

### **SPERI REPORT**

## Project No. PI-242559 (SCCF)

Date of narrative executive up to July 31, 2024

Submitted to Secours Catholique/Caritas France (SCCF)

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We thank for the supports from



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# **Project Profile**

Project name	Title: Community-based action research to promote 'Carbon justice' in Vietnam
Project code	PI-242559
Project Goal	The overall objective is to empower the Indigenous People (IP) and Local Communities (LC), so they can sustain long-term Livelihoods Sovereignty (LISO).
Project location(s)	Human Ecological Practice Area (HEPA) in Ha Tinh province and mountainous regions where YIELDS-AGREE Network members live
Target group	Ethnic minority groups in mountainous areas of Vietnam and Laos
Reporting period	February 1 <sup>st</sup> , 2024 to July 31 <sup>th</sup> 2024
Project start date	February 1 <sup>st</sup> , 2024
Project end date	January 31 <sup>st</sup> 2025
Project budget	56,000 EURO
Legal holder of the project	Social Policy Ecology Research Institute (SPERI) Address: 12C Pham Huy Thong street, Ngoc Khanh ward, Ba Dinh district, Hanoi, Vietnam Phone (landline): + 84 24 37715690 ; Email: <u>dtkien@speri.org</u> <b>Bank details:</b> <i>Name of Bank</i> : Joint Stock Commercial Bank for Foreign Trade of Vietnam. <i>Bank address</i> : No. 2 NGUYEN THI MINH KHAI STREET, HA TINH CITY, HA TINH PROVINCE, VIET NAM. <i>Name of the Branch</i> : Branch - HA TINH. <i>Account</i> <i>holder</i> : SOCIAL POLICY ECOLOGY RESEARCH INSTITUTE. <i>Account number</i> : 1033142448. <i>SWIFT code</i> : BFTVVNVX020
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Reporting to	Secours Catholique/Caritas France (SCCF)

Date/place: <u>Ha noi, August 1<sup>st</sup></u>, 2024

Signed & Stamped

Signature of person responsible for the report:

Tran thi Lanh



#### Part 1: Project background and changes in the project contact

#### **1.1. Report preparation**

The Project No. PI242559 is funded by SCCF, implemented by SPERI during the period from February 2024 to January 2025. The project specifically aims at strengthening the capacity of Indigenous People (IP), Local Communities (LC) and related actors in collection of empirical evidence on carbon storage to provide inputs into fair carbon trading policy.

This report is written based on SPERI reports, records from SPERI meetings, workshop and participatory action research. Other sources of information derive from a process of observation and interaction between SPERI and academics, local ecological farmers, local officials and related actors, such as the Ministry of Agriculture and Rural Development (MARD), NLI (Germany) and Tay Nguyen University.

#### **1.2.** Changes in specific project setting

There is no notable changes recorded during this reporting period.

#### **1.3.** Changes of the target groups

The participatory action research at HEPA involves not only ecological farmers from mountainous regions of Vietnam, but also one from Laos (Mr. Viengphet Oudom). This setting could be a good start for opening up the topic of carbon justice in Laos in the coming time.

Beside the ongoing cooperation with Prof. Goltenboth from NLI, Germany, SPERI developed more contact and exchange with Dr. Bao Huy from Tay Nguyen University and policy makers from MARD.

#### 1.4. Changes of the implementing organization

Ms. Pham Mai Tan becomes the person in charge of financial management for this project. In the past, Mai Tan had worked closely with Nguyen Minh Phuong (former financial manager) and gained sufficient experience in financial management of the project.

#### 1.5. Implications of all the changes for the project

Involving one person from Laos in the participatory action research is a strategic step taken by SPERI in order to scale up the farmers' or forest owners' awareness and debate over Carbon trading and Carbon justice not only in Vietnam, but also in Laos in the future.

The connection and exchange between different academics and policy makers on the basis of empirical research could become a solid foundation for the future debate on the Carbon trading practice and recommendation for the improvement of legislation toward Carbon justice in the future.

