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planetindonesia.org



IMPACT REPORT 2018

Preliminary Evidence and Impact Report

Planet Indonesia - USA

Yayasan Planet Indonesia - West Kalimantan, Indonesia

Made with

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THE CHALLENGE

The tropical forests of Indonesia represent some of the most biodiverse ecosystems on the planet (Myers et al 2000; Brooks et al 2002). Over the past two decades Indonesia has seen extensive loss of forests from anthropogenic disturbances such as agricultural expansion, logging, and fires (Achard, F et al 2002; Sodhi et al 2004; Margono et al 2014; Hansen et al 2013; Abood et al 2015). These forces combined with hunting, trapping, and the illegal wildlife trade are major drivers of species loss (Nijman 2010; Symes et al 2018).

"76% of carbon emissions in Indonesia are from forest loss"

Globally, Indonesia hosts the highest number of mammal species and the 3rd highest number of avian species. Between 2001 and 2016 alone 23.1 million hectares of forest were lost (World Resource Institute, Global Forest Watch). In Indonesia, land-use change and forestry sectors combined with agriculture expansion contributed 33.6 ktCO₂e of emissions from 1990–2014, 76 % of Indonesia's total over this period. The majority of tree cover loss in Indonesia from 2013 to 2016 occurred within natural forest (WRI 2017). The total loss within natural forest was equivalent to 5.3Mt of CO₂ emissions released. This biodiversity loss can be tied to multiple drivers at both grassroots, national, and international levels.



THE PROTECTED AREA SYSTEM

Protected area (PA) systems such as national parks, marine parks, and nature reserves cover 15% of our Earth's land surface. They are the principal tool for conservation and management of biodiversity at a global scale. Although PAs represent the global flagship program for biodiversity conservation efforts, many around the globe are poorly planned and managed. This is an important consideration as the Convention for Biodiversity calls for the expansion of terrestrial and marine protected areas to 17% and 10% global coverage.

This system of PAs can be important for protecting biodiversity, however principal challenges have seriously limited their effectiveness. These challenges include but are not limited to: enhancing participation, ensuring financial sustainability, effective law enforcement, supporting sustainable use, involvement of multiple stakeholders, and enhancing livelihoods.

Indonesia's PAs are extensive in their coverage. However, many of these areas represent once community-owned lands that were taken forcefully and turned into state-run protected areas in the 1980's. This has caused a long history of conflict, poor land-use planning, extensive destruction of biologically diverse PAs, and many negative impacts on rural communities inhabiting these areas. The rural nature of many PAs also creates challenges for local communities living within their boundaries and buffer zones with limited access to many basic services. Current issues continue to further these negative impacts such as lack of law enforcement, corruption, and rural poverty within PA buffer zones.

"Our model brings stakeholders together to effectively manage protected areas - safeguarding biodiversity"

SYSTEMS CHANGE

Indigenous and rural communities (IRCs) represent some of the most highly marginalized and socially neglected groups on the planet. The vast majority of IRCs living in tropical latitudes inhabit some of the most at-risk biologically diverse ecosystems on the planet. They represent just 4% of the world's population but manage as much as 80% of the world's biodiversity (World Bank 2015). The negative effects of failing crops, rising sea levels, and environmental stochastic events have the highest impact on minorities and poor rural communities. High levels of socio-economic inequalities and lack of access to basic land rights drives unsustainable management of forest and marine resources.

Indonesia is no exception to this global trend. With over 250 million citizens it now represents the 4th largest country on the planet. This growing population is tied with high levels of rural poverty and inequality, with little to no recognition of Indigenous land rights and forest management by state actors.

From this set of challenges it became clear to Planet Indonesia that an innovative solution was needed to drive community-led conservation of biodiverse ecosystems utilizing a mechanism that fostered improvements in human well-being.

We saw the need for a *systems approach* that restored the integrity and diversity of nature through targeting the root causes of biodiversity loss at the grassroots level.

"Restoring the integrity of nature through systems change at the grassroots level"

OUR SOLUTION

Conserve at-risk ecosystems and species through village-led partnerships.

