



KONSERVASI  
BERSAMA  
MASYARAKAT

# ANNUAL REPORT 2020-2021



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## Summary of Project

|                                 |   |
|---------------------------------|---|
| <b>Project Overview</b>         |   |
| Reporting period                | 2 years<br>01/01/2020-31/12/2020<br>01/01/2021-31/12/2021 |
| Geographical Area               | Bujang Raba Landscape, Bungo District, Jambi Province     |
| Technical specifications in use | Avoided deforestation (REDD+)                             |

| PROJECT INDICATORS   | HISTORICAL                           | ADDED/ISSUED THIS PERIOD (2020-2021)   | TOTAL                                     |
|--|--------------------------------------|--|---|
| No. smallholder households with PES agreements   | n/a                                  | n/a  | n/a                                       |
| No. community groups with PES agreements (where applicable) by Dec 2014  | 5                                    | -  | 5   |
| Approximate number of households (or individuals) in these community groups  | 934 household<br>(3,652 individuals) | -  | 934 household<br>(3,652 individuals)      |
| Area under management (ha) where PES agreements are in place   | 5,339 ha                             | -  | 5,339ha                                   |
| Total PES payments made to participants (USD)  | 362,845.4                            | 109,032  | 209,548                                   |
| Total sum held in trust for future PES payments (USD)  | n/a                                  | n/a  | n/a                                       |
| Allocation to Plan Vivo buffer to date   | 56,869                               | 18,956   | 75,825                                    |
| <b>Unsold Stock at Time of Submission: 0</b>   |                                      |  |   |
| Saleable Emissions Reductions Achieved (tCO <sub>2</sub> )   | 227,460                              | 75,820<br><small>(reserved for future issuance as project is not currently issuing due to the current uncertainty of the status of the VCM in Indonesia)</small> | 303,280                                   |
| Plan Vivo Certificates (PVCs) requested for issuance this reporting period   | <b>15,000 from 2015</b>              |  |   |
| <b>tCO<sub>2</sub> available for future issuances (in 2014, 2015, and 2019, a portion of emissions reductions were issued and the rest remain)</b> |                                      |  |   |
| 2014   |                                      |  | 32,910                                    |
| 2015 (issuing 15,000 this 2020-2021 reporting period)  |                                      |  | 17,910                                    |
| 2016, 2017; 2018   |                                      |  | 0   |
|  |                                      |  | All available credits were issued in 2018 |
| 2019   |                                      |  | 35,820                                    |
| 2020   |                                      |  | 37,910                                    |
| 2021   |                                      |  | 37,910                                    |
| Total  |                                      |  | 167,460                                   |

## Part A: Key Events, Successes, and Challenges

### A1. Key Event

From 2020 to 2021 and even at the time of writing this, the global COVID-19 pandemic is being felt by Bujang Raba the community in the health, economic, and agricultural sectors. Mass restrictions on human activities to reduce the spread of the virus have greatly slowed the wheels of the economy, reducing the level of community data collection and some activities. It has changed the culture of the community by pushing people to share time and knowledge through the transfer of technology. In this project period, we focused on social welfare, addressing COVID-19, and distributing foodstuffs to maintain living standards with less focus on forest management programs as would have been done usually.

Regarding project activities, the COVID-19 pandemic caused several agenda activities that were actually carried out by involving crowds, the number of participants had to be limited and follow strict health protocols. Some activities involving crowds from various regions had to be carried out online and some activities were halted such as the culinary products outlined in the

previous AR. But over time, and the ability to strategize and adjust to the situation, project activities were implemented and will continue.

The activities that did take place focused on community livelihoods and business development, regional governance through the affirmation of village forest boundaries and forest patrols, as well as capacity building of local institutions, such as alternative economic excavation, administrative and financial training, and coffee cultivation training. In addition, the project promoted a sustainable forest management model through Community REDD+, by encouraging community leaders to speak at events involving parties at the National level.

In this period, 5 village communities in Bujang Raba benefited from the project. The support funding for community PES Bujang Raba project has been distributed to 5 main activity components, namely 1) increasing the institutional capacity of village forest management groups, 2) improving the economy and livelihoods, 3) building infrastructure for village public facilities, 4) Forest governance through the affirmation of village forest boundaries and forest patrols, and 5) as well as educational and social assistance. Some important events are described as follows:

1. Socialization of prevention and breaking of the chain of spread of the Covid19 Virus. The local community began to understand the impact of the Covid 19 pandemic and learn steps to help prevent and halt the spread of the virus
2. Strengthening commitments to reduce carbon emissions (Carbon Returns MoU in 2021 between developers and beneficiaries). The activity aimed to reaffirm the community's commitment to reducing carbon emissions through forest protection even if the rate of deforestation in the project area does not affect the achievement of reducing emissions. The deforestation in the project area, particularly what occurred in 2019, is a green light for the community to be vigilant so that deforestation does not continue to develop. This activity is also used for joint reflection and evaluation of project activities.
3. Forest patrols and the affirmation of the boundaries of the Village Forest protected zone. The forest patrol is a routine activity carried out for monitoring and securing forests. To improve forest protection, it is necessary to affirm the boundary between the protected zone and the utilization zone village forest area. Boundary signs in the field notify everyone of the zone's protected status. The boundary sign (a nameplate) is posted following the boundary at every 100 meters.



*Figure 1: Forest patrol*



Figure 4: Community used GPS



4. Designing village forest annual plan, which is approved by the Forest Management Unit of Bungo District. The design of forest village management plan involved related stakeholder and youth in the participatory manner. The document is compulsory for village forest councils as their responsibility to manage the forest.



Figure 5: Finalization Village forest management plan by Forest Management Unit facilitator



Figure 6: FGD for formulating Village Forest Management Plan



Figure 7: Input the potency of village forest

## 5. Forest enrichment / Agroforestry

The payment for ecosystem services was also used to finance the distribution of areca nut seedlings. The seedlings were distributed to every household who needed to plant it around their farms. There are 7,000 seedlings for 150 Households.

In Laman Panjang village, the local community agreed to enrich their farms with Robusa Coffee. The local community has got knowledge how to cultivate it. The group of coffee farmer started to make seed for the Robusta coffee.



Figure 8: Distributing Areca nut tree



Figure 9 : Areca nut seed nursery



Figure 10: Seeding Robusta Coffee in a group at Laman Panjang village

## 6. Strengthening community economic and livelihood

One of the efforts to strengthen the community's economy was formed the Social Forestry Business Group (SFBG). Currently, 3 SFBGs Rattan Manau have been united into A Joint Village-Owned Enterprise (BUMDUSMA), namely "Bukit Telago" in Senamat Ulu village, KUPS "Sako Makmur" in Lubuk Beringin village, and "Batang Mengkuang" Laman Panjang village. The BUMDUSMA is a joint business entity that will support business groups in five villages. BUMDUSMA is expected to be a liaison for business groups in the village with a wider market network. At this time, the Rattan Manau has got buyers from Java and Sumatera Island.



Figure 11 : Rattan as the potency of NTFP



Figure 12: Activity to sort out the rattan

## 7. Benefit sharing from Community PES Bujang Raba project

Since the Covid pandemic hit the Indonesia, the production of agriculture is also limited. People did not go tapping the rubber and the factory of rubber stopped its works. The price of rubber was very low. The condition was getting worst when the Muslim people celebrated Eid Mubarak, where the expenditure could not be controlled. To anticipate it, the government of 5 villages in Bujang Raba agreed to distribute pack of groceries and masker for all households.



Figure 13: Distribution pack of groceries and 500 masks in Lubuk Beringin village





Figure 15 : Distribution of groceries

The number of receivers a pack of groceries each of the villages are :

- |                           |                    |
|---------------------------|--------------------|
| 1. Laman panjang village  | : 202 households   |
| 2. Senamat Ulu village    | : 337 households   |
| 3. Lubuk Beringin village | : 110 households.  |
| 4. Buat village           | : 360 households   |
| 5. Sungai telang village  | : 561 households   |
| Total                     | : 1,579 households |

In addition, Lubuk Beringin also agreed to purchase one buffalo, the meat of buffalo distributed to all households in the village. Meanwhile, the allocation of carbon credit was also distributed to orphans, elderly people, and disabled people in each village. The data of vulnerable people can be accessed from the Village Information system (VIS).



Figure 16 : Carbon credit for elderly people



Figure 17: Carbon credit for disable person

The carbon fund is the result of the sale of carbon in the Village Forest in the Bukit Panjang Rantau Bayur landscape managed by five villages. In this reporting period, these five village forests received funds of 1 million IDR which were divided equally, 200,000,000 IDR each village. Each of the village design the program and activities for disbursement, the activities related to social fund, capacity building, building infrastructure, forest patrol and monitoring, allocation for women group, as illustrated as follow :

The blessing of carbon credit during the pandemic is very helpful for communities around the forest. With the price of rubber plummeting, no one even bought it because the factory closed. The community was helped by the sale of wind (Carbon in local terms) in their forests.

#### 8. Building infrastructure in the village

The distribution of carbon credit is also used to support infrastructure in the village such as fixing the hanging bridge in Laman Panjang village, making a signing board for the Village forest, building a volleyball field, and renovating the mosque.

The picture as follow :

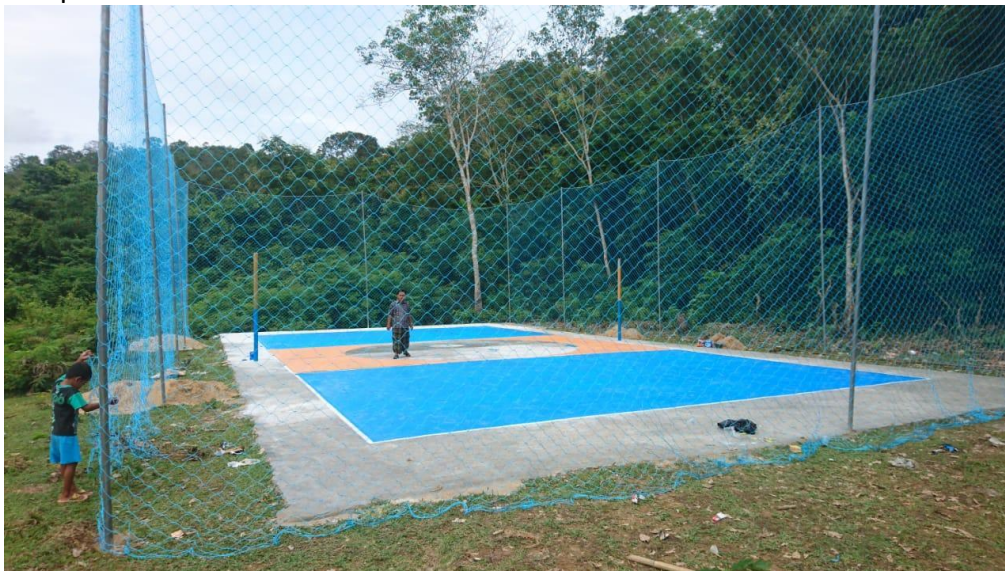


Figure 19 : Volleyball field from carbon credit



Figure 20 : Signing board of village forest, as informative board



Figure 21 : Renovation hanging bridge from carbon credit

## 9. National and international events

KKI WARSI actively promotes learning in Bujang Raba both at the national and international levels. This is an example of the first community REDD+ project in Indonesia to receive international support through a voluntary carbon market mechanism. In the event, several community leaders such as village heads, chairmen of the CBFM forum, traditional leaders, and women leaders, became resource persons to share stories about experiences at the site level in natural resource management. Events that have been held online due to the pandemic include:

### A. Webinar on Green Development during the Covid19 Pandemic

Green Development is a lofty ideal in terms of sustainable development. However, in its application, green development is still not evenly applied. The Covid-19 pandemic seems to remind us to evaluate the exploitation that has been passed. It's time for policy makers and the community to be more prudent in carrying out development. It has been almost 3 decades since KKI Warsi helped the community and assisted the communities around the forest so that the existing forests could be maintained and could benefit them. KKI Warsi had the opportunity to be a speaker in the Webinar "Green Development: Learning from Rural Areas".

In the event, the Coordinator of the REDD+ program of KKI Warsi Emmy Primadona Than shared the experience of community assistance in Bujang Raba. The assistance carried out can maintain local wisdom

that is ecologically beneficial, by successfully reducing the rate of deforestation in village forests. The community's efforts, paid off and received incentives for environmental services from the voluntary carbon trading scheme.

**WEBINAR**  
LIVE ON ZOOM

**PEMBANGUNAN HIJAU**  
DI MASA PANDEMI COVID 19  
Pembelajaran Dari Perdesaan

Selasa, 30 Juni 2020 | 10.00 - 12.00 WIB

LINK REGISTRASI: <https://bit.ly/belajardaridesa>

LIVE STREAMING (Otomatis Mahala)  
<https://www.youtube.com/channel/UCarCMzYbKk-Eu0R23AAhPw>

**NARASUMBER:**

- Drs. Sumedi Andono Mulyo, MA, PhD  
Direktur Pengembangan Sumber Daya Alam Kawasan Perdesaan, Ditjen Pengembangan Kawasan Perdesaan, Kementerian Desa, PDT, dan Transmigrasi
- Drs. Mulyadin Malik, M.Si  
Direktur Pengembangan Sumber Daya Alam Kawasan Perdesaan, Ditjen Pengembangan Kawasan Perdesaan, Kementerian Desa, PDT, dan Transmigrasi
- Dr. Stephanus Madang, Sos, MM  
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KABUPATEN BUNGO  
KABUPATEN BUNGO  
WARS

Figure 22: Sharing session about the green development in Pandemic Covid 19, case study Bujung Raba

- b. Webinar on the database system "The potency of micro spatial plan" as the basis for village development planning in Bungo Regency. Realizing the challenges in the preparation of development planning at the village level, KKI Warsi together with the Bungo Regency Government conducted intensive discussions to encourage effective, efficient, and broad impact village development planning. The theses gave birth to a joint design to build a Village Micro spatial plan database system, which was carried out in villages in Bujung Raba and its surroundings.

The village micro spatial plan database model, which is built digitally, is expected to be able to become a database for village development planning, which is oriented towards sustainable natural resource development, and contributes to low-emission development. On this occasion, one of the Village Heads in Bujung Raba (Mr. Jamris) acted as a resource person to share experiences about the PRM application that he had applied. This activity was held on Thursday, September 24, 2020, at 10.00-12.00, with zoom application.

**Webinar**

**Sistem Database "Potensi Ruang Mikro" Sebagai Basis Perencanaan Pembangunan Desa Pada Kabupaten Bungo Provinsi Jambi**

**Keynote Speaker:**  
H. Mashuri S.P., M.E.  
Bupati Kabupaten Bungo

**Narasumber:**

- H. Deddy Irawan, SE, MM.  
Kepala BAPPEDA Kabupaten Bungo
- Riene Rahma Dewita, S. Sos., M.Si.  
Koordinator Project KKI Warsi
- Jamris  
Rio Dusun Laman Panjang Kabupaten Bungo
- Muzir  
Rio Dusun Timbolasi Kabupaten Bungo

**Moderator:**  
Ir. Rudi Syaif, M.Si  
Direktur KKI Warsi

**Penanggap:**

- Dr. Ivanovich Agusta, SP. M.Si  
Kepala Pusat Data dan Informasi Kemendes-PDT
- Edi Endra, S.P.  
Koordinator P3MD Provinsi Jambi
- Samedy, P.hD.  
Direktur Program TFCA Sumatera

Link Pendaftaran: [bit.ly/WebinarPRMWarsi](https://bit.ly/WebinarPRMWarsi)

Kamis 24 September 2020 | 10.00-12.00 WIB

via ZOOM

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Figure 23: Sharing session about the micro spatial plan as the guidance for village development plan in Bujung Raba

### C. Virtual Talk show [EU Climate Diplomacy Week 2020]

Forest protection and conservation has been carried out by community groups living in and around the forest. The role of communities in forest conservation is in line with efforts to address climate change. In Indonesia, this effort

is carried out by several indigenous peoples through various social forestry schemes or other schemes. Social forestry has brought a positive trend towards deforestation reduction efforts that contribute to reducing carbon emissions. There are many potentials and benefits of environmental services managed by the community in supporting the national target of reducing deforestation. To discuss this, Warsi, as the selected partner of EU Climate Diplomacy Week 2020, held a virtual talk show with the theme Community's Role in Forest Conservation. Featuring indigenous communities from Jambi, North Kalimantan, and Central Sulawesi who will talk about forest conservation and reducing deforestation. One of the resource persons representing Jambi was the Bujang Raba community, which was represented by Mr. Bakian as a Community Leader, and Misrayanti as a representative of the Women's Group.

Bakian conveyed the community's initiative to protect the forest. Forests for them are an economic source of non-timber forest products, such as sap, honey, and of course also fruits, petai, jengkol, durian and others. In addition, the forest is always also the guardian of a stable water source to irrigate the community's rice fields. With this condition, the community does protect and protect their forests. The bonus that communities receive from maintaining these forests is voluntary carbon returns. "Selling wind" is what the community calls the carbon returns they have received twice from the success of maintaining the Bujang Raba forest. Misrayanti also stated that the community uses village forests to improve the community's economy through non-timber forest products. One of them is manau rattan which is commonly found in village forest areas. The community practices sustainable harvesting to take rattan. This rattan began to be marketed to the rattan market in Cirebon. In the future, the marketing of Manau rattan is designed to be carried out by Bumdes together with rattan producing villages around Bujang Raba.

This activity was held on Day / Date: Sunday, October 25, 2020

Form : Virtual Talkshow via Zoom (The talkshow will be held in Bahasa and English)

**EU CLIMATE DIPLOMACY WEEK 2020**

**VIRTUAL TALKSHOW**

**PERAN MASYARAKAT ADAT DALAM KONSERVASI HUTAN**

Minggu, 25 Oktober 2020  
Pukul 13:00 - 15:00 WIB (GMT +7) via ZOOM

**SPEAKERS**

- RUDI SYAF**  
Direktur Eksekutif  
KKI WARSJI
- PROF. DR. FRIEDHELM GOLDENBOTH**  
Universitas Hohenheim,  
Jerman
- DENNIS GREIS ADJI**  
Tokoh Perempuan Pipikoro,  
Sulawesi Tengah
- BAKIAN**  
Tokoh adat dari  
Lubuk Beangin, Jambi
- HANSICOF**  
Kepala Desa Setulang  
Kalimantan Utara
- ROSNI**  
Anggota Kelompok Perempuan  
Pengelola Angrek Hutan dari  
Desa Bahagia Sulawesi Tengah
- MISRAYANTI**  
Perwakilan kelompok  
perempuan dari  
Sungai Telang, Jambi
- BASMAIRAN**  
Ketua Kelompok Sadar  
Pariwisata/Pok Darwis,  
Setulang, Kalimantan Utara
- MODERATOR**
- ANGGALIA PUTRI PERMATASARI**

Link Registrasi:  
[bit.ly/MasyarakatAdatJagaHutan](https://bit.ly/MasyarakatAdatJagaHutan)

The Talkshow Will Be Held In Bahasa and English

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#### D. Sharing session about the potency of PES

Sharing Warsi's experience with academics, researchers and campus activists of Sulthan Thaha Jambi Islamic University. Monday 16 November 2020



Figure 25: sharing session about climate change and the potency of ecosystem services

E. National Webinar with the theme of Utilization of Village Funds for spatial-based mapping of village resources

Indonesia has more than 70 thousand villages. Some of these villages still do not have a definitive boundary system for each other. This condition often causes uncertainty in the management of the area by its people. Warsi in a number of regions has developed a spatial-based village database. Initially, the database that was present in the form of an application was intended to collect data on the potential of villages containing spatial and social data of their communities. This data can be used for village development planning. Warsi's learning in Bujang Raba was then shared in a National Webinar with the theme Of Village Fund Utilization for spatial-based mapping of village resources. The speakers at the event were: Director of KKI Warasi (Rudi Syaf), Head of Laman Panjang Village – Bujang Raba (Jamris), Head of Bungo Regency Bappeda (Dedi Irawan), Head of Community Empowerment division of PMD Bungo Regency (Iman Budiseriawan), and Representatives from the Ministry of Villages. Conducted on Monday 15 February 2021.



Figure 26: Sharing session about the allocation of Village Fund for mapping natural resources

A2. Key Successes and Challenges

In this 2020 - 2021 report period, we found some keys to success and challenges as follows:

1. The contribution for ecosystem services derives from Bujang Raba has significant meaning to the community. PES funds can be used to implement village council's work plan in forest management, development, infrastructure for public facilities, capacity building and social assistance.
2. The outbreak of the Covid-19 pandemic, which was felt up to Bujang Raba, greatly affected aspects of people's lives. This is exacerbated by the decline in the price of rubber commodities, which have been the mainstay of the community, thereby reducing people's income. For the rural poor, the proceeds from carbon credits, which are distributed in cash and in kinds are very helpful to meet their basic lives.
3. The ability of the community to adapt to the Covid19 pandemic by implementing strict health protocols and following the vaccination program, is an important factor so that various activities can be implemented.
4. Currently, the government is preparing technical regulations on the economic value of carbon, this has an impact on the restraint of carbon sales transactions, so that the amount of funds to support activities is reduced.

### A3. Project developments

In this period, many activities were dominated by the distribution of benefits from the proceeds of carbon credit. The distribution of benefits is determined in a participatory manner with the community, and is adjusted to the needs of each village. Each of village proposed activities based on the agreed budget to WARSI, and WARSI assist for the disbursement. All financial report and progress reports are reported to WARSI.

To support the distribution of benefits can be done in a transparent and accountable manner, the community is given training on administration and finance. The use of finance is also supervised in layers, ranging from the level of village facilitators, Warsi's financial team, to external auditors.

Due to the incomplete regulatory problems at national level, there are no carbon credit transactions in this period, and no transactions will be carried out until there is clarity of regulation. The activities carried out in this period are still supported by the proceeds from sales in the previous period.

## PART B: PROJECT ACTIVITIES

The pandemic of Covid 19, during this period, halted some activities in the field because the economy of the local community was paralyzed along with the market.

### Eco-tourism

During the pandemic of Covid 19 the activity of eco-tourism was closed. The policy for social distancing and traveling made the destination of eco-tourism in some areas in Bujang Raba was abandoned. The narration of Covid 19 as the global pandemic that killed millions of people, made the local community in Bujang Raba refusing the visitor from outsider. WARSI as the facilitator used the strategy of facilitation into the mitigation of transmitting Covid 19. It is very important because there was a lot of false information about the Covid 19 accepted by the local community.

Together, with the local community, we build the Covid post and provide an isolation house for people infected by Covid 19. In addition, in some places, we provide hand sanitizer and liquid soap for a healthy life. The demand for handicrafts also went down dramatically.

### Forest Patrols

Two forest patrols are conducted per year to protect the coffee trees which were threatened by the stifled market, i.e., they could have been a target for those desperate for income.



Figure 27: Forest patrole

### Camera Traps

Camera traps were installed in 2020 in order to monitor biodiversity. IUCN list species are noted to be living in the forest. It is found 20 species of animals from 20 families successfully recorded by camera, most of the animals are protected animals in Indonesia and internationally (IUCL CITES list). The largest species found in the form of carnivores which identify that this area is still in a stable ecosystem and becomes a natural habitat for many wildlife.



*Neofelis diardi* Macan dahan  
Figure 28: photo captured by camera trap



Figure 29: one of IUCN list captured by camera trap



Figure 30: installed camera trap



**Agroforestry**

Rubber, cacao, coffee, cardamon, betel nut (areca), dragon blood (rattan-esque, vine) all provided and planted in the utilization zone, garden, or farming areas in order to provide multi-layer income to support the entire community. The seeds for areca have been distributed from the nursery.



Figure 32 : Seed nursery

**B1. Project activities generating Plan Vivo Certificates**

**Table B1: Project activity summary**

| Name of technical specification | Area (Ha) | No smallholder households | No Community Groups |
|---------------------------------|-----------|---------------------------|---------------------|
| REDD+                           | 5,336     |                           | 5 villages          |

**B2. Project Activities in Addition to those Generating PVCs**

Ecotourism and handicrafts were halted due to COVID 19. Training went forth on the sustainable harvesting of rattan. This way the trees, where rattan grows, are protected from accidental cuts and damage.



Figure 33 : Training how to harvest rattan

### Legal drafting training

Legal drafting training is a training how to design legal product at the village. The activity is carried out in 4 days, where activities on days 1 and 2 were made inventory the problems in the village and provide an understanding of the authority of the village, types, and uses of legal products in the village. On day 3, local community get understanding of the flow of making legal products in the village, the framework of village legal products and the technical implementation this legal product. On the 4th day we carry out the practice of discussing and promulgating village legal products. The participants involved in this activity were approximately 30 people consisting of village governments, village legislative, representatives of rural institutions, representatives of community leaders, representatives of women and representatives of youth. Local community makes exercise how to make legal product related to the management of natural resources. The following up of this training how to design the legal product together with the village apparatus.



Figure 34 : Steps in designing village regulation

## Part C: Plan Vivo Certificate issuance submission

### C1. Contractual statement

This issuance is based on signed PES agreements with participants complying with all the minimum requirements stated in these agreements. Every year, the WARSI and the five villages in Bujang Raba renew the commitments to run the project as shown the photo below:



Figure 35 : Contract and MoU with 5 villages with Warsi



Figure 36 : Deputy Director of WARSI signed the contract

**Table C1: Historical Analysis of PVCs available for issuance**

| Vintage | Area (ha) | Tech. Spec | Total tCO2 achieved per period 1 | % buffer 2 | No. of PVCs allocated to the buffer account 3 | Saleable PVCs achieved that period 4 (1-4) | PVCs issued from this vintage | Saleable PVCs remaining that vintage (PVCs that have not been issued) | PVCs available from previous period (cumulative sum of 5 from previous periods NOT INCLUDING CURRENT) |
|---------|-----------|------------|----------------------------------|------------|---|--|-------------------------------|---|---|
|---------|-----------|------------|----------------------------------|------------|---|--|-------------------------------|---|---|

|              |              |        |                |            |               |                |  | 5  |   |
|--------------|--------------|--------|----------------|------------|---------------|----------------|--|--|---|
| 2014         | 5,336        | REDD + | 47,388         | 20%        | 9,478         | 37,910         | 5,000  | 32,910   | 0 (start of project, none from previous period) |
| 2015         | 5,336        | REDD + | 47,388         | 20%        | 9,478         | 37,910         | 5,000 issued 2015<br>10,000 requested for issuance this 2020-2021 period<br>totalling 15,000 | 22,910   | 0 (start of project, none from previous period) |
| 2016         | 5,336        | REDD + | 47,388         | 20%        | 9,478         | 37,910         | 37,910   | 0  | 55,820 & 5,000 issued in 2015)                  |
| 2017         | 5,336        | REDD + | 47,388         | 20%        | 9,478         | 37,910         | 37,910   | 0  | 55,820  |
| 2018         | 5,336        | REDD + | 47,388         | 20%        | 9,478         | 37,910         | 37,910   | 0  | 55,820  |
| 2019         | 5,336        | REDD + | 47,388         | 20%        | 9,478         | 37,910         | 2,090  | 35,820   | 55,820  |
| 2020         | 5,336        | REDD + | 47,388         | 20%        | 9,478         | 37,910         | 0 (No PVCs issued this period due to changes in VCM regulations in Indonesia)                | 37,910   | 91,640  |
| 2021         | 5,336        | REDD + | 47,388         | 20%        | 9,478         | 37,910         | 0 (No PVCs issued this period due to changes in VCM regulations in Indonesia)                | 37,910   | 129,550   |
| <b>TOTAL</b> | <b>5,336</b> |        | <b>379,104</b> | <b>20%</b> | <b>75,824</b> | <b>303,280</b> | <b>135,820</b>   | <b>TOTAL SALEABLE PVCs not yet issued on Markit: 167,460</b> |   |

**Table C2: Issuance Request for reporting period 01/01/2020 – 31/12/2020 and 01/01/2021 – 31/12/2021 (made on the basis of ongoing activities on land already managed by the project)**

| Percentage   | Area (ha)    | Total tCO2 achieved this period* | % buffer   | No. of PVCs allocated to the buffer account | Saleable PVCs  | No. PVCs requested for issuance from saleable | tCO2 available for future issuances |
|--------------|--------------|----------------------------------|------------|---|----------------|---|-------------------------------------|
| 2015         | 5,336        | 47,388                           | 20%        | 9,478                                       | 37,910         | 15,000  | 7,910                               |
| 2020         | 5,336        | 47,388                           | 20%        | 9,478                                       | 37,910         | 0   | 0                                   |
| 2021         | 5,336        | 47,388                           | 20%        | 9,478                                       | 37,910         | 0   | 0                                   |
| <b>TOTAL</b> | <b>5,336</b> | <b>142,164</b>                   | <b>20%</b> | <b>28,434</b>                               | <b>113,730</b> | <b>15,000</b>                                 | 7,910 remaining after this issuance |

**Available for issuance**

| Available for Issuance |   |
|------------------------|---|
| 2014                   | 32,910 tCO2 (5,000 were issued)                                   |
| 2015                   | 22,910 tCO2 (5,000 were issued 2015, 10,000 issuing 2020 to 2021) |

|              |                                 |
|--------------|---------------------------------|
| 2016         | 0 tCO2 (all issued)             |
| 2017         | 0 tCO2 (all issued)             |
| 2018         | 0 tCO2 (all issued)             |
| 2019         | 35,820 tCO2 (2,090 issued 2019) |
| 2020         | 37,910 tCO2 (0 issued)          |
| 2021         | 37,910 tCO2 (0 issued)          |
| <b>TOTAL</b> | <b>167,460 tCO2</b>             |

**Table C3: Allocation of issuance request**

**Table C3: Allocation of issuance request**

| Buyer name/<br>Unsold Stock | No. PVCs transacted | Markit ID (if available) | Tech spec |
|-----------------------------|---------------------|--------------------------|-----------|
| COTAP                       | 5,585               |                          | REDD+     |
| Fairatmost                  | 2,000               |                          | REDD+     |
| Unsold                      | 7,415               |                          | REDD+     |
| <b>TOTAL</b>                | <b>15,000</b>       |                          |           |

**C3 Data to support issuance request**

Please refer to Section E1 and Annex 1.

**Part D: Sales of Plan Vivo Certificates**

**Table D1: Sales of Plan Vivo Certificates**

Tables for sales of PVCs have been divided according to the years of the sales. This is because the community, project, and government payment split is different in some years. Also, the amount reserved for the community and the amount disbursed varies. Some years more is disbursed to the community than PVCs sold and some years less is disbursed to the community than PVCs sold.

**PVCs Sold in 2018**

| Year of Sale | Vintage   | Buyer       | No of PVCs | Price per PVC (\$) | Amount of total sale | *Price to participants            | % Sale price received by participants | Total to Participants | Expenditure** | Left over*** |
|--------------|-----------|-------------|------------|--------------------|----------------------|-----------------------------------|---------------------------------------|-----------------------|---------------|--------------|
| 2018         | 2014-2015 | Zeromission | 6,009      | \$6                | \$36,054             | \$3.6                             | 60%                                   | \$21,632.4            | \$23,432.4    | \$0          |
| 2018         | 2015      | Zeromission | 500        | \$6                | \$3000               | \$3.6                             | 60%                                   | \$1,800               |               |              |
| Total sales  |           |             |            | \$39,054           |                      | Total to participants in 2018**** |                                       | \$23,432.4            |               |              |

**\*Base on 60/40 split**

**\*\* amount disbursed to community based on their activity proposals**

**\*\*\*amount left over (not given to community) is due to a lack of need based on the budgets of proposed projects from the community, amount left over is saved in trust**

**\*\*\*\*This figure is the total amount reserved for participants, not necessarily the total amount that is disbursed to participants. The amount disbursed is based on the community's request for funds for their project proposals**

| Year of Sale | Vintage | Buyer | No of PVCs | Price per PVC (\$) | Amount of total sale | *Price to participants | % Sale price received by participants | Total to Participants | Expenditure* | Left over*** |
|--------------|---------|-------|------------|--------------------|----------------------|------------------------|---------------------------------------|-----------------------|--------------|--------------|
|--------------|---------|-------|------------|--------------------|----------------------|------------------------|---------------------------------------|-----------------------|--------------|--------------|

|             |           |             |        |           |           |                                |     |              |  |                     |
|-------------|-----------|-------------|--------|-----------|-----------|--------------------------------|-----|--------------|--|---------------------|
| 2019        | 2015      | Zeromission | 500    | \$6       | \$ 3,000  | \$3                            | 50% | \$1,500      | 1 billion IDR for all of 2019 (\$72,505 based on \$13,972 USD IDR conversion rate) | \$103,252           |
| 2019        | 2015      | Zeromission | 7,343  | \$6       | \$44,058  | \$3                            | 50% | \$22,029     |  |                     |
| 2019        | 2015      | Zeromission | 345    | \$6       | \$2,070   | \$3                            | 50% | \$1,035      |  |                     |
| 2019        | 2015      | C-level     | 125    | \$6       | \$750     | \$3                            | 50% | \$275        |  |                     |
| 2019        | 2016-2017 | Zeromission | 50,000 | \$6       | \$300,000 | \$3                            | 50% | \$150,000*** |  |                     |
| 2019        | 2017      | Zeromission | 306    | \$6       | \$1,836   | \$3                            | 50% | \$918        |  |                     |
| Total sales |           |             |        | \$357,714 |           | Total to participants 2019**** |     | \$175,757    | Disbursed to community: \$72,505   | In trust: \$103,252 |

\*Base on 50/30/20 split where 50% goes to the community, 30% goes to WARSI, and 20% is reserved for the Indonesian government in case the legislation requires payment for VCM projects

\*\* amount disbursed to community based on their activity proposals

\*\*\*amount left over (not given to community) is due to a lack of need based on the budgets of proposed projects from the community, amount left over is saved in trust

\*\*\*\*This figure is the total amount reserved for participants, not necessarily the total amount that is disbursed to participants. The amount disbursed is based on the community's request for funds for their project proposals

\*\*\*\*\*2019 is when disbursements began and included payments from previous vintages. Note that disbursements in 2022 onwards may include vintages of 2015 or previous

| Year of Sale | Vintage     | Buyer       | No of PVCs | Price per PVC (\$) | Amount of total sale | *Price to participants    | % Sale price received by participants | Total to Participants | Expenditure*                    | Left over***      |
|--------------|-------------|-------------|------------|--------------------|----------------------|---------------------------|---------------------------------------|-----------------------|---------------------------------|-------------------|
| 2020         | 2017        | Zeromission | 75         | \$6                | \$450                | \$3                       | 50%                                   | \$225                 | 1 billion IDR (\$68,951)        | \$92,248          |
| 2020         | 2017        | Zeromission | 460        | \$6                | \$2,760              | \$3                       | 50%                                   | \$1,380               |                                 |                   |
| 2020         | 2017-202018 | Zeromission | 50,071     | \$6                | \$300,426            | \$3                       | 50%                                   | \$150,213             |                                 |                   |
| 2020         | 2018        | Zeromission | 3,127      | \$6                | \$18,762             | \$3                       | 50%                                   | \$9,381               |                                 |                   |
| Total sales  |             |             |            | \$322,398          |                      | Total to participants**** |                                       | \$161,199             | Disbursed to community \$68,951 | In Trust \$92,248 |

\*Base on 50/30/20 split where 50% goes to the community, 30% goes to WARSI, and 20% is reserved for the Indonesian government in case the legislation requires payment for VCM projects

\*\* amount disbursed to community based on their activity proposals

\*\*\*amount left over (not given to community) is due to a lack of need based on the budgets of proposed projects from the community, amount left over is saved in trust

\*\*\*\*This figure is the total amount reserved for participants, not necessarily the total amount that is disbursed to participants. The amount disbursed is based on the community's request for funds for their project proposals

| Year of Sale | Vintage | Buyer       | No of PVCs | Price per PVC (\$) | Amount of total sale | *Price to participants | % Sale price received by participants | Total to Participants | Expenditure**         | Left over***        | Funds withdrawn from trust  |
|--------------|---------|-------------|------------|--------------------|----------------------|------------------------|---------------------------------------|-----------------------|-----------------------|---------------------|-----------------------------|
| 2021         | 2019    | Zeromission | 819        | \$6                | \$4,914              | \$3                    | 50%                                   | \$2,457               | 1 billion IDR (13876) | None left over***** | \$69,609 (\$72,066-\$2,457) |

|             |  |         |                           |  |         |                             |  |  |          |  |  |
|-------------|--|---------|---------------------------|--|---------|-----------------------------|--|--|----------|--|--|
|             |  |         |                           |  |         |                             |  |  | \$72,066 |  |  |
| Total sales |  | \$4,914 | Total to participants**** |  | \$2,457 | Disbursed to community***** |  |  |          |  |  |
|             |  |         |                           |  |         |                             |  |  | \$72,066 |  |  |

\*Base on 50/30/20 split where 50% goes to the community, 30% goes to WARSI, and 20% is reserved for the Indonesian government in case the legislation requires payment for VCM projects

\*\* amount disbursed to community based on their activity proposals

\*\*\*amount left over (not given to community) is due to a lack of need based on the budgets of proposed projects from the community, amount left over is saved in trust

\*\*\*\*This figure is the total amount reserved for participants, not necessarily the total amount that is disbursed to participants. The amount disbursed is based on the community's request for funds for their project proposals

\*\*\*\*\*No funds put into trust this year. 1 billion IDR was given to the community from previous years' trust.

\*\*\*\*\*In 2021, there were not enough sales to allocate money to the trust because the sales were less than 1 billion IDR that is reserved for the community every year. Therefore, money was taken from the trust amount to reach the 1 billion IDR

## Part E: Monitoring Results

Table E1: Monitoring Results

| ACTIVITY                       | ACTIVITY INDICATOR (MEASURE ANNUALLY)              | ANNUAL TARGETS |   |  |
|--------------------------------|--|----------------|---|--|
|                                |  | TARGET         | RESULTS   | MITIGATING ACTIONS IF APPLICABLE   |
| Forest Carbon Stock Monitoring | Remote Sensing of Project Area                     | Annually       | In the reporting period 2020-2021: satellite image detected deforestation in the project area was 18.3 ha, the detail as follow :<br>In 2020 deforestation was 12.6 ha (in Sangi-Letung 3.4 ha, in Lubuk Beringin 2.8 ha, and in Sungai Telang 6.3 ha)<br>In 2021 deforestation was occurred 5.7 ha in Sangi-Letung | n/a<br>forest patrol and ground checking   |
|                                | Remote Sensing of Project Area                     | Ex-forest fire | Carried out in 2020-2021<br>Already covered in light green and it turned into shrub (nature regenerative)   | After 7 years (nature regenerative) it turns into secondary forest level 1.                |
|                                | Fixed point photography taken by community members | Every 2 years  | We were unable to take fixed photo points this period due to COVID.   | ake the same spot or photo point<br><br>Photos will be taken for future annual reports and |

|                                   |  |   |  |   |
|-----------------------------------|--|---|--|---|
|                                   |  |   |  | available in the next report  |
| <b>Forest Condition</b>           | Patrols carried out by community                               | 2 times per year (2 per community)                  | In the period 2020 - 2021, the illegal encroachment occurred 12.6 ha and 5.7 ha respectively. The illegal encroachment was 12.6 in 2020 (In Sangi-Letung 3.4 ha, in Lubuk Beringin 2.8 ha, and in Sungai Telang 6.3 ha)<br>In 2021 the illegal encroachment was 5.7 ha in Sangi-Letung<br>These are accounted in Annex 2 | Tagging/signboard zonation in protected zone  |
|                                   | Analysis Deforestation due to illegal encroachment (2013-2021) | <646 without project intervention (Table 13 of PDD) | Up to 2021 it was projected <646 ha deforested without project intervention, but in reality 117,7 ha deforested due to illegal encroachment and forest fire  | Forest patrol and give awareness raising to the local community to not cut the forest.      |
|                                   | Logging and/or Forest Clearance in Leakage Zone                | 0 ha  | 0 ha   | Provide awareness raising and education to the local community about the forest protection. |
| <b>Land Use Change Monitoring</b> | Land cleared for agroforestry in the forest                    | 0 ha cleared  | In the period 2020 - 2021, 18,3 ha illegal encroachment occurred for new farming<br>In 2020 encroachment for new farming was 12,6 ha (In Sangi-Letung 3.4 ha, in Lubuk Beringin 2.8 ha, and in Sungai Telang 6.3 ha)   | Provide awareness raising and education to the local community about field findings.        |

|                                  |   |  |  |   |
|----------------------------------|---|--|--|---|
|                                  |   |  | In 2021 encroachment for new farming was 5.7 ha in Sangi-Letung<br><br>Below thresholds according to annex 2   |   |
|                                  | Land cleared for smallholder oil palm plantations   | 0 ha cleared                                   | 0 ha   | Provide awareness raising and education to the local community about the forest protection. |
| <b>Biodiversity Monitoring</b>   | Biodiversity Surveys and photography (camera trap)  | annually                                       | 120 species of animals from 20 families were successfully recorded by camera, most of the animals are protected animals in Indonesia and internationally (IUCN CITES list). The largest species found is in the form of carnivores which identify that this area is still in a stable ecosystem and becomes a natural habitat for many wildlife. | Provide awareness raising and education to the local community about forest protection.     |
| <b>Water Availability</b>        | Monitoring of water supply to generate micro hydro power, clean drinking water, agricultural irrigation | Continuous water supply                        | Water has been continuously provided and there was no limited availability   |   |
| <b>Socio-economic Monitoring</b> | Establishment and access to nurseries for marginalized people   | Access for 50 people in 5 village forest areas | Seeds have been planted in the communities' farming area   | More seeds need to be distributed to the farmers.   |
|                                  | Income  | decline  | Not because of forest destruction but the COVID 19 pandemic, and low commodity prices  |   |
|                                  | Women enterprise  | Stop operating this period                     | The condition Covid 19   |   |

|  |  |   |  |   |
|--|--|---|--|---|
|  | Strengthening VFC  | Design village forest annual plan                           | Village forest management plan is implemented  |   |
|  | Law enforcement  | Design village regulation about natural resource management | Training legal drafting  | The village regulation about the natural resource management is ready |
|  | Increase access for poor and marginal community member to health care and social service | Poor and marginal community get access of social service    | Poor and marginal community get access financial support from carbon credit  | Allocation budget for poor and marginal group on benefit sharing      |
|  | Expenditure for PES fund   | Each of village has management plan                         | 5 villages in Bujang Raba have designed annual management plan   |   |
|  | Agreed management plan for PES   | Each of village has agreed on their management plan         | The management plan is approved by the head of village   |   |
|  | Trainings delivered to the communities   | 4 trainings   | 1 <sup>st</sup> training on how to develop coffee nurseries<br>2 <sup>nd</sup> training on how to harvest rattan in sustainable way<br>3 <sup>rd</sup> training on how to design village regulation<br>4 <sup>th</sup> training on forest patrol |   |

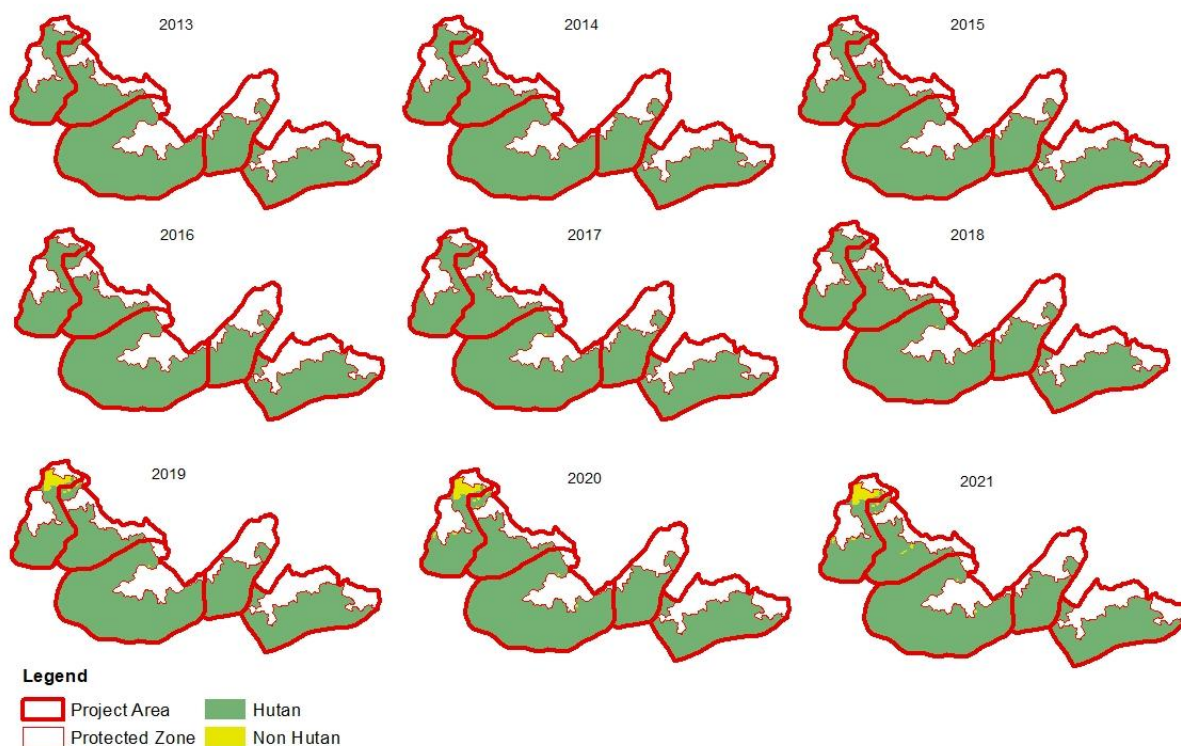


Figure 37: Citra satellite for forest cover

From figure 37, forest cover from 2013 – 2018 tends to be stable, although deforestation is relatively small in area, due to illegal encroachment. While the large deforestation occurred in 2019, due to extreme hot weather (El Nino) which caused forest fires, which occurred not only in the project area, but in many other areas of Indonesia. Likewise, from period from 2020 to 2021, if found small deforestation occurred due to illegal encroachment.

Based on the fact above, the deforestation in the project area is quite high which has been predicted. The local community understand it is hard to avoid deforestation until zero, so they make commitment to prevent deforestation 75% in the project area. Despite of that, from the range period from 2014 – 2021 the performance to reduce deforestation in the project area is beyond the stated target (see the graph 1)

In the area ex-forest fire (2019), from the analysis satellite imaginary, the color is light green, it means the area has been covered with shrub and other plants as natural regeneration. Because the location is hilly and the area is quite large, currently only natural restoration is carried out. In the tropical forest such as in the Bujang Raba landscape, natural restoration has a significant impact on the natural succession of plants quickly. At the age of 0-7 years the land will become shrubs, the age of 7-15 years becomes a young secondary forest, the age of 15-25 becomes a medium secondary forest, and over 25 years old becomes an old secondary forest. This kind of restoration or natural succession is good enough for ecology, but less economically impactful. To get ecological and economic balance, in the future it is necessary to enrich plants with MPTS (multipurpose tree species), so that there is economic value that can be taken, both in the form of fruit, leaves and latex.

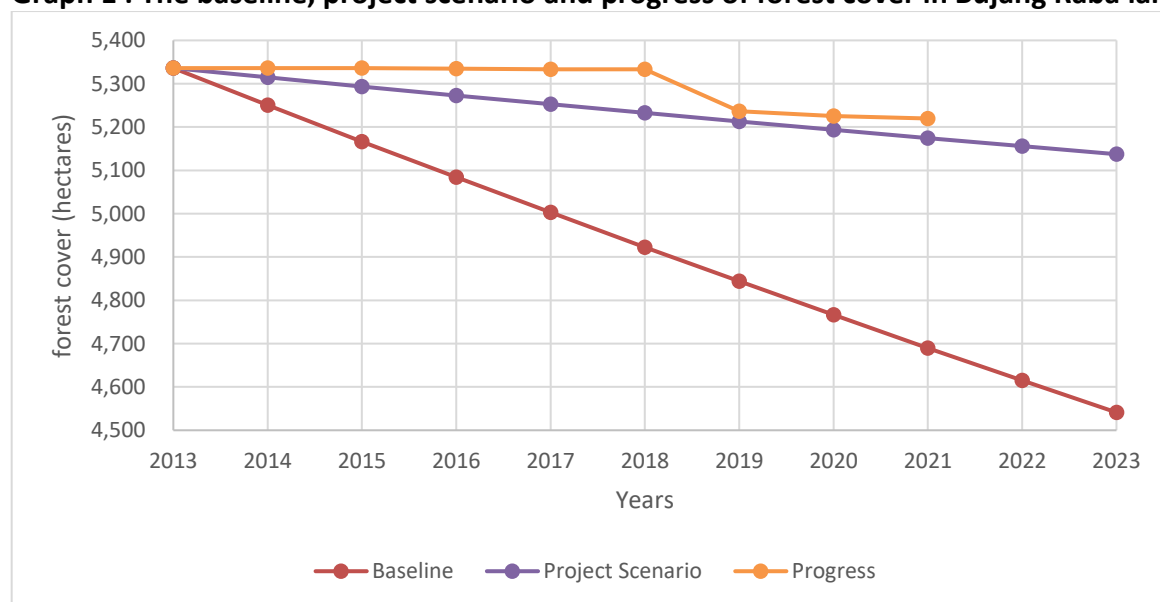
On deforestation land due to illegal encroachment, agroforestry is developed so that it can restore ecology and have an economic impact. The village forest institution keeps doing socialization and awareness raising to local communities about forest protection.

**Table E2: Percentage the Annual Thresholds and Targets for Project Performance Monitoring based on total of deforestation**

| 1       | 2    | 3                 |                  |                  | 4   | 5   |
|---------|------|-------------------|------------------|------------------|---|---|
| Year to | Year | Forest cover (ha) |                  |                  | % of year 2013 (5,336 ha) forest cover remaining per project year | % of year 2013 (5,336 ha) forest cover remaining per project year |
|         |      | 3a                | 3b               | 3c               |   |   |
|         |      | Baseline          | Project Scenario | Actual remaining |   |   |

|    |      |       | (75%) of baseline forest area remaining in hectares per project year | forest area in hectares per project year | based on actual remaining hectares (3c)<br>Year X 3C / Year 0 3A | based on the project scenario (3b)<br>Year X 3b/Year 0 3a |
|----|------|-------|--|--|--|---|
| 0  | 2013 | 5,336 | 5,336  | 5,336.0                                  | 100.00%  | 100.00%   |
| 1  | 2014 | 5,251 | 5,315  | 5,336.0                                  | 100.00%  | 99.6%   |
| 2  | 2015 | 5,167 | 5,294  | 5,336.0                                  | 100.00%  | 99.2%   |
| 3  | 2016 | 5,084 | 5,273  | 5,334.6                                  | 99.97%   | 98.82%  |
| 4  | 2017 | 5,003 | 5,253  | 5,333.2                                  | 99.95%   | 98.44%  |
| 5  | 2018 | 4,923 | 5,233  | 5,333.2                                  | 99.95%   | 98.07%  |
| 6  | 2019 | 4,844 | 5,213  | 5,236.7                                  | 98.14%   | 97.7%   |
| 7  | 2020 | 4,766 | 5,194  | 5,225.5                                  | 97.93%   | 97.34%  |
| 8  | 2021 | 4,690 | 5,175  | 5,219.7                                  | 97.82%   | 96.98%  |
| 9  | 2022 | 4,615 | 5,156  |  |  |   |
| 10 | 2023 | 4,541 | 5,137  |  |  |   |

**Graph 1 : The baseline, project scenario and progress of forest cover in Bujang Raba landscape**



**Table E3: Annual Thresholds and Targets for Project Performance Monitoring based on total of deforestation**

| Year to | Year | Baseline deforestation// | Project scenario (ha) | Actual deforestation (ha) |
|---------|------|--------------------------|-----------------------|---------------------------|
|---------|------|--------------------------|-----------------------|---------------------------|

|    |      | (ha)     |       |          |       |          |       |
|----|------|----------|-------|----------|-------|----------|-------|
|    |      | annually | total | annually | total | annually | total |
| 0  | 2013 | 0        | 0     | 0        | 0     | 0        | 0     |
| 1  | 2014 | 85,4     | 85,4  | 21,3     | 21,3  | 0        | 0     |
| 2  | 2015 | 84,0     | 169,4 | 21,0     | 42,3  | 0        | 0     |
| 3  | 2016 | 82,7     | 252,1 | 20,7     | 63,0  | 1,4      | 1,4   |
| 4  | 2017 | 81,3     | 333,4 | 20,3     | 83,3  | 1,4      | 2,8   |
| 5  | 2018 | 80,0     | 413,4 | 20,0     | 103,4 | -        | 2,8   |
| 6  | 2019 | 78,8     | 492,2 | 19,7     | 123,0 | 96,6     | 99,4  |
| 7  | 2020 | 77,5     | 569,7 | 19,4     | 142,4 | 12,6     | 112,0 |
| 8  | 2021 | 76,3     | 646,0 | 19,1     | 161,5 | 5,7      | 117,7 |
| 9  | 2022 | 75,0     | 721,0 | 18,8     | 180,2 |          |       |
| 10 | 2023 | 73,8     | 794,8 | 18,5     | 198,7 |          |       |

### Deforestation in this Period Explained

During this annual reporting period (2020-2021) a total of 18,3 ha were deforested within the Bujang Raba project area. Deforestation figures were 12,6 ha in 2020 and 5,7 ha in 2021. Both figures are below the project scenario deforestation projections. The deforestation area is above the threshold (as demonstrated in Table E2, Graph 1, and Table E3). Calculations in table E2 shows that up to this project reporting period in 2021, the % forest cover remaining from the original forest cover at the start of the project in 2013 (5,336 ha) was projected to be 96.98% thanks to the project. The actual percentage of the 2013 forest cover remaining is more than the project scenario with 97.82% remaining.

### E2: Maintaining commitments

No community group resigned from the project within the reporting period

### E3: Additional monitoring

NTFPs due to COVID 19. No monitoring beyond forest monitoring due to COVID 19. The essence of the additional activities and livelihood activities were restricted to trainings.

Currently, women's enterprises such as traditional food and handy craft were not running well, due to the Covid 19. From the carbon credit, women group develop new business which can be done from at home. For example, the woman group in Laman Panjang get support 2 unit of sewing machines and get training how to use it. The sewing machine will be very useful for the women group to fix the rip clothes at home, and anyone in the village can access the machine. The women group in Lubuk Beringin get support from carbon credit such as wedding decoration, the costume and decoration are for rent for anyone in the village who will hold wedding ceremony. The women group in Sangi Letung get support from the carbon credit for cookware. The cookware is also for rent for the local community who hold any ceremony and needs plates, cups, basin, stove, and so on.

The regulation about village also encourage village to have their own income, so the project is successful to establish village Joint village-own enterprises in 5 villages in Bujang Raba with the commodity is rattan. The Bujang Raba Forest has high potential rattan, which part of NTFP. In 2020 – 2021, the joint village-own enterprises have sold the 3-truck container of rattan to buyer, with the sales turnover reached more than 13 million IDR. The process collecting rattan

usually conducted by low-income family who highly depend on their live from forest resources. The village-own enterprises set the size of the rattan and provide the rattan workshop before transporting to buyers. In the future, the local community plans to expand their capacity to make handicraft product.

**Table 1 : Rattan sales**

|                       | January 2021     | April 2021       | Sept 2021         |
|-----------------------|------------------|------------------|-------------------|
| <b>Rattan</b>         | 406 unit         | 597 unit         | 643 unit          |
| <b>Sales turnover</b> | <b>4.933.000</b> | <b>6.366.750</b> | <b>13.624.500</b> |

**Table E3: NTFP commodities**

Table E3 reflects focus on some new NTFP commodities, which have been planted for the last two years

| No | NTFPs        | Number of seeds | Number of seeds in the polybag | Life-roll     |
|----|--------------|-----------------|--------------------------------|---------------|
| 1. | Coffee       | 10,000          | 10,000                         | 7,000         |
| 2. | Areca nut    | 10,000          | 10,000                         | 7,000         |
|    | <b>Total</b> | <b>20,000</b>   | <b>20,000</b>                  | <b>14,000</b> |

The more the quality of life improves the more the community gets access to medical services. This access comes from the district government, the project allows for the enjoyment of free medical services from the clinic. With regards to sanitation, more people are aware of its importance. There has been a lifestyle and behavior shift which now allows for community members to use the toilet at home as opposed to the river.

At this time, the average production of rubber in Bujang Raba is 700 kg per month and local community is interested to develop coffee and areca nut, because the demand of coffee and areca nut are high and as an additional income besides rubber. The areca nut will be planted surrounded coffee as the fence of the plantation.

**E4 : Environmental and biodiversity monitoring**

Environmental and biodiversity monitoring focus on tracking forest cover indicators, as discussed above. Ground-based patrols will monitor indicators like illegal encroachment area, forest fire, and some mitigation action. The biodiversity tracked through the monitoring through installing camera traps (see annex 2).

Plan for recommendation in 2022 – 2023 we expect to make up for the unachieved target by doing fix photo point.

**E5 : Summary of Payment Received for Sale of PVCs**

| no | Year of Disbursement | Vintage of Sold PVCs | TonCo2 | Price/unit (USD) | Total (USD) |
|----|----------------------|----------------------|--------|------------------|-------------|
| 1  | 2018                 | 2014-2015            | 6.009  | 6                | 36.054      |
| 2  | 2018                 | 2015                 | 500    | 6                | 3.000       |
| 3  | 2019                 | 2015                 | 500    | 6                | 3.000       |
| 4  | 2019                 | 2015                 | 7.343  | 6                | 44.058      |
| 5  | 2019                 | 2015                 | 345    | 6                | 2.070       |

|    |              |           |                |   |                |
|----|--------------|-----------|----------------|---|----------------|
| 6  | 2019         | 2015      | 125            | 6 | 750            |
| 7  | 2019         | 2016-2017 | 50.000         | 6 | 300.000        |
| 8  | 2019         | 2017      | 306            | 6 | 1.836          |
| 9  | 2020         | 2017      | 75             | 6 | 450            |
| 10 | 2020         | 2017      | 460            | 6 | 2.760          |
| 11 | 2020         | 2017-2018 | 50.071         | 6 | 300.426        |
| 12 | 2020         | 2018      | 3.127          | 6 | 18.762         |
| 13 | 2020         | 2019      | 819            | 6 | 4.914          |
|    | <b>total</b> |           | <b>119.680</b> |   | <b>718,080</b> |

## Part F: Impacts

Some media publications promote the initiatives of Bujang Raba and have drawn public attention

[Berjuang Lawan Deforestasi, Perempuan Ini Antar 5 Desa Hutan Bujang Raba Raup Rp 1 M dari Jual Karbon](#)

[Senyum Semringah Warga Desa Hutan Bujang Raba Dapat Rp1 Miliar dari Jual Karbon](#)

[Berkah Karbon Bujang Raba di Tengah Wabah Covid-19](#)

[Berkah Karbon di Tengah Pandemi Covid-19, Pengelolaan Bujang Rama Hasilkan Uang Rp 1 Miliar](#)

[Menghitung Karbon - YouTube](#) - counting carbon

[Bagi-Bagi Dana Karbon Bujang Raba - YouTube](#) - carbon disbursement

[Berkah Karbon si Bujang Raba - YouTube](#)

[Dana Karbon untuk Bujang Raba - YouTube](#)

## Part G: Payments for Ecosystem Services

**Table G1: Summary of payments made and held in trust**

| 1. Reporting year | 2. Total Previous Payments to Community*                          | 3. Ongoing payments to community **                               | 4. Total Payments for community (2+3)*** | 5. Total Payments Held in Trust | 6. Total Payments Withheld |
|-------------------|---|---|--|---------------------------------|----------------------------|
| 2018              | 0   | \$23,432.4<br>(based on 2018 IDR to USD conversion at IDR 12,166) | \$23,432.4                               | \$0                             | 0                          |
| 2019              | \$23,432.4<br>(based on 2018 IDR to USD conversion at IDR 12,166) | \$175,757<br>(based on 2019 IDR to USD conversion at IDR 13,793)  | \$200,415                                | \$103,252                       | 0                          |

|  |  |   |             |                                      |   |
|--|--|---|-------------|--------------------------------------|---|
| 2020   | \$199,189.4<br>(\$23,432.4+\$175,757)      | \$161,199<br>(based on 2020<br>IDR to USD<br>conversion at IDR<br>14,503) | \$360,388.4 | \$92,248                             | 0 |
| 2021   | \$360,388.4<br>(\$199,189.4+\$161,199<br>) | \$2,457<br>(based on 2021<br>IDR to USD<br>conversion at IDR<br>13,876)   | \$362,845.4 | No payments<br>held in trust         | 0 |
| TOTAL<br>To community:   |  |   | \$362,845.4 | \$195,500 total held in<br>trust**** |   |
| Total of payments made, payments held in trust, and payments withheld: \$558,345 |  |   |             |                                      |   |

\*(cumulative of previous reporting periods)

\*\* (payment made during associated reporting period)

\*\*\* This is the total reserved for the community from all sales, the amount distributed may be more or less than the sales for that year. This is because the community submits activity proposals to WARSI along with a budget, if the budget is less than total sales that year, less is distributed. If the budget is more than sales that year, the disbursement will come from the trust/left over funds from sales of previous years

\*\*\*\* \$69,609 withdrawn in 2021 from trust

The total of the payments that have been made so far is \$188,867. The remaining of the money is reserved in trust for future payment. WARSI and the local community have agreed to do disbursements annually. In 2019, WARSI conducted the reporting and implementation of the project and at the same time gave education to the village forest staff on how to report and implement the project.

All the financial reports should be reported back to WARSI and WARSI is audited for every expenditure made. In the second year, 2021, a village forest member group proposed a program for 1 year and the budget. This is handled by the local community by practicing what they have learned about reporting. WARSI keeps helping by providing capacity building to make sure the implementation is according to the plan and beneficiaries; however, this is a stepwise process as the community grows accustomed to the process of submitting a plan for use of disbursements and then reporting on the implementation of the plan and finances spent in so doing. The payment for 2022 is in the process.

Though the transaction of carbon credits is on hold in Indonesia, the project is still running, and it continues running since they have sufficient funds remaining to implement this project. The rest of the payment will be used for future programs and activities. The emissions reductions from this year will not be issued until the government of Indonesia is more clear on its requirements for the VCM.

This is an update in the payment split from PVCs due to the state of the VCM in Indonesia. In the past we have done a 70/30 split. For now this will be different because a portion must be put aside for the government in case it is required as the government has previously alluded to. The structure is such that, from the PVC payment, WARSI reserves 20% for the contribution to the state in case governmental regulation on the VCM is proposed in the future. Following the 20% being reserved, 60% is reserved for the community and 40% for the project. The PDD will be updated following the verification to reflect this change.

## Part H: Ongoing Participation

### H1: Recruitment

In 2020, we recruited a local facilitator, Agus Sumarli, who is in charge of assisting local communities in the implementation of Community PES Bujang Raba. She is also responsible for facilitating the disbursement of Carbon funds in 5 villages in project areas.

### H2: Project Potential

No further communities are currently on a waiting list to join the project.

### H3: Community participation

The community is actively involved in all stages of the project. Over the 2-year reporting period, the project held more than 30 community meetings. The local community in Bujang Raba take active and effective participation in designing and implementation the project. Some activities are related to protection of village forest, institutional strengthening and improving economic livelihood and they are described as follows:

| No | Activity  | Location  |
|----|---|---|
| 1. | <p><b>Financial and reporting training</b><br/> <b>Objective:</b></p> <ol style="list-style-type: none"> <li>1. Improve capacity building for village forest treasurer and village-own enterprises how to make book keeping and financial report</li> <li>2. Improve capacity building for village forest treasurer and village-own enterprises how to make narrative report</li> <li>3. Filling and documenting archives and data analysis.</li> </ol>   | Sangi Letung, Dusun Buat, Senamat Ulu, Lubuk Beringin and Sungai Mengkuang Kecil                |
| 2. | <p><b>Socialization about rattan and provide training for village own-enterprises and local community how to harvest rattan in sustainable way</b></p> <ol style="list-style-type: none"> <li>1. Training harvesting rattan in sustainable way</li> <li>2. Training specification of rattan to be harvest (size, type, etc.)</li> <li>3. Designing the benefit sharing</li> <li>4. Managing financial and administration report.</li> </ol>   | Dusun lubuk Beringin, Dusun Senamat ulu and Kampung Sungai Mengkuang Kecil, Dusun Laman Panjang |
| 3. | <p><b>Protected zone demarcation (tagging)</b></p> <ul style="list-style-type: none"> <li>● Local community understand the border between utilization zone and protected zone</li> <li>● Local community understand what do and don't in protected zone</li> <li>● Make forest demarcation</li> </ul>   | Dusun senamat<br>5 villages in Bujang Raba  |
| 4  | <p><b>Designing the management plan of Village forest</b></p> <ul style="list-style-type: none"> <li>● The local community engaged actively on formulating village forest management plan</li> <li>● The management plan is presented with village apparatus and get some input</li> </ul>  | 5 villages in Bujang Raba   |
| 5. | <p><b>Participation in Webinar :</b></p> <ul style="list-style-type: none"> <li>● The representative women group, Misrawati talked about the relation women and forest</li> <li>● The representative of local community from Lubuk Beringin village talked about the tradition and local knowledge in managing the forest</li> <li>● The representative of head of village in Bujang Raba, talked about Micro Spatial Plan</li> <li>● The representative of local community talked about the condition of Covid 19 in the village.</li> </ul> | Representative of community in Bujang Raba  |

## Part I: Project Operating Costs

### Annex 1: Results

#### Allocation cost for this reporting period (2020 - 2021)

| Expense   | Narrative   | Amount US\$<br>(1USD = 13,876<br>IDR) | Contribution<br>from sale of<br>PVCs | Contribution<br>from other<br>sources |
|---|---|---------------------------------------|--------------------------------------|---------------------------------------|
| Operational cost<br>Staffing,<br>travelling, meal<br>and<br>accommodation | Local facilitator is hired to facilitate local community. He stays in the village 15 -20 days in a month  | \$ 14,413                             | 100%                                 | -                                     |
| Training for NTFP   | Training for harvesting in sustainable way. Expenditure for consultant fee, travelling, accommodation, meal and lodging for participant of training | \$1,615 USD                           | 100%                                 |                                       |
| Forest monitoring and patrol  | Technicians and Field workers undertaking monitoring such lodging and meals. Monitoring conducted in 5 villages, 2 times in a year.                 | \$54,192                              | 100%                                 |                                       |
| Training and provision cost   | Seeds supply for areca nut administrative   | \$4,000                               | 100%                                 |                                       |
|   | Building nursery plot for Coffee nursery  | \$3,000                               | 100%                                 |                                       |
|   | Seeds distribution  | \$1,000                               | 100%                                 |                                       |

|              |  |           |      |  |
|--------------|--|-----------|------|--|
|              | Strengthening Village forest institution for financial and reporting             | \$3,000   | 100% |  |
|              | training product scanning for rattan   | \$4,000   | 100% |  |
|              | Strengthening the Village Forest Management Group (monthly meeting)              | \$5,000   | 100% |  |
|              | Monitoring and evaluation under collaboration 5 village forest in Bathin III Ulu | \$4,500   | 100% |  |
|              | Facilitating field visit to Bujang Raba  | \$5,000   | 100% |  |
| Project cost | Certification issuance   | \$54,328  | 100% |  |
| Total        |  | \$154,048 |      |  |

### **Annex 1: Results**

The following table is the monitoring of current forest cover and carbon stocks in the five villages from the beginning of the project through to the end of 2021. These figures will be verified after year 5 through SPOT analysis and third-party verification. The conservative estimates mentioned in the PDD (Table E2) will be used to determine issuance requests spanning the first period 2014-2021.

| No                 | Location               | Forest Cover (ha) |                | Forest Loss (ha) *         |                       |              | Deforestation can be Prevented (ha) | Carbon Emission (CO2eq)*   |                       |                | Carbon Emission Reduction (CO2eq) | Percent Emission Reduction by 1.6% per year |                       |              |
|--------------------|------------------------|-------------------|----------------|----------------------------|-----------------------|--------------|-------------------------------------|----------------------------|-----------------------|----------------|-----------------------------------|---|-----------------------|--------------|
|                    |                        | 2013              | 2021           | Without Project (baseline) | With Project (target) | Actual       |                                     | Without Project (baseline) | With Project (target) | Actual         |                                   | Without Project (baseline)                  | With Project (target) | Actual       |
| 1                  | HD Kp.Sangi-Letung     | 736.0             | 717.1          | 89.1                       | 19.33                 | <b>18.9</b>  | 70.2                                | 117,256                    | 25,438                | 24,872         | 92,383                            | 0%  | 75.0%                 | 78.8%        |
| 2                  | HD Kp.Sungai Mengkuang | 634.0             | 632.6          | 76.8                       | 16.65                 | 1.4          | 75.4                                | 101,003                    | 21,911                | 1,842          | 99,161                            | 0%  | 75.0%                 | 98.2%        |
| 3                  | HD Senamat Ulu         | 1,095.0           | 1,095.0        | 132.6                      | 28.76                 | -            | 132.6                               | 174,449                    | 37,848                | -              | 174,449                           | 0%  | 75.0%                 | 100.0%       |
| 4                  | HD Sungai Telang       | 745.0             | 651.9          | 90.2                       | 19.57                 | 93.1         | - 2.9                               | 118,690                    | 25,754                | 122,520        | -<br>3,8<br>30                    | 0%  | 75.0%                 | -3.2%        |
| 5                  | HD Lubuk               | 2,126.0           | 2,121.7        | 257.4                      | 47.94                 | 4.3          | 253.1                               | 338,699                    | 63,089                | 5,659          | 333,040                           | 0%  | 75.0%                 | 98.3%        |
| <b>Grand Total</b> |                        | <b>5,336.0</b>    | <b>5,218.3</b> | <b>646.0</b>               | <b>132.3</b>          | <b>117.7</b> | <b>528.3</b>                        | <b>850,096.5</b>           | <b>174,041.0</b>      | <b>154,893</b> | <b>695,203.3</b>                  | <b>0%</b>                                   | <b>75.0%</b>          | <b>81.8%</b> |

*\*annual accumulation*

Sources:

- 1 **Forest cover**; Landsat image analysis 2013 dan 2021)
- 2 **Carbon stock (1,316 ton CO2eq per hectares)**;
- 3 **Baseline Deforestation, 1.6% per year**; KKI Warsi

From the table above, it can be seen that the ability of each village to reduce deforestation varies greatly, the lowest deforestation is in Senamat Ulu Village with 0 (zero) hectares, while the highest is in Sungai Telang Village reaching 93.1 hectares. The total deforestation rate in Bujang Raba reaches 117.7 hectares, this number is lower than the baseline scenario of 646 hectares and smaller than the target of 132.3 hectares. Based on the established baseline, the actual deforestation that occurred was able to save 528.3 hectares of forest area or 695,203.3 tons of CO2eq. In sum, this project is able to reduce emissions within the project areas anywhere from 100% to -3.2% - averaged this is 81.8% emissions reduction set against the baseline which is greater than the target of 75% emission reductions against the baseline.

Annex 2. Annual deforestation each of the village in Bujung Raba

| No    | Village       | Baseline forest cover (ha) | Annual forest lost (ha) |      |      |      |      |      |      |      | Total forest lost (ha) | Forest can be prevented (ha) |
|-------|---------------|----------------------------|-------------------------|------|------|------|------|------|------|------|------------------------|------------------------------|
|       |               |                            | 2014                    | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |                        |                              |
| 1     | Buat          | 736                        | -                       | -    | -    | -    | -    | 9.8  | 3.4  | 5.7  | 18.9                   | 717.1                        |
| 2     | Lamanpanjang  | 634                        | -                       | -    | 1.4  | -    | -    | -    | -    | -    | 1.4                    | 632.6                        |
| 4     | Senamatulu    | 1,095                      | -                       | -    | -    | -    | -    | -    | -    | -    | -                      | 1,095.0                      |
| 5     | Sungaitelang  | 745                        | -                       | -    | -    | -    | -    | 86.8 | 6.3  | -    | 93.1                   | 651.9                        |
| 3     | Lubukberingin | 2,126                      | -                       | -    | -    | 1.4  | -    | -    | 2.8  | -    | 4.3                    | 2,121.7                      |
| Total |               | <b>5,336</b>               | -                       | -    | 1.4  | -    | -    | 96.6 | 12.6 | 5.7  | 117.7                  | 5,218.3                      |

## **Annex 2: Biodiversity report from the camera trap**

KKI WARSI has set up 10 units camera trap in the forest of Bujang Raba landscape to see the potency of biodiversity and endangered species in the forest. It is found 20 species of animals from 20 families successfully recorded by camera, most of the animals are protected animals in Indonesia and internationally (IUCN CITES list). The largest species found in the form of carnivores which identify that this area is still in a stable ecosystem and becomes a natural habitat for many wildlife. These are some documentation from the camera trap.





*Neofelis diardi*/Macan dahan

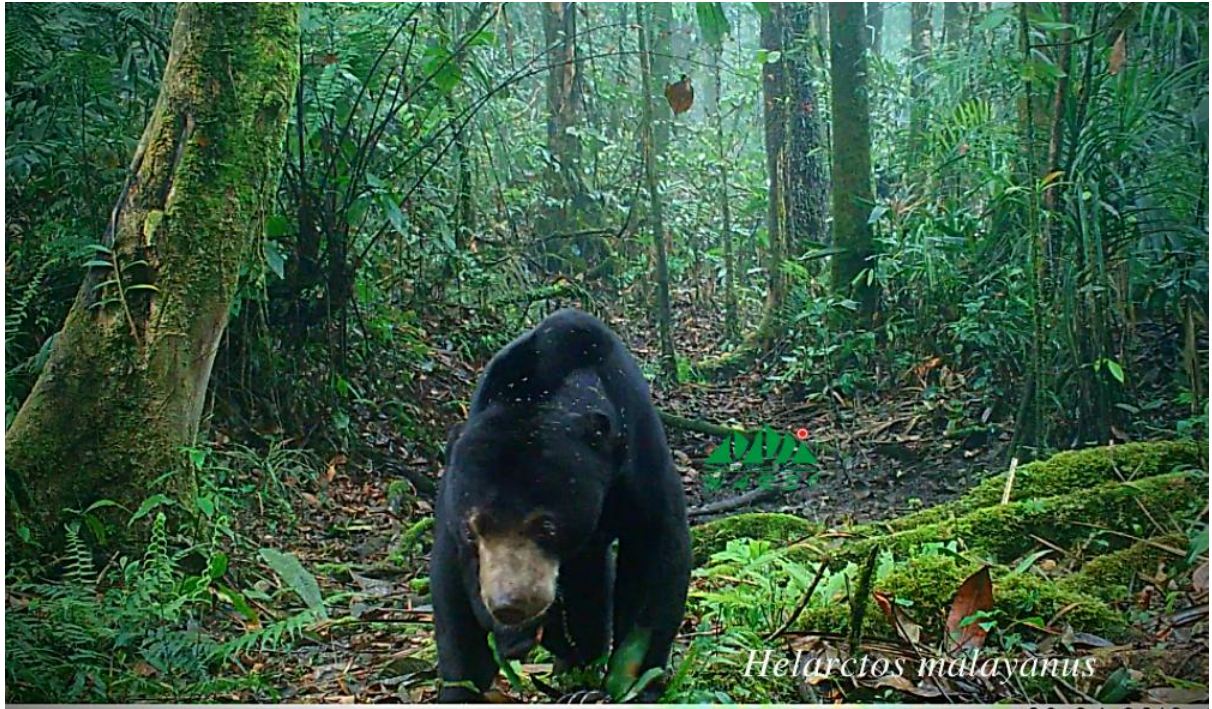


*Pardofelis marmorata*



*Capricornis sumatraensis* / Kambing hutan

*Muntiacus muntjak* / Kijang



*Helarctos malayanus*