PROJECT OBJECTIVES	INDICATORS	ACTUAL OUTPUTS	OUTCOMES
Specific Objective 1: IP and LC rights towards CO <sub>2</sub> justice is promoted and strengthened in Vietnam through Participatory Action Research	<b>Expected Result 1:</b> Different stakeholders to set up and consolidate evidence-base with site-indicators for carbon justice and fair- carbon-trading policy inputs for proposing/ submitting policy implications towards improvement of Carbon Justice, particularly regarding Decree 107/2022/ND-CP	The participants of the six different rounds of training workshops and discussions (especially forest owners) understand the Carbon stocks in the biomass of tropical forests of the 6 North Central provinces. They do not agree with the estimation by the negotiators between MARD and WB, who figured out 3 million hectares of natural forest in the six mentioned provinces, which only reserve 10.3 million tons of equivalent CO <sub>2</sub> , or only 3.5 million tons of Carbon. The participating forest owners in the upper basin of Ngan Pho River, Nan River and Gianh River clearly understand Decree 107/2022-CP on the transfer of greenhouse gas emission reduction rights between 6 provinces of the North Central region and the World Bank.	The participants of the training workshop and action research questioned the wholesale selling price and wholesale purchase price, which were agreed at 5 USD/ton of Carbon in the negotiation (between MARD and WB) in the period from 2018 and the contract term until 2025. Forest owners realized that the situation of buying and selling carbon and prices is not transparent between forest owners and buyers. The Ministry of Agriculture and Rural Development represented forest owners of 6 North Central provinces, but they did not properly implement the regulations on behalf of the functions and roles of forest owners according to Decree 107/2022/ND-CP as well as the application of the Land law and Forestry law.
	<b>Expected Result 2.</b> Young key farmers and representatives of IPLC, lead the collection of evidence on carbon storage and are aware of their related rights.	20 participants (8 female) of the participatory action research (especially forest owners) understood and could practice skills of collecting and measuring forest samples (or sample plots). They know how to set up sample plots, how to determine the route and direction of energy flows when choosing sample plots. From practical experiences, they improved their skills of reading maps and using GPS.	Field practice helped the participants to have skills in calculation of carbon stocks on a forest tree or plant and in a sample plot. They then can infer calculation of 1 hectare of forest from measuring results of the sample plots. Forest owners could apply the lesson learnt to estimate the carbon stocks on their own forests. Forest owners value forest trees, which are vital for air, for humus, nutrition and soil health, for water and climate change.
	<b>Expected Result 3.</b> Empirical evidence provides inputs into fair carbon trading policy which influences national policy making.	SPERI members have actively contacted and discussed with relevant academics and officials, such as Dr. Bao Huy from Tay Nguyen (Central Highland) University, Prof. Goltenboth (NLI, Germany) and policy makers from MARD.	The relevant academics and officials showed their interest in SPERI empirical research and were willing to have further cooperation for transferring the field research results and recommendations to the policy legislature in the future.

# Part 2: Logical Framework (Contract Objectives)



### Part 3: Additional Narrative

#### 3.1. Current status of activity implementation and generation of outputs

Based on SPERI long-term cooperation with local ecological farmers and forest owners in different regions, we selected the most suitable forest owners and herbal healers in the upstream areas near HEPA of Ha Tinh province, three from Quang Binh province, two from Kon Tum province, one from Ba Vi National Park, two from Yen Bai province and one from Luang Prabang, Laos. The participants had opportunities to learn how to measure timber reserves, and from timber reserves to deduce Carbon stocks, and from there deduce how much carbon is in stock.

The contents of training, exchange, sharing are focused on the following topics: 1) Skills to set up sample plots according to the directions of the route; 2) Skills to observe and analyze the advantages and disadvantages of the energy flows of water - sunlight - wind to select sample plots; 3) Skills to use GPS; 4) Skills to view and read maps in the field, calculate the distance from the map to the field and vice versa; 5) Skills to measure, count, and record information about timber trees; 6) Skills to measure, count, and record information about endemic trees, medicinal plants, medicinal herbs, etc. 7) Skills to calculate carbon volume in different types of trees.

Notable outputs have been achieved, including: 1) Participants understand and practice the skills of the training content proficiently and are able to apply them in their own localities and retrain others. For example: Mr. Ho Van Hue (Ma Lieng ethnic youth from Quang Binh province) and Mr. Tran Dinh Khanh (near HEPA area) know how to use GPS, measure and count trees. Mr. Khanh becomes proficient in taking notes and calculating tree volume and Carbon stock. Mr. Nguyen Thanh Trung is proficient in reading maps. Ms. Dang Nhu Bang has identified some medicinal plants in the field. 2) SPERI staff have produced a set of documents with information on volume and biodiversity of 37 sample plots. These documents have been recorded, compiled and rewritten to serve as inputs for future policy analysis and recommendations. 3) SPERI staff have completed one photo report, and a video clip reflecting participatory action research has been edited.