We address issues of socio-economic inequality in rural communities that drive environmental and biocultural loss. We create shared solutions with local communities to holistically catalyze conservation efforts through improving human well-being at the village level. We believe in a systems approach to bring positive change to restore the relationship between humans and nature.

Conservation Cooperatives as a mechanism for safeguarding biodiversity and improving human well-being.

We create Conservation Cooperatives (CCs) - community-led organizations that engage in the management of protected areas and at-risk ecosystems. These CCs are the platforms where we administer services to communities in three sectors: business, education, and health. Our CCs take conservation action at the community level to protect forests and wildlife while acting as a mechanism to address the root causes of rural social inequalities.

Collaborating with communities and partners to make sure the right services reach the right people

We work with a number of private and public partners to ensure the right services reach the right communities. Our model provides a community-led mechanism for conservation through improving livelihoods, access to healthcare and education - addressing the root causes of biodiversity loss.

OUR MODEL FOR SYSTEMS CHANGE



Livelihood

Improvement

Farming inputs and sustainability training



Ecosystem

Management

Forest and Land Management, Restoring coastal fisheries, Wildlife Conservation



Savings Promotions

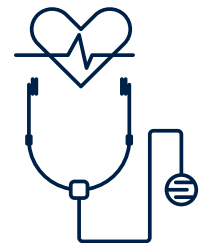
Access to Savings Account and Village Savings & Loans



