



**PLANET
INDONESIA**

EVIDENCE IN PRACTICE



2021

WORKING PAPER
YAYASAN PLANET INDONESIA

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Summary

ABOUT:



The evidence in practice paper provides a high-level overview of results from a community-led conservation approach facilitated by Yayasan Planet Indonesia (YPI) in the village of Engkangin in West Kalimantan, Indonesia

RIGHTS:



Progress towards securing rights and co management has been slowed due to village conflict with government management authorities and unclear boundaries between village administrative borders. While significant advances have been made in comanagement of the nature reserve that Engkangin borders, unclear boundaries and zoning is a major area for future development.

MANAGEMENT:



Establishment of the Conservation Cooperative (CC) has helped to improve co management of forest inside the reserve, improve land management for agriculture practices, and increase the use of degraded lands for agroforestry plantations. Additionally, the CC's growth has played an important role in providing a platform for community members to organize and advocate for management rights and governance.

DEFORESTATION:



Deforestation rates were reduced after the program partnership was started and significantly lower than control areas within the same landscape. SMART patrol encounter rates over a three year period also indicated a statistically significant reduction in illegal activities

BIODIVERSITY:



Density estimates for two highly threatened species show stabilization to slight improvements in densities of the Abbott's Gibbons and Helmeted Hornbill respectively. SMART patrol encounter rates also show a significant reduction in the detections of snares and poaching instances.

CLIMATE SMART AGRICULTURE:



Climate-smart Agriculture program indicators revealed indicators of more resilient livelihoods with reduced farmer spending, increased yield, and the creation of a farmer mentoring program. Agriculture services were also noted as an important incentive to participate in management and the overall program

WELL-BEING:



Health partnerships increased the access to healthcare, establish teams of local health ambassadors, and increased the frequency of traveling government clinics to the area for immunization and standard health checkups

CHALLENGES:



The largest challenge and barrier to progress in the Engkangin village has been related to spatial planning, land tenure, and village boundaries. There is a long history of conflict between community members and the Indonesian government who turned the customary forests in the area into a strict nature reserve in the 1980s

FUTURE STEPS:



Future steps are focused on accelerating our work towards a multi-use landscape, rezoning the nature reserve to establish more clear no-take zones and limited use zones, and also supporting the village of Engkangin to secure rights over a buffer zone area through the Indonesian social forestry scheme.



These working papers are intended to be simple yet insightful looks into the work of YPI and partners. Please do not hesitate to contact us at admin@planetindonesia.org should you have any questions, comments or inquiries about what is presented here

The Model

Planet Indonesia works alongside local communities to conserve at-risk ecosystems. We use our award-winning community-led approach that is the cornerstone of Planet Indonesia's approach to co-create 'Conservation Cooperatives' (CC) at the village level. Each CC is a community owned, registered entity (e.g. organization) that engages in and supports regenerative activities at the village level. It becomes a space for collaboration, reconciliation, and participation of CC members both within and along with the wider community and the external stakeholders in their landscape. In its highest function, a CC operates as a living entity that is dynamic enough to account for the ever-changing circumstances that a community may experience. Therefore, a CC provides the mechanism through which communities can reposition themselves by engaging with external pressures, including the non-governmental sector.

By establishing a CC at the village level, we establish the prerequisites to develop pathways aimed at improving human well-being and drive the adoption of conservation action for vulnerable rural communities. In order to support the creation of a CC, we deploy a simple and focused four-pronged model.



01

ACCESS AND RIGHTS OVER RESOURCES

We support local communities to secure tenure, gain use-rights over surrounding natural resources, and develop human resources that together enhance the lifeline for rural livelihoods.



02

EFFECTIVE PARTICIPATORY MANAGEMENT

We provide the tools, technical assistance, and support that enable local communities to manage natural and human resources in an effective way.



03

INCLUSIVE GOVERNANCE

We support the creation of local governance institutions that acts as a community-led decision-making body. This locally-led institution provides the platform to co-design a variety of services to address the socio-economic hardships faced by communities.



04

FINANCIAL RESOURCES

We work alongside communities to provide access to financial resources, start-up capital, and strengthen supply chains to improve equitable and resilient livelihoods.