In reality, SPERI organized two major times of Participatory Action Research (PAR) at HEPA. The first was done on 21 sample plots. The second was carried out on 16 sample plots, and a recheck and fix of errors from the first PAR.

The participatory action research has resulted in comparative indicators of medicinal plants with the following figures: 1) Total number of measured and counted plots: 37 - equivalent to an area of 1.85 ha; 2) Total number of medicinal plants counted: 9,765 plants; 3) Total number of medicinal plant species discovered: 208; 4) Most common medicinal plant: Small-stemmed sedge (*Xuong Xi than nho*) - 575 times per 1.1 ha; 5) Most common medicinal plant in the south direction: 12,860 plants per ha; 6) Most common medicinal plant in the foothills and lowlands: 11,600 plants per ha.

#### **3.2. Unintended effects**

The process of multi-stakeholder consultation, discussion and participatory action research have brought about a great success that produce valuable inputs for contribution to improvement of the government's Carbon trading policy. Especially, SPERI arranged discussion between Professor Goltenboth (from NLI - Center for Agriculture in the Tropics and Subtropics of the University of Hohenheim, Germany) and policy makers from MARD and local officials. The local officials highly appreciate the academic recommendations while Prof. Goltenboth clearly pointed out that currently, there are several million hectares of forest so we should not set a goal for a change of the whole thing immediately. We can practically aim at 10 percent of change each year, for instance, the increase of native rice or integrated crops to replace mono plantation. Then after ten years, we will achieve 100 percent of native rice and integrated crops to solve the issue of overwhelming mono plantation now.



SPERI has completed a report on the entire outcome and consolidated data of the HEPA forest volume and Carbon stock. The report (in English version) was shared with Prof. Goltenboth (NLI, Germany) and one Vietnamese version was sent to three Vietnam ministries (Ministry of Agriculture, Ministry of Natural Resources and Environment, Ministry of Science and Technology). In the Vietnamese version, there is a comparison of four different formulas for calculation and conversion from forest volume to Carbon stock and the reason why SPERI decided to choose the most suitable one, that is introduced by Prof. Bao Huy of Tay Nguyen University.

#### 3.3. Risks and/or unexpected opportunities

There is no prominent risk appearing during implementation of the project in this phase.

#### 3.4. Evaluation

There is no formal evaluation during this reporting phase. However regular assessment and evaluation are made during the implementation process. From SPERI staff's observation and talk with the participants, we learnt that the training program on measuring and auditing HEPA forests is completely suitable for the needs and aspirations of HEPA staff and the target communities.

From the HEPA forest audit results, the participants understand deeper the value of forests as well as the achievements of more than 20 years of managing and protecting HEPA forest land, which should provide them more motivation for their work in the following years. The participants have learned how to identify sample plots, compare maps, measure timber trees and medicinal plants. After the practical training, they can proactively apply and do surveys in their localities without the support of external experts.

#### **3.5.** Planning versus Implementation

The activities are implemented in time, or even ahead of the project schedule. SPERI staff understand that it is much better to have a comprehensive and persuasive set of empirical data and documentation as soon as possible, so that they will be confident to share and discuss with relevant academics and policy makers. Early connection and discussion with academics and policy makers helps SPERI staff to gain more trust and support from them whenever SPERI organizes further meetings, debate and send their policy recommendation to the relevant policy making agencies in the next phase.

#### 3.6. Main lessons for improvement of coming activities

SPERI staff understand that the results of 37 sample plots could not fully reflect the results of the entire HEPA. It is necessary to measure at least 100 more sample plots in different regions, terrains, and directions of the entire HEPA. Besides, some staff are not very satisfied with the calculated results from two samples (Plot 10 and Plot 21 in the first PAR), so in the second PAR, they re-organized and fixed the measurement and counting errors on the mentioned samples.