Literacy

Skills*

Access to monthly tutors, improved workforce placement



Healthcare

Access*

Health Counseling and Family Planning

Conservation Cooperatives

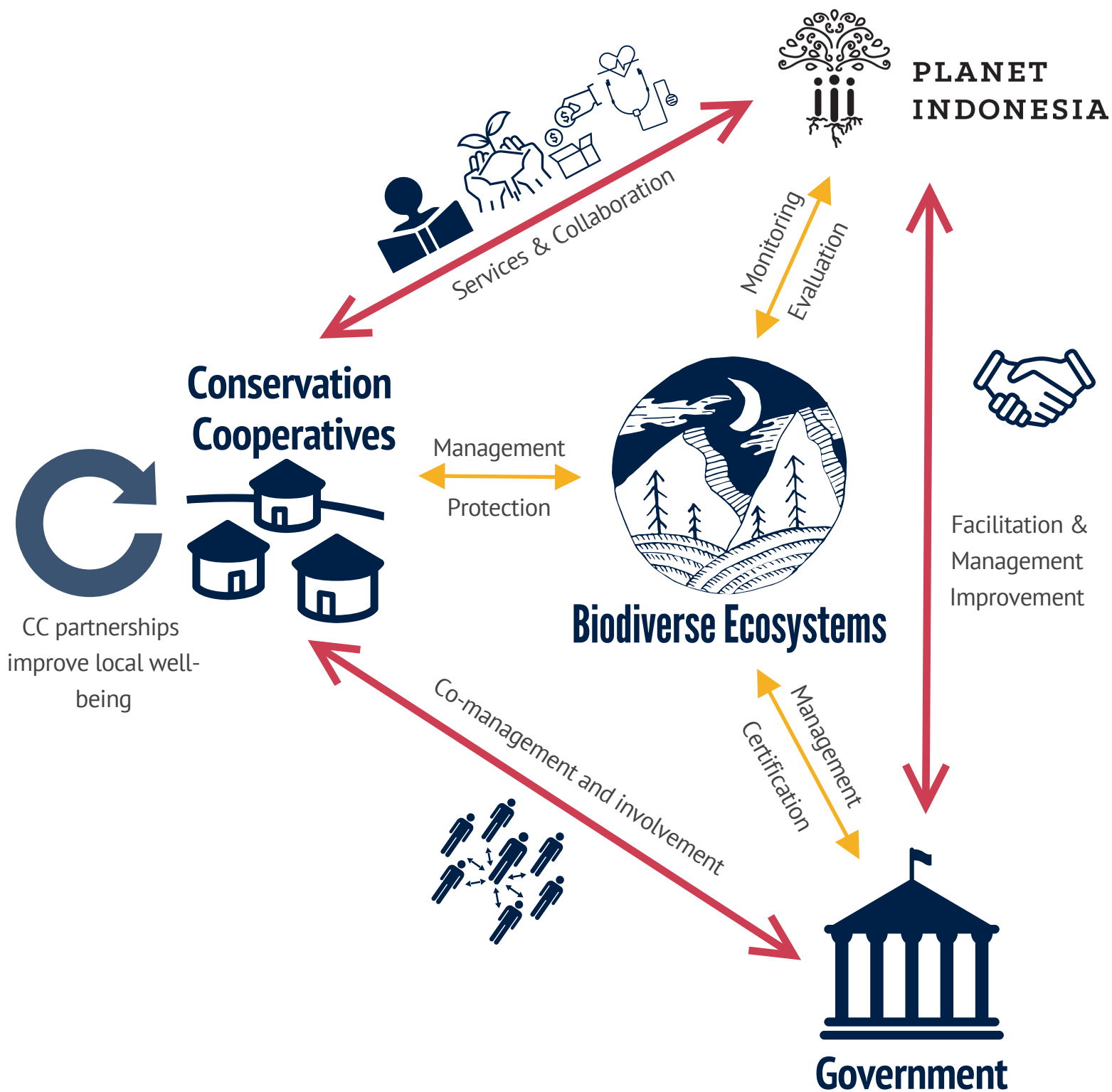
Conservation Action

Conservation rewards for transitioning from logging, hunting, and unsustainable agriculture/fishing

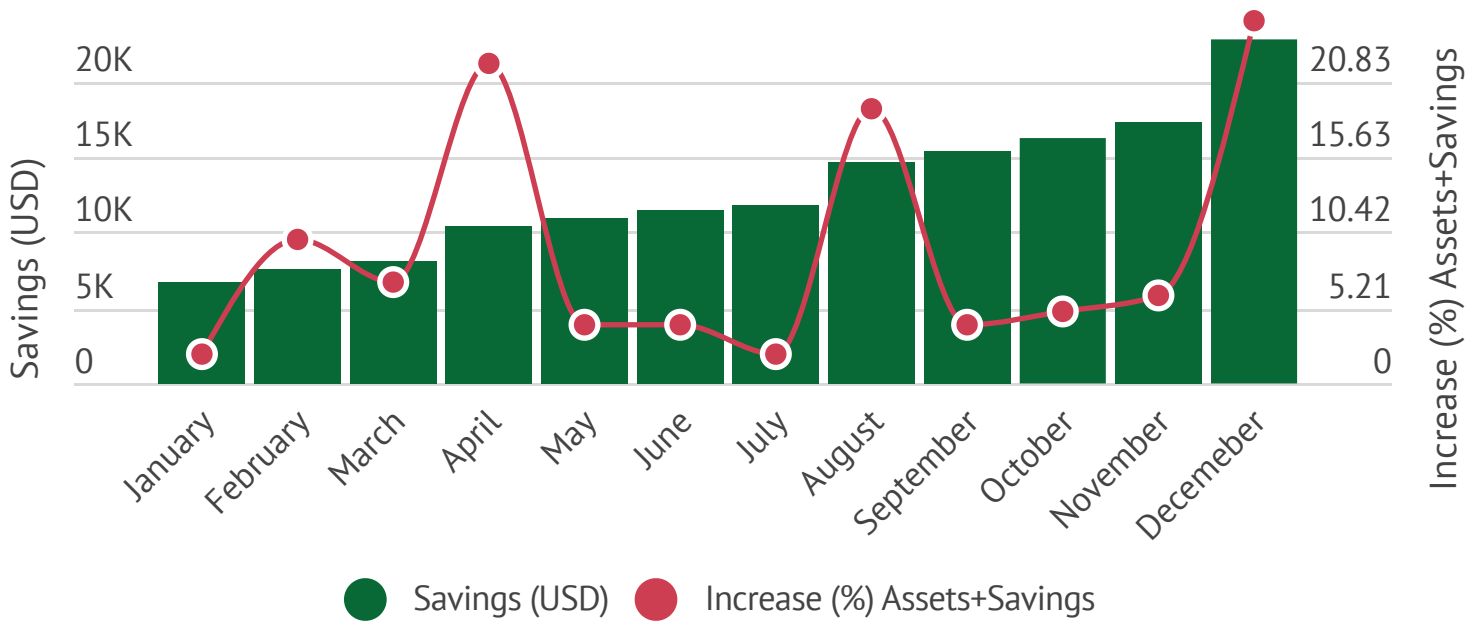


*** Collaboration is at the heart of what we do - health and education services are provided through partnerships with government health clinics and local ngos - we make sure the right services reach the right people

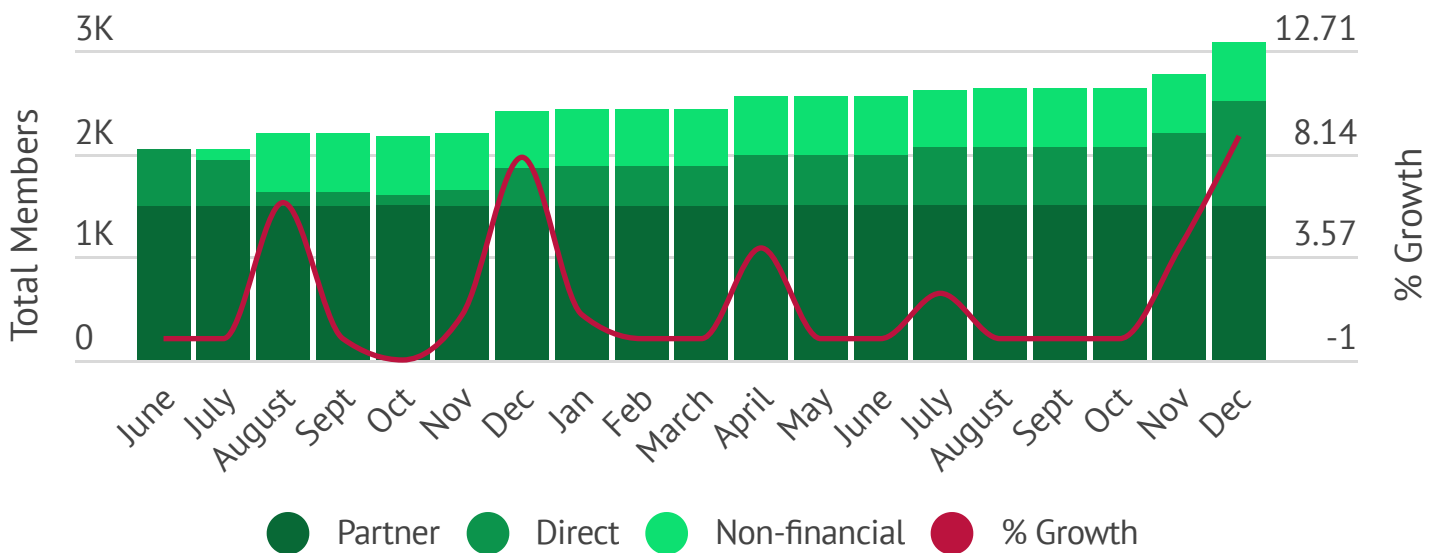
SYSTEMS CHANGE



SCALE AND REACH



Central to our Conservation Cooperatives is the promotion of savings through a village savings and loans program. This is an economic safety net to allow communities to work together on development projects, or overcome hardships such as crop failure, drought, or fire. It is also an indicator in membership growth and member involvement and the vehicle that our conservation rewards distribution.



Membership growth in Conservation Cooperatives from June 2017 till December 2018. Membership is broken down through our direct impact, impact of our partner organizations, and non-financial members. After a CC has reached independence we provide non-financial support and therefore members are moved from receiving direct support to non-financial counseling and facilitation.

SCALE AND REACH



98,000

98,000 acres of Bornean Rainforest protected through Cooperatives



17,300

17,300 hectares of high-carbon mangrove forest protected through Cooperatives



30,000

30,000 seedlings annually planted on degraded lands to restore ecosystems

IMPACT-DRIVEN APPROACH

In 2018 we compiled data from our Community Change Survey (CCS). This Survey targeted over 400 households enrolled in our programs and also an additional 270 households in adjacent villages not enrolled in our programs. Each survey was extensive, with 5 sections covering economics, health, education, land/agriculture, environment and satisfaction. Over 250 hours were spent by our team interviewing households in our project sites throughout 2017 and 2018.



72%

Households enrolled in CCs were 72% less likely to own wildlife vs villages without our CCs



56%

Households enrolled were 56% less likely to own a chainsaw or rifle



51%

Households **enrolled** were 51% **less** likely to poach wildlife and illegally log vs villages without CCs

IMPACT-DRIVEN APPROACH

Our models integrate mechanisms and services communities need to reduce socio-economic inequalities while engaging in conservation.



96%

Households enrolled were 96% **more** likely to save money every month



3.5x

Households enrolled saved 3.5x **more** money per month than those not enrolled



120%

Households enrolled 120% **less** likely to use harmful chemicals in agriculture



250%

Households enrolled were 250% **more** likely to plant trees and engage in reforestation

IMPACT-DRIVEN APPROACH



53%

53% of households reported improved income within 6 months after joining with over half reporting a 15-30% improvement (US\$15-50)



6-14%

45% of households reported a 6-14% (US\$5-14) improvement in their livelihood within 3-6 months



78%

78% of members reported they felt more economically safe after enrollment in our conservation cooperatives



1.2x +

Households enrolled were 1.2x more likely to make family planning decisions as a couple vs male-dominated decisions

IMPACT-DRIVEN APPROACH



190km

Our conservation cooperatives co-manage patrol teams that on average patrol 190km a month



618

Our CCs patrol teams have removed 347 wildlife snares in 2018

98% Satisfaction Rate with program from respondents



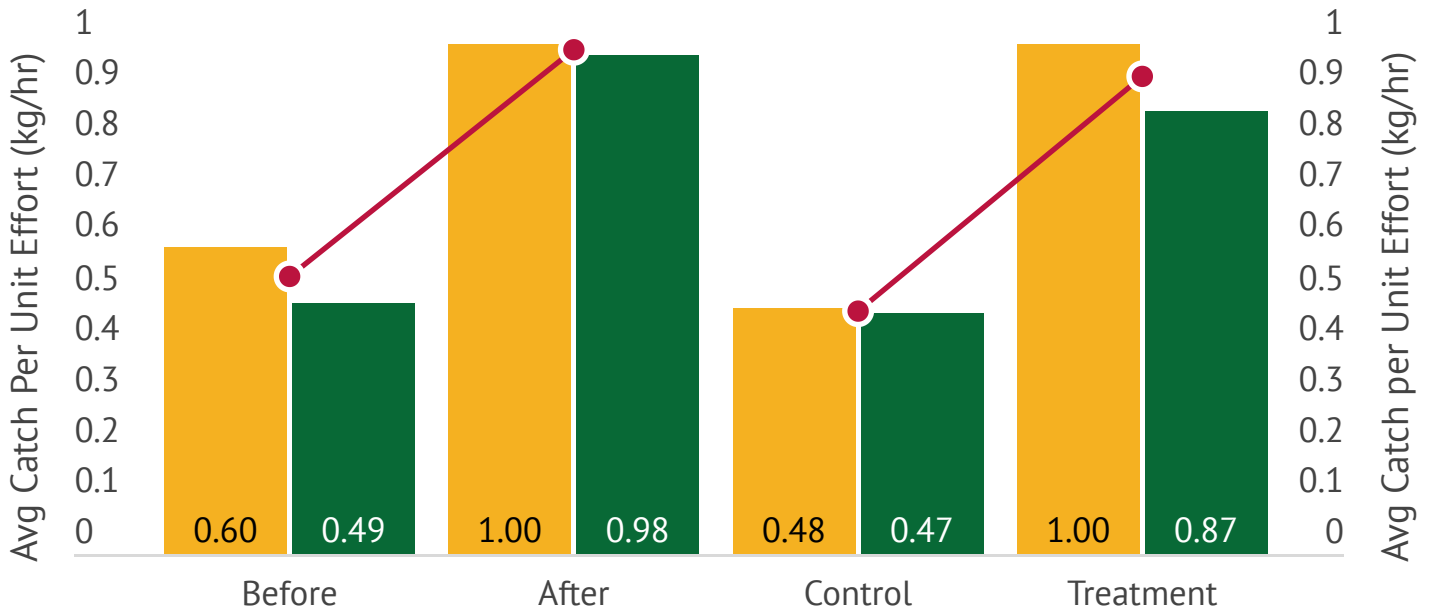
● Satisfaction Level



68%

of households not enrolled wished to join

IMPACT-DRIVEN APPROACH



Our periodic closures in coastal mangrove forests work to restore coastal fisheries and improve food security. From two (yellow & green) three month closures *preliminary* findings show improvements in harvest rates and income. Data shows harvest rates before-after a closure and after a closure between control-treatment.



-36%

36% decrease in Global Land Analysis and Discovery Disturbance Alerts (GLAD) in project sites between 2016-2017



-15%

15% decrease in Global Land Analysis and Discovery Disturbance Alerts (GLAD) in project sites between 2017-2018 - decrease in deforestation

IMPACT: FORESTS



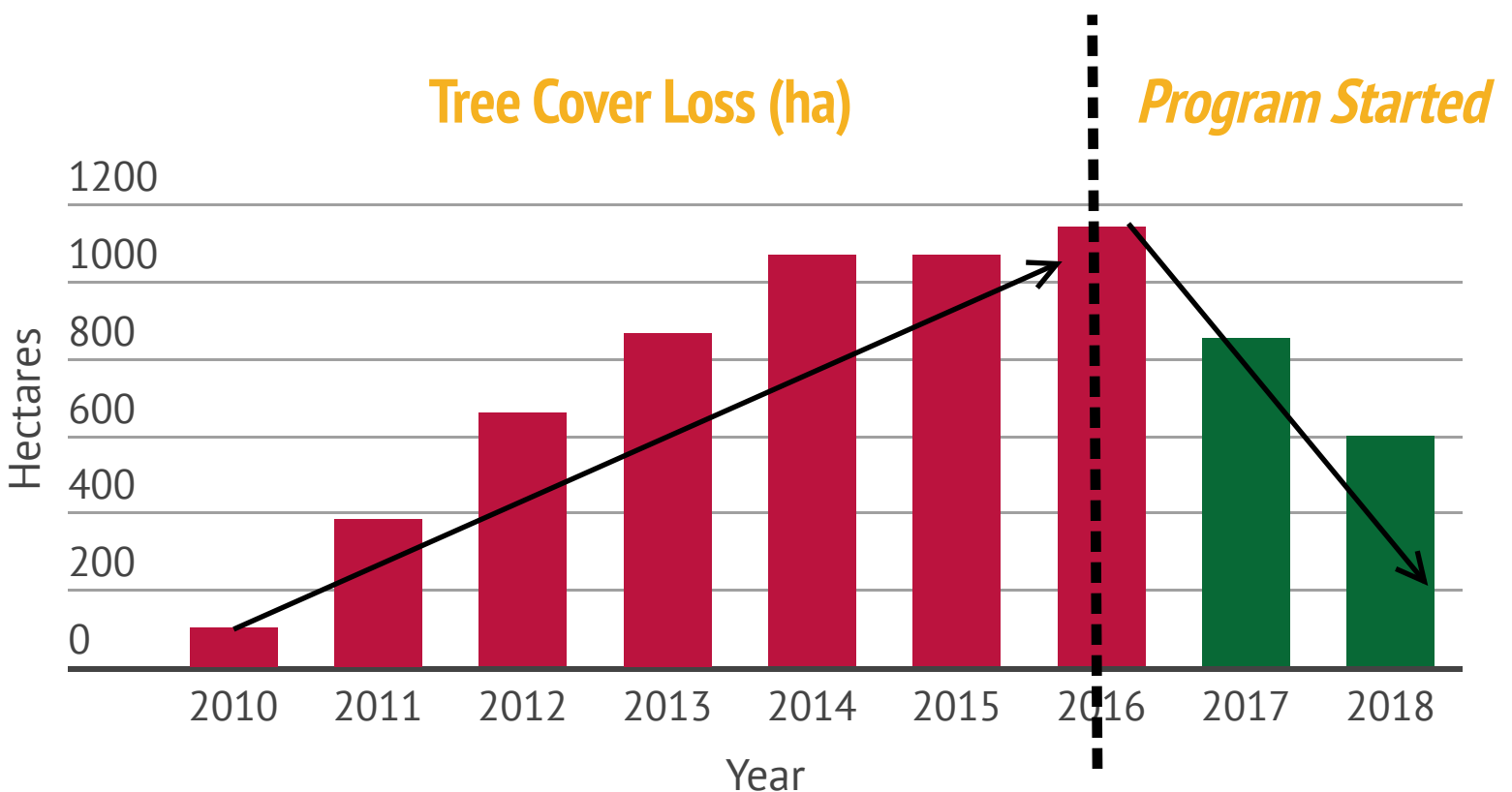
0.5 hectare

Deforestation has halted in our coastal site with less than 1 hectare of forest loss during over our project's lifetime (2016-2018)

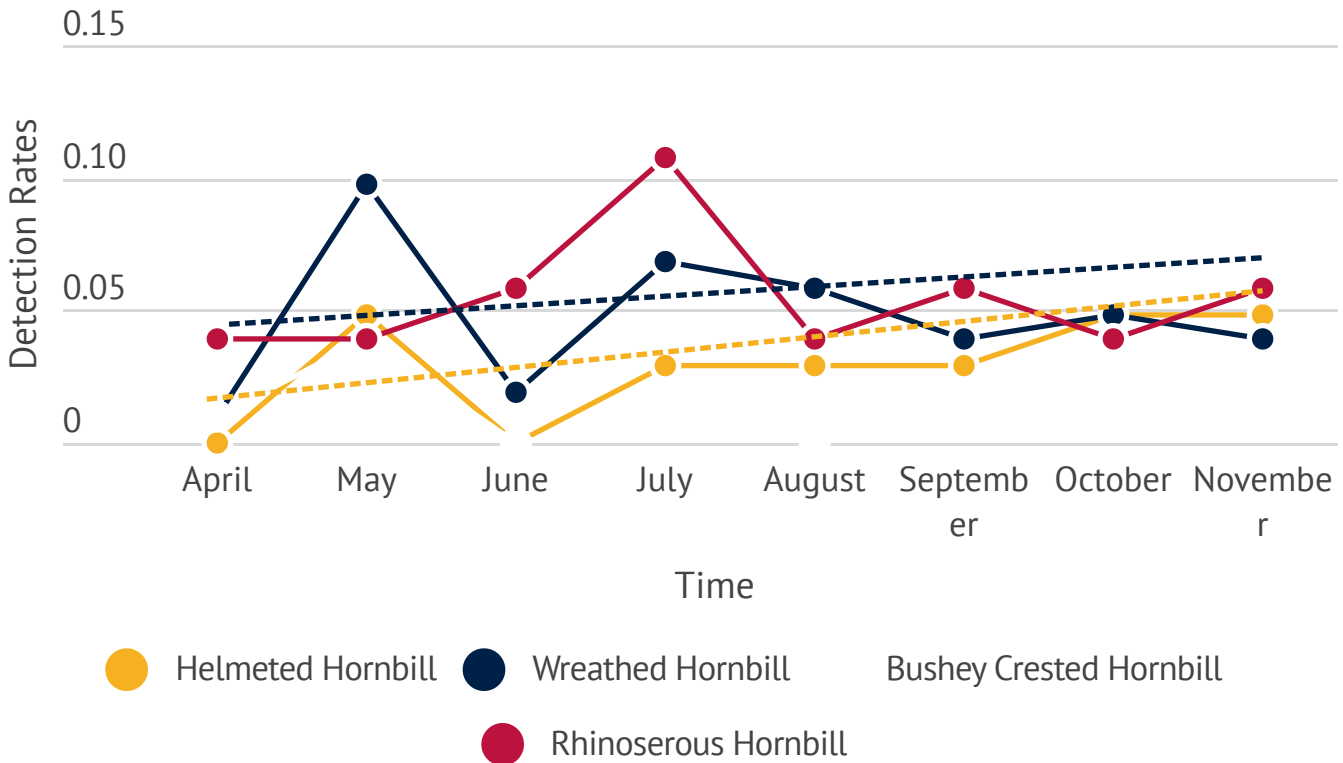