In essence, the CC approach links each of these steps through program activities and creates the opportunity for Planet Indonesia and partner local communities to co-design, co-deliver, co-evaluate, and co-improve activities with community partners. At the heart of Planet Indonesia community partnership ethics is the belief that success in community-based projects can only be achieved through the co-design of program strategies that capitalize on local solutions. Thus, before initiating a village-level partnership, YPI embraces Free, Prior, and Informed Consent (FPIC) through Focus Group Discussions (FGDs), community hearings and workshops.

In Practice – Engkangin

The Engkangin village is located in the buffer zone area of the Gunung Nyiut Nature Reserve and Gunung Penjapa protection forest located in the district of Landak Raya in West Kalimantan, Indonesia. Community livelihoods are highly dependent on the forest and agriculture, with income levels varying greatly between lower income smallholder farmers to daily-wage plantation workers. Being located close to a National Reserve and its remote location restricts villagers' access to basic government services (e.g. health / education) as well as equitable supply chains.

Since 2017, Yayasan Planet Indonesia (YPI) has been working in this village to support local communities to address low levels of wellbeing and protect the surrounding at-risk tropical forest ecosystems. Several FGDs were conducted prior to the initiation of the village-level partnership. Problem trees and solution trees around social, economic, and environmental issues were created by community members. Then, solution trees were used in program design to align with YPI's capacity and the needs on the ground. From there, YPI does not initiate activities without an official signed letter of request from the village leader who is tasked with representing their communities interest. Finally, before the partnership was initiated an official MOU was established outlining the rules of engagement between YPI and the community. In this working paper we do not cover this process extensively but we emphasize that results created through this partnership hinge upon FPIC and co-design to ensure community members from Engkangin have ownership over the design, implementation and evaluation process.



Results

Using SMART patrol data, we first conducted an analysis of encounter rates (detection per kilometer) of illegal activity (logging, land clearing, and poaching) over a 30 month period. Using a general linear regression, we found a statistically significant reduction in illegal activities during the project period (Figure 1).

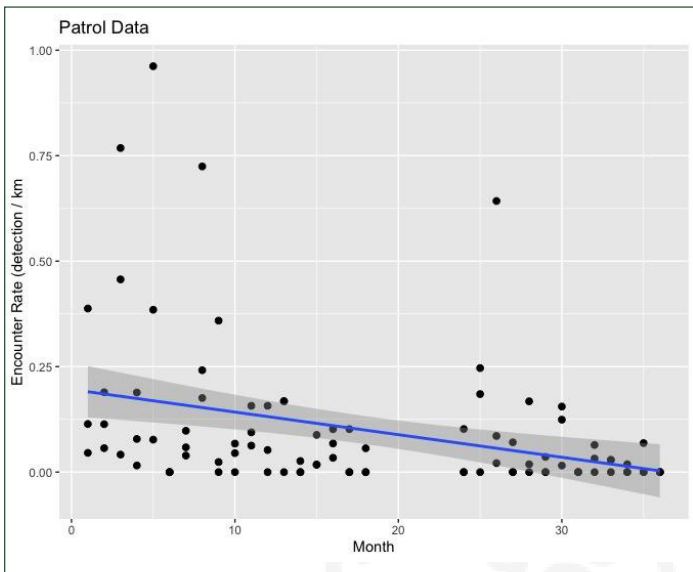


FIGURE 1

Shows encounter rates for illegal activities directed by community SMART patrols in the Engkangin area over the 30 month period.

Using the Nusantara Forest Atlas (<https://nusantara-atlas.org>) we then calculated deforestation (% of area lost annually) within the Engkangin village boundaries and control areas (Figure 2). Control areas were chosen as adjacent villages within the landscape that had yet to enter a partnership with YPI. Control areas were similar in social-economic status, livelihood, and location. Our analysis shows that deforestation was reduced after the partnership agreement was signed and program activities were commenced, and deforestation rates were considerably higher in control areas vs Engkangin.

TABLE 1

Shows density estimates of two highly threatened species within the Engkangin village boundaries between 2018 and 2021.