The involvement of herbal healers from different ethnic groups and regions (Dao in Ba Vi, Hanoi and Tay in Yen Bai province) has not merely helped enrich research results, but also created opportunities for the participants to exchange their experience and find ways to apply to their own localities

#### Part 4: Recommendations and conclusion

Carbon Stock Measurement by random sample approach in the watershed tropical rain- forest measurement requires: 1) Professional Background of Soil Science, Chemical Geographical Biologically, Forest Science Background; 2) Google Satellite Understanding and as well 3) high kills in reading administrative and geographical mapping and the imperial ecological landscape; more than that, it need the basic understanding of mathematic logic to apply carbon stock formulation in



calculation processes. Therefore, the program has been challenging a lot in term of limitation of budget and human resources.

Meanwhile, during implementation approach, HEPA also face difficulty in how to deal with the dilemma of Decree 107/2022/ND-CP which the scientific organization such SPERI and CHESH, who must take place of high responsibility in term and one behalf of highland Farmer/ land and forest holder who will be a long last forest and Land user towards NetZero 2050 (Officially stated by the Vietnam Government). Therefore, we have been trying our best to deal with our very important mission for many farmers and forest users who are representing grassroots watershed protection and preservation.

However, our team have been successfully in very close cooperation with Professor Goeltenboth who on behalf of Natural Life International, Germany and his team who voluntarily engaged and coming to HEPA during 10 days from April 5<sup>th</sup> to April 16<sup>th</sup>, committed with our Key Farmers, Staff and Supervisor for Government Side, we have been up-dated all our database, formulations and results from different scientific formulations from sources, we together, came up with a common agreement of using the Vietnamese Prof. Bao Huy's formula (2012) for Carbon Stock in Above Ground Biomass to report to the local and central Government later on.

In the next 6 months, SPERI and HEPA will associate with Consultant on Development (CODE) to work together closely and connect to Scientific Professor Bao Huy for further long-term going in order to protect and preserve not only Watershed Rain-Forest for Farmers Livelihood, but also contribute our efforts to Climate Change as well as widen our lessons learnt to FETRA Partners.



#### Annexes

# Annex 1. Comparing timber volume of each sample plot at different zones (the first Participatory Action Research/ PAR on 21 sample plots)

Code of plot	Sampling plots at the foothills					Sampling plots at the middle of hills				Sampling plots at the edges and top of hills					
-	Trees >6cm	Tree s <6cm	Bam boo	Tim ber volu me (m3)	Reser ved Carbo n (ton)	Tre es >6c m	Tre es <6c m	Bam boo	Tim ber volu me (m3)	Reser ved Carbo n (ton)	Tre es >6c m	Trees <6cm	Bam boo	Timber volume (m3)	Reserved Carbon (ton)
Ô1				()		29	80	5 reef	3,54	8,85 1					
Ô2										1	37	125		16,92	7,794
Ô3											45	96		9,93	5,378
Ô4						37	10	7	5,3	3,61					
Ô5	40	106		11,9	7,71		7	reef		7					
Ô6					6	30	12 7		11,3 8	6,70 9					
Ô7						51	19 0		10,1 3	6,18 6					
Ô8	19	43		7,54	4,48 4				5						
Ô9				7,54							25	94		9,4	4,184
Ô10	28	103	5 reef	6,95	4,23 9										
Ô11				0,95							27	144		8,96	5,374
Ô12	41	157		8,74	5,43 9										
Ô13						34	10 9		11,6 8	7,11 2					
Ô14											34	142		8,58	4,754
Ô 15											30	162		6,22	4,116
Ô16											39	105		32,19	15,301
Ô17											31	136		6.39	3,182
Ô18											42	106		16,19	9,502
Ô19						32	86	2 reef	8,04	4,91 6					
Ô20	42	111		10,6 7	5,91 5										
Ô21	43	120		13,7 0	112, 766										



Code of plot	Sampling plots at the foothills				Sampling plots at the middle of hills				Sampling plots at the edges and top of hills						
	Trees >6cm	Tree s <6cm	Bam boo	Tim ber volu me (m3)	Reser ved Carbo n (ton)	Tre es >6c m	Tre es <6c m	Bam boo	Tim ber volu me (m3)	Reser ved Carbo n (ton)	Tre es >6c m	Trees <6cm	Bam boo	Timber volume (m3)	Reserved Carbon (ton)
Avera ge per plot	35	106		9,91	23,4 26	35	13 8		8,34 5	6,11 1	34	123		12,7	6,620
Avera ge per ha	700	2.12 0		<b>198,</b> 2	486, 520	70 0	2.7 60		166, 9	122, 2	68 0	2.460		254	132,4

