KATINGAN PEATLAND RESTORATION AND CONSERVATION PROJECT

MONITORING & IMPLEMENTATION REPORT - SUMMARY

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1 SUMMARY DESCRIPTION OF THE PROJECT

The Katingan Restoration and Conservation Project ('The Katingan Project') is managed by an Indonesian company, PT. Rimba Makmur Utama. It protects and restores 149,800 hectare of peatland forest ecosystem, to offer local people sustainable sources of income, and to tackle global climate change. The project lies within the districts of Katingan and Kotawaringin Timur in Central Kalimantan Province, and covers one of the largest remaining intact peat swamp forests in Indonesia (Figure 1).

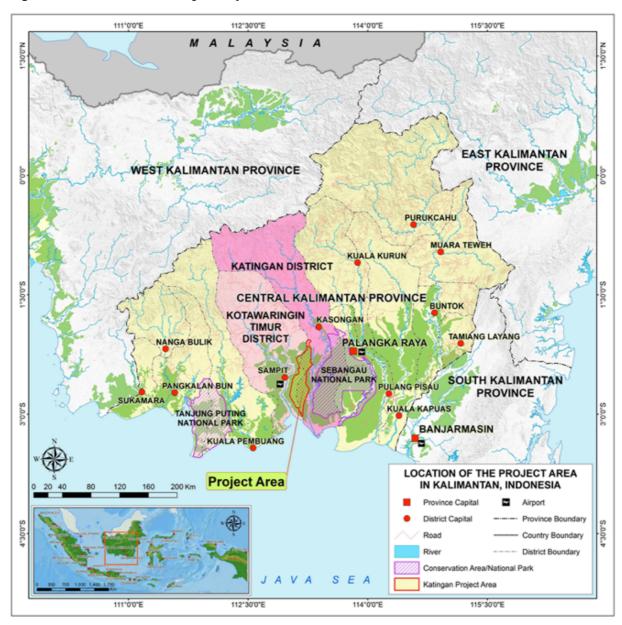
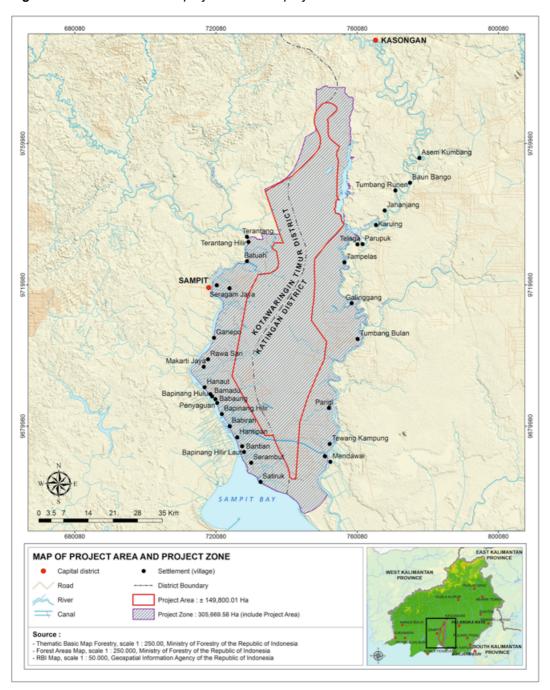


Figure 1: Location of the Katingan Project in Kalimantan, Indonesia

The project area of 149,800 ha is defined by the ecosystem restoration concession (ERC) license and is the area over which GHG emission reductions are achieved and quantified. The wider project zone, covering an area of 305,669 ha, represents the extent of the area in which the wider range of project activities are implemented. This area includes the main river catchments and the land of 34 villages likely to be affected by the project (Figure 2).

Figure 2: The location of the project area and project zone



The project area is almost entirely based on peat soils and stores vast amounts of carbon. It plays a vital role in stabilizing water flows, preventing devastating peat fires, enriching soil nutrients and providing clean water. It is rich in biodiversity, being home to large populations of many high conservation value species, including some of the world's most endangered species such as the Bornean Orangutan (*Pongo pygmaeus*) and Proboscis Monkey (*Nasalis larvatus*). Surrounded by villages, the area supports traditional livelihoods including farming, fishing, and non-timber forest products harvesting.

The goal of the Katingan Project is to develop and implement a sustainable land use model through reducing deforestation and degradation, habitat and ecosystem restoration, biodiversity conservation, and growing economic opportunities for the local people of Central Kalimantan. The Katingan Project is designed to ensure that all benefits are real, long lasting, and passed on to local communities, the region, and to the wider State of Indonesia in which it operates.