SPECIES	BASELINE (2018-2019) From Ahmad Et. Al (2021)	ESTIMATE (2021)	METHOD USED
Helmeted hornbill	1.54 (0.58-4.11)	2.6 (1.6-4.1)	Point Transects and Line Transects
Abbott's Gibbons	1.7 (1.13 -2.26)	1.7 (1.06 - 2.7)	PLEO and Line Transects

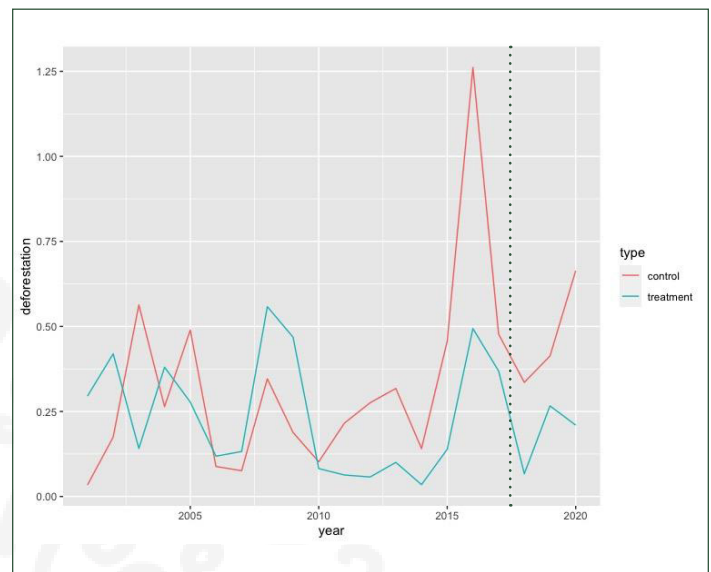


FIGURE 2

Shows deforestation rates (% area) inside the Engkangin village boundaries (blue) and control areas (red). The dotted line represents the start of the program partnership.

We then utilized data from point counts, line transects, and social surveys (see Ahmad et al 2021 for PLEO description) to compare densities (individuals / km²) for two highly threatened species. Both the Critically Endangered Helmeted Hornbill and the Endemic Endangered Abbotts Gibbons are in peril due to poaching and forest loss. Data shows that over the project period these two populations appear to have stabilized to slightly increasing within the Engkangin forest landscape.

In addition to the above results, several other project indicators point towards the progressive success of the partnership with the Engkangin village. Some of these indicators are as follows:



328

Individuals enrolled in the Conservation Cooperative



42%

Of membership base is represented by women



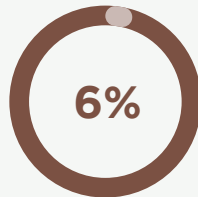
\$15,000

Saved in Cooperative assets for economic resilience

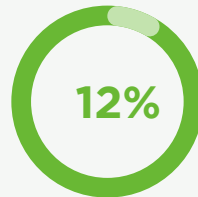
41 LOANS TAKEN OUT BY MEMBERS DURING THE PROJECT PERIOD. LOAN USE:



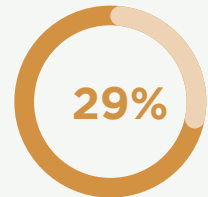
Daily needs
(e.g. supplies, food, small bills)



Health related concern



Pay for education
education



For agriculture inputs





1,401 KM

between 2018-2020, community-led SMART patrols conducted 1,025 effective hours of patrolling.



147 FARMERS

trained by farmer mentors within the Conservation Cooperative



30% SAVED

in Conservation Cooperatives assets improving economic resiliency



7 NEW ENTERPRISES

introduced to strengthen livelihoods



170 AVERAGE HOUSEHOLDS

On average 170 households a month receive health consultations from health ambassadors and government health workers

Reflections, Challenges, and Next Steps

RIGHTS AND BOUNDARIES



A major challenge throughout the project period has been Engkangin's conflict with the nature reserve status. Unclear boundaries, zoning, and land tenure issues have created conflict within the village, between neighboring villages, and first and foremost with the Indonesian government. We are working closely to rezone the reserve, opening access to degraded farmlands while creating clear no-take zones. However, the process has been greatly slowed by bureaucracy and funding restraints. On reflecting on our experience of working with multiple villages in this landscape it is clear that villages who are located entirely or partially inside the protected area tend to engage in more deforestation and experience higher levels of socio-economic insecurities. We used the nusantara atlas to conduct an analysis between some of these areas.