# Annex 2. Estimated Carbon of each sample plot (the first PAR on 21 plots)

Plot	Trees	Bamboo	Reef of bamboo	Estimated carbon (ton)
PIOL	Trees	Damboo	Reel Of Dallibuu	((01)
Ô 1	5,307		3,544.25	8,851
Ô 2	7,794			7,794
Ô 3	5,738			5,738
Ô 4	3,617			3,617
Ô 5	6,950	766.04		7,716
Ô 6	6,709			6,709
Ô 7	6,186			6,186
Ô 8	4,484			4,484
Ô 9	4,184			4,184
Ô 10	4,239		400,448	404,686
Ô 11	5,374			5,374
Ô 12	5,439			5,439
Ô 13	7,112			7,112
Ô 14	4,754			4,754
				4,116
Ô 15	4,116			,
Ô 16	15,301			15,301
Ô 17	3,182			3,182



Plot	Trees	Bamboo	Reef of bamboo	Estimated carbon (ton)
Ô 18	9,502			9,502
Ô 19	5,789		3,911,044	3,916,833
Ô 20	5,965			5,965
Ô 21	112,766			112,766
Total	234,509	766.04	4,315,036	4,550,311



# Annex 3. H (Shanon Index) and Cd (Concentration of Dominance Index) indices of 37 sample plots (after the second PAR)

No	Sample plots	Number of species	Total individuals	H (Shanon Index)	Cd (Concentration of Dominance Index)
1	H29	24	48	2.962	0.063
2	H16	23	39	2.953	0.064
3	D2	21	28	2.948	0.059
4	D6	22	55	2.913	0.062
5	H7	25	51	2.910	0.075
6	H13	22	34	2.909	0.069
7	H17	21	31	2.906	0.066
8	D4	23	43	2.853	0.078
9	D7	22	36	2.844	0.079
10	H20	21	42	2.843	0.069
11	H3	22	45	2.828	0.080
12	H4	21	37	2.825	0.074
13	H25	21	43	2.822	0.076
14	H2	20	37	2.819	0.069
15	H18	21	42	2.776	0.082
16	H21	21	43	2.761	0.088
17	H19	18	32	2.751	0.072
18	H26	20	49	2.744	0.081
19	D1	20	43	2.739	0.082
20	D8	22	48	2.726	0.092
21	D9	20	43	2.713	0.085
22	H14	19	34	2.654	0.095
23	H12	20	41	2.651	0.103
24	H1	17	29	2.644	0.089
25	H6	17	30	2.627	0.091
26	H27	17	34	2.617	0.090
27	D10	18	52	2.603	0.092
28	D5	19	44	2.566	0.104
29	H15	16	30	2.561	0.093
30	H11	14	27	2.531	0.086
31	H10	16	28	2.511	0.110
32	D3	14	29	2.435	0.106
33	H9	13	25	2.391	0.107
34	D11	14	25	2.332	0.142
35	H5	17	40	2.301	0.174
36	H28	12	33	2.144	0.152
37	H8	2	19	0.576	0.612
Mea	n	18.78	37.54	2.64	0.10



No	Sample plots	Number of species	Total individuals	H (Shanon Index)	Cd (Concentration of Dominance Index)
SD		4.26	8.66	0.40	0.09
Max	(	25.00	55.00	2.96	0.61
Min		2.00	19.00	0.58	0.06

thnic from Yen Bai are exchanging knowledge

# Abbreviation

3R	Forest, upland field & rice field agro-ecology ( <i>Rung, Ray, Ruong</i> in Vietnamese)
SPERI	Community Entrepreneur Development Institute
HEPA	Human Ecology Practice Area
LISO	Livelihood Sovereignty Alliance
MARD	Ministry of Agriculture and Rural Development
NLI	Center for Agriculture in the Tropics and Subtropics, Germany
PAR	Participatory Action Research
SCCF	Secours Catholique/Caritas France
YIELDS-AGREE	Young Ecological Leadership Development Strategy./.