+ to highly-forested districts within a province, with districts becoming a logical management unit for REDD+;

- In the long-term, under a national implementation of REDD+, there will need to be administrative structures used to facilitate the management, and monitoring of forests and carbon stocks at all levels of governance. FFI holds the view that independent, accurate remote sensing data is necessary for REDD+ monitoring, and it will be a long term process to build capacity at the local level for this.
- National REDD+, or even subnational REDD+ at a provincial scale, is an ambitious exercise requiring a long-term approach to develop, given the sheer volume of stakeholders involved in forest management at that scale in Vietnam. A nesting approach is suggested as a way to incorporate existing REDD+ pilots and (as above) due to the logistical and operational need for sub-national management and monitoring of the forest estate, led by DPCs and DARD.
- Given that District governments and authorities play a strong and prominent role in forest and land management and planning decisions in Vietnam, including forest land allocation, and that some districts having the majority of forest within a province, as is the case with Kon Tum. Sub-national DARDs and CPCs are also empowered with land use planning and decision making over commercially loggable forest stock (m3) as well as (revenue from) carbon stocks, as well as other land use priorities.

***5. Additional lessons learnt from other REDD+ pilot sites in Vietnam***

While this briefing focusses on the experience and knowledge gained during the design and development of FFI's Hieu Commune REDD+ pilot, it recognises the very significant contribution made by other REDD+ pilot projects in Vietnam; of which some of the key lessons learnt are summarised here, following a multi-stakeholder workshop on REDD+ Piloting held in Hanoi, in March of 2015:

- The ongoing demonstration of tablet-based monitoring for forest carbon in both the JICA (Dien Bien) and GIZ ( Quang Binh) pilots seems very promising - with the technology being used for data entry and reporting, and direct uploading into the database;
- There are emerging issues and somewhat divergent approaches to the measurement of biomass/forest carbon which highlight the need for a revised and single, country-specific SOP;
- Carbon inventory and accounting will be affected by the diversity of Vietnam's forest types, and thus that several Allometric equations should be established (one for each type);
- There is a need to decide whether output data should be produced annually with the application of Remote Sensing in forest cover change monitoring or at different time series, and whether or not the national data (set) can be harmonized with data acquired from different methods and at different levels;

- There in an acute need to harmonise the scale, replicability and design of REL(s) and MRV, such that: they are cost effective, makes the best use of national expertise (supervised/evaluated by international experts), are integrated among provinces, the carbon measurement is tailored to different localities and/or for different forest types, RELs be established for sub-national localities and integrated/nested into the national REL, together with a decision on what sub-national means; i.e. regional or province or district?;
- Different donors needs to integrate their forest carbon data sets and make them available to all;
- The FORMIS forest inventory database is Vietnam's hub for forest data, but there is a need to develop procedures to harmonize different data sources and formats, including: (i) A common platform with open access; (ii) A platform / database that can accept a range of data; (iii) Improved and regular communication between provinces and national level on data sharing; (iv) Clarification on data ownership and release / sharing of data (i.e. FIPI – VNFOREST sharing National Forest Inventory data and so forth); (v) Access to data – i.e. a sharing mechanism

## Conclusions

- Extensive and permanent losses in forest condition detected across Kon Plong District provide a strong case for investing in ongoing forest degradation monitoring in the Central Highlands of Vietnam. This highlights the need for furthering specialised remote sensing technical capacity building programmes, and ongoing support for research and technological innovations that aim to improve the cost-efficiency of degradation detection.
- Piloting REDD+ at the Commune-level (municipality) in highly forested and Ethnic Minority populated areas in Vietnam has proved useful in providing important insights, which in turn can be utilised to support the design process and implementation of subnational-level REDD+. Communes can effectively be a 'micro-jurisdiction' and piloting REDD+ activities at this scale can help to develop a more intimate understanding of deforestation drivers, and how to establish roles, responsibilities and relationships for multi-stakeholder governance frameworks to mitigate those drivers.

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## Our vision

A sustainable future for the planet, where biodiversity is effectively conserved by the people who live closest to it, supported by the global community.

## Our mission

To act to conserve threatened species and ecosystems worldwide, choosing solutions that are sustainable, based on sound science and take into account human needs.

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## Background and Disclaimer

FFI have developed five policy briefs that analyse experiences and present lessons learnt and from implementing their Community Carbon Pools REDD+ pilot project in Kon Tum province, and from other sub-national REDD+ initiatives in Vietnam. The 5 REDD+ briefings are on:

- Forest land allocation (FLA) and tenure
- FPIC based community consultation
- REDD+ piloting, scaling up and nesting within national implementation
- Beyond carbon: REDD+ as innovative finance within sustainable landscapes
- Carbon accounting: Measuring forest cover and change

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