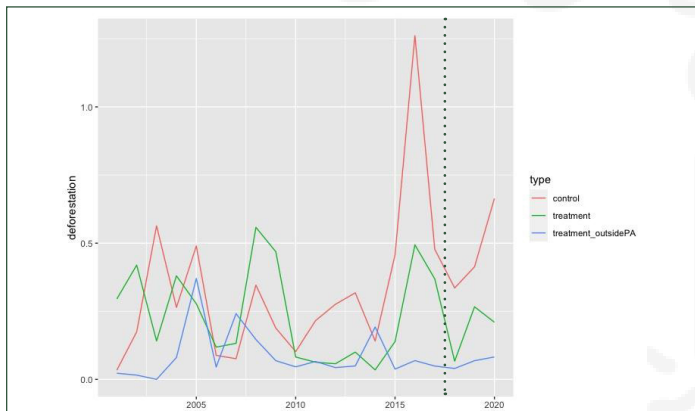


FIGURE 3

Shows deforestation rates between control areas (red) and two treatment sites (blue and green). The green line represents deforestation in the Engkangin village while blue is in the village of Pisak in the same reserve. The major difference between these two areas is Engkangin is located partly inside the protected area leading to the high level of conflict discussed above. While Pisak (blue) is located outside the protected area in the buffer zone.

Figure 3 further shows that while both areas had lower deforestation rates than the counterfactual (control), Pisak was engaged in deforestation considerably less than Engkangin. While this may be partly due

to the level of access and socio-economic status of the two areas, community members of Pisak has a better understanding of the reserve's boundaries boundaries and has accepted where use and non-use begins and stops. Comparably, Engkangin has a long history of land and forest tenure battles and within the communities themselves there exists those that are pro and contra for the reserves existence and its current zoning.

MANAGEMENT VS GOVERNANCE



While progress was made towards participatory management through a number of tools, understanding and accelerating governance has been more challenging. the CC was established to play an important role in the wider social-ecological management of the area, strengthening governance frameworks and developing an understanding of what governance mechanisms are working vs those that are not yet to be done. Progress in this area has been slowed due to the conflicts related to reserve boundaries, agriculture lands inside the reserve, and prior zoning conducted in 2016 that did not follow FPIC.

AGRICULTURE NEEDS / SLASH AND BURN



The Conservation Cooperative framework has included a climate smart agriculture intervention in the area. While prior success has been achieved to reduce farmer spending and improve yield, more work needs to be done to specifically address slash and burn agriculture.

MOVING TOWARDS A MULTI-USE LANDSCAPE



Future steps will focus on securing rights for communities through the establishment of customary forests in the buffer zone of the reserve. We also are supporting communities to integrate SMART patrol data and participatory mapping results into village management plans. This data is also being used to lobby the Indonesian government to re-zone the reserve and establish more clear boundaries and areas of use..





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About Us

Planet Indonesia is an award-winning international non-profit that conserves at-risk ecosystems through village-led partnerships. We utilize a right-based approach to engage locally-led solutions and unlock the potential for Indigenous and rural communities to restore and retain balance within human-nature interdependence. Our organization's evidence-based model is driven by listening, responding, and adapting to the opportunities and challenges faced by communities in Indonesia. From there, our on-site interventions are co-designed through community partnerships and built upon the values, needs, and aspirations of communities that partner with us to address issues at the social-ecological nexus. We recognize the need for far-sighted solutions that transcends the boundaries of mainstream initiatives that side-line communities in environmental conservation - acknowledging the future requires a shift towards inclusive systems-based approaches.

We do not limit our work to one ecosystem type, land-use issue, or social group. Rather, we focus on adapting our organization's Conservation Cooperative Approach to create opportunities and address the needs within the landscapes of the communities that partner with us. We remain agile and adaptive through addressing the underlying drivers and barriers that create imbalance between people and nature. We address barriers to community engagement in conservation ranging from lack of access to healthcare and limited livelihood opportunities to inequitable governance and capacity issues around resource management.

Our organization believes it is imperative to shift conservation from a symptomatic reactive model towards an inclusive proactive approach that positions communities behind the wheel in determining their social-ecological trajectory.