2 PROJECT OBJECTIVES

The goal of the Katingan Project is to develop and implement a sustainable land use model through reducing deforestation and degradation, habitat and ecosystem restoration, biodiversity conservation, and increasing economic opportunities for the local people of Central Kalimantan. The Katingan Project is designed to achieve this through a series of objectives, considered in turn below:

A) Climate objectives

- To deliver credible GHG emissions reductions through avoided deforestation and forest degradation, prevention of peat drainage and fires
- To enhance ecological values at the landscape scale through ecosystem restoration
- To conduct research and development (R&D) activities as to implement the latest science, research and management practices

B) Community objectives

- To enhance the quality of life and reduce poverty of the project-zone communities by creating sustainable livelihood options and economic opportunities
- To strengthen community resilience by increasing capacity to cope with socio-ecological risks
- To maintain and enhance ecosystem services for the overall well-being of the project-zone communities through ecosystem restoration

C) Biodiversity objectives

- To eliminate drivers of deforestation and forest degradation and to stabilize and maintain healthy populations of faunal and floral species in the project zone through biodiversity conservation and protection
- To maintain natural habitats and ecological integrity through ecosystem restoration

3 PROJECT PROPONENT

The Katingan Project is developed and managed by the ecosystem restoration concession (ERC) holder, PT. Rimba Makmur Utama (RMU). By collaborating with the project-zone communities and partner organizations, PT. RMU takes full responsibility to manage, finance and implement project activities for the duration of the project. Table 1 below shows the project proponent's information.

Table 1: Project proponent information

Organization	PT. Rimba Makmur Utama (PT. RMU)
Category	Private company
Contact person	Dharsono Hartono, Director
Address	Menara BCA, Fl. 45, Jl. MH Thamrin No. 1, Jakarta, Indonesia Phone: +62 (0)21 2358 4777; Fax +62 (0)21 2358 4778; Mobile: +62 (0)816-976-294 dharsono@ptrmu.com
Profile	PT. RMU was founded in 2007 with a mission to restore and conserve peatland in Central Kalimantan Province through a land-use permit, IUPHHK-RE, also known as ecosystem restoration concession (ERC). By using the ERC business model, PT. RMU seeks to reduce greenhouse gas emissions within the concession site and generate carbon offset credits under REDD+ mechanisms.

4 PROJECT START DATE AND MONITORING PERIOD

The project start date is November 1, 2010. The duration of the VCS project crediting period is 60 years, beginning on the project start date of November 1, 2010 and ending on October 31, 2070. This period is consistent with the terms of the ecosystem restoration concession licences held by PT RMU. The current monitoring period, reported here, covers the two year period since the last CCB monitoring report: 1st January 2018 through 31st December 2019 for CCB, and the one year period since the last VCS monitoring report: 1st January 2019 through 31st December 2019 for VCS.

5 SECTORAL SCOPE AND PROJECT TYPE

The Katingan Project is categorized as an Agriculture, Forestry and Other Land Use (AFOLU) project under the Reduced Emissions from Deforestation and Degradation (REDD) project category. The project activities are categorized under the VCS as a combination of REDD+WRC and ARR+WRC; specifically as Avoiding Planned Deforestation (APD) and Reforestation (ARR), in combination with Conservation of Undrained and Partially drained Peatland (CUPP) and Rewetting of Drained Peatland (RDP) activities. This is not a grouped project.

6 SUMMARY OF PROJECT ACTIVITY

The project has successfully implemented a wide variety of project activities supporting its objectives for climate, community and biodiversity. In turn, these activities have successfully conserved a vast ecosystem of peat swamp forest which would have otherwise been converted to industrial acacia plantations. Activities have been implemented in line with the project framework presented below (in Figure 3). Key activities and outcomes from this monitoring period are summarised below.

Katingan Project GOAL **OBJECTIVES** To develop and implement a sustainable land use model through reducing DIRECT deforestation and degradation, promoting conservation, enhancing ecological integrity, and growing economic opportunities for people in Central Kalimantan SUPPORTING Climate **Biodiversity** Community Biodiversity GHG Emission Ecosystem Community Sustainable Research & Conservation Reductions Restoration Resilience Livelihoods Development and Protection **Direct Activities** Participatory planning REDD revention & fire Community-based business development fiahtina Microfinance NITEP Livestock Protection and law Reforestation Sustainable energy Ecotourism Agroforestry Health and sanitation Aguaculture and Salvaged wood Wetland rewetting Species conservation & sustainable fishery production habitat management Basic education and conservation Supporting Activities General Admin Sales & Marketing Policy & Planning Communications Statutory Knowledge Management Finance Standards Legal

Figure 3: Katingan Project Framework

- Avoided Deforestation and peat drainage (REDD + WRC): The project has avoided the
 deforestation, degradation and drainage of a vast area of peat swamp forest. Three fires were
 recorded within the project area during this monitoring period which affected 1,921.19 hectares in
 total, of which only 156.91 hectares affected forested areas. During the monitoring period 571
 community members were involved in project activities including re-wetting and biodiversity
 monitoring.
- Reforestation (ARR): During the monitoring period, 233 men and women from 6 villages were
 involved in reforestation activities, including providing seedlings, biodegradable bags, maintaining
 nurseries, planting the seedlings in firebreak areas, watering the seedlings and weed control.
- Fire prevention and suppression: 1,572 local villagers helped establish fire prevention and fighting teams, in addition to full-time dedicated project staff. These teams worked to identify and minimize surface fuel in high-risk areas, build water ponds and a deep well for firefighting, conduct patrols and conduct fire prevention and suppression activities. Early warning systems were also developed and are currently in use. Fire prevention awareness events were attended by over 390 people with 191 campaign media (banners and warning signs) have been produced and distributed.
- Participatory Planning: 22 villages have now completed the MOUs or formal agreements either
 the second or first MoUs. One of the Village Forest applications has been formally approved for
 Telaga Village. During this period, the project also provided support for village events or
 infrastructure on 137 occasions.
- Community-based business development: Community livelihood development is a core priority
 of the Katingan Project. During this monitoring period, the project provided assistance to 1,139
 community members involved in sustainable business development, including coconut sugar,
 livestock, rice growing, sustainable bamboo development, chicken farming, and ecotourism. A
 further 1,186 community members were assisted in agroforestry or agroecology development.
- Microfinance development: The Katingan Project seeks to assist sustainable local development
 by supporting the development of small to medium sized businesses. In this monitoring period, 5
 new microfinance institutions were established, with 201 new members; bringing the total number
 of recipients up to 1,149 since the project's start.
- Improved public health, water and sanitation, and education: During the monitoring period, 215 community members were allocated supplemental grants from the project to build latrines to prevent the discharge of waste into the local rivers, 118 households were benefitted from solar panel instalments to be used for clean water generation, 666 community members benefitted from improved access to local health care, and 360 community members, including children, benefitted from improved education initiatives or support for access to higher education.

7 EMPLOYMENT AND TRAINING

The Katingan Project and PT. RMU operate in full compliance with Indonesia's labour law and aim to set an example of best practice. To date over 74% of project field staff have been hired from project zone communities, representing 65% of the total project personnel, while all other staff are from Indonesia. Some forms of training or capacity building has been delivered to over 1,200 recipients.

8 STAKEHOLDER ENGAGEMENT

During the monitoring period the project has continued to conduct numerous stakeholder consultations at the national, provincial, district, sub-district and village level. During the monitoring period over 375 such events were held, reaching over 5,900 participants. Through this process, information has been disseminated on the ecosystem restoration concession concept, planned and implemented activities, management plans and project boundary setting processes, and has adapted feedback from the stakeholders into agreed plans and legal approvals.

9 LEGAL STATUS

The Katingan Project is implemented in full compliance with national and regional laws of the Republic of Indonesia, including those relating carbon emissions offsets and the National REDD+ strategy. It operates under legal approval from the formal licences SK.734/Menhut-II/2013 (covering 108,225 ha) and BKPM SK.23/1/IUPHHK-RE/PMDN/2016 covering the remaining 49.500 ha.

10 METHODOLOGY

The Katingan Project applies the latest version of approved VCS methodology VM0007 (version 1.5), including all applicable modules. All applicability conditions of the methodology and its associated modules have been met.

11 BASELINE SCENARIO, ADDITIONALITY & EMISSIONS

The project area is located entirely within state-designated production forest. Without the project, under the business-as-usual scenario, the area would be converted into fast-growing industrial pulpwood (acacia) plantations. The Katingan Project prevents this primarily by obtaining legal control of the production forest area. Total baseline emissions during the VCS monitoring period (01-Jan-2019 - 31-Dec-19) were estimated to be 6,479,584 tCO₂e

12 PROJECT GHG EMISSION REDUCTIONS AND REMOVALS

Project emissions that were accounted for during the VCS reporting period (01-Jan-2019 – 31-Dec-2019), and the GHG emissions estimated, are shown in Table 2 below. Emissions that were not accounted for during this reporting period, but which will be accounted for in future periods, include those resulting from biomass stock changes due to ARR activities and forest growth.

Table 2: Summary of project emissions (01-Jan-2019 – 31-Dec-19)

Source of emissions	tCO₂e
Emissions from forest deforestation and degradation	134,951
Emissions from uncontrolled burning	860,592
Emissions from microbial decomposition of peat	160,367
Emissions from water bodies in peatlands (DOC)	456
Leakage	0

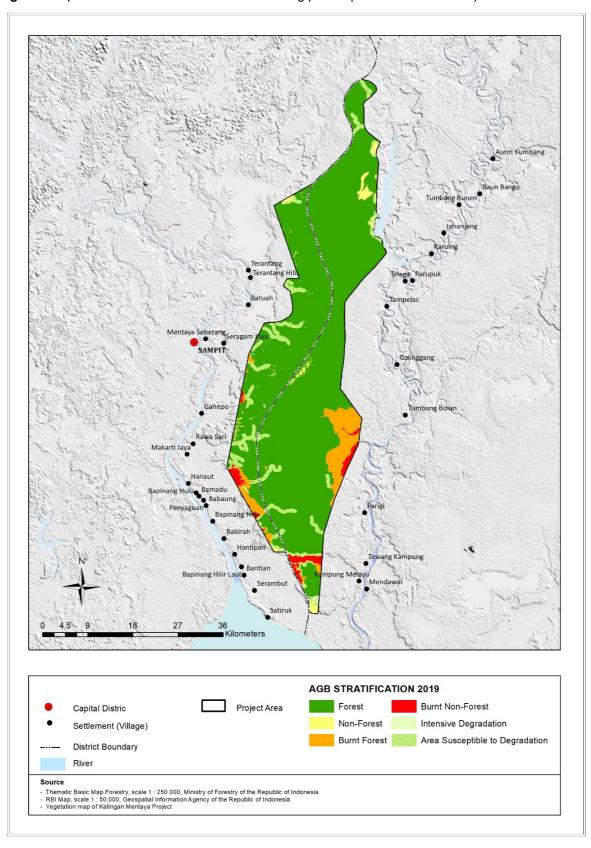
13 STRATIFICATION CHANGES

Due to the uncontrolled burning and illegal logging activities witnessed during the monitoring period, the project description stratification was updated to include the strata shown in Table 3 below.

Table 3: 2019 Stratification classes and areas

2019 Stratification classes	Area (ha)
Forest	126,149
Non-forest	2,505
Area Susceptible to Degradation	9,303
Intensive Degradation	407
Burnt Forest	8,722
Burnt Non-forest	2,714
Total	149,800

Figure 4: Updated stratification at end of monitoring period (31st December 2019)



14 UNCERTAINTY AND NON-PERMANENCE RISK

The total error in the REDD+ project was calculated to be 0.90%. Considering the 15% uncertainty threshold, no VCU deductions were made due to uncertainty. The combined non-permanence risk buffer for the project was determined as 10%

15 CALCULATION OF VERIFIED CARBON UNITS

VCU are calculated by subtracting the VCS non-permanence risk buffer withholding from the uncertainty adjusted net emission reductions for each project activity. In total the project generated and estimated **4,776,356** VCUs during the VCS reporting period (01-Jan-2019 – 31-Dec-19).

16 COMMUNITY & BIODIVERSITY

The project has had a net positive impact on all groups in the communities in the project zone, and no high conservation values related to community well-being have been negatively affected. The project has also had a significant net positive biodiversity benefit in relation to the baseline. Project community and biodiversity benefits both each the Gold Standard level:

- Community Gold Standard: The project zone is qualified as a rural area of a high concentration of population living under the national poverty line, and the Katingan Project delivers significant well-being benefits to smallholders/community members. The project has benefited communities through a variety of socio-economic activities which also target the most vulnerable and marginalized community members. These programs are designed to lift the poorest out of poverty by engaging them in community-based business development (such as microfinance, sustainable agriculture and livestock, coconut sugar development and sustainable bamboo project initiation) and community empowerment and development programs (such as women's empowerment, education and public health improvement, water and sanitation, agroforestry and forest area co-management). All community programs are designed and implemented through community participation, transparent decision-making processes based on mutual trust, and proper management of project activities.
- Biodiversity Gold Standard: The Katingan Project is qualified as a Key Biodiversity Area (KBA), and conserves and protects the biodiversity of global significance. The project has generated exceptional biodiversity benefits based on multiple achievement of the criteria defined in the CCB Standards Third Edition. This includes five species considered critically endangered, 12 considered endangered, and 37 species considered vulnerable. For two of these at least, Orangutan and Proboscis Monkey, the project zone is estimated to hold over 5% of the entire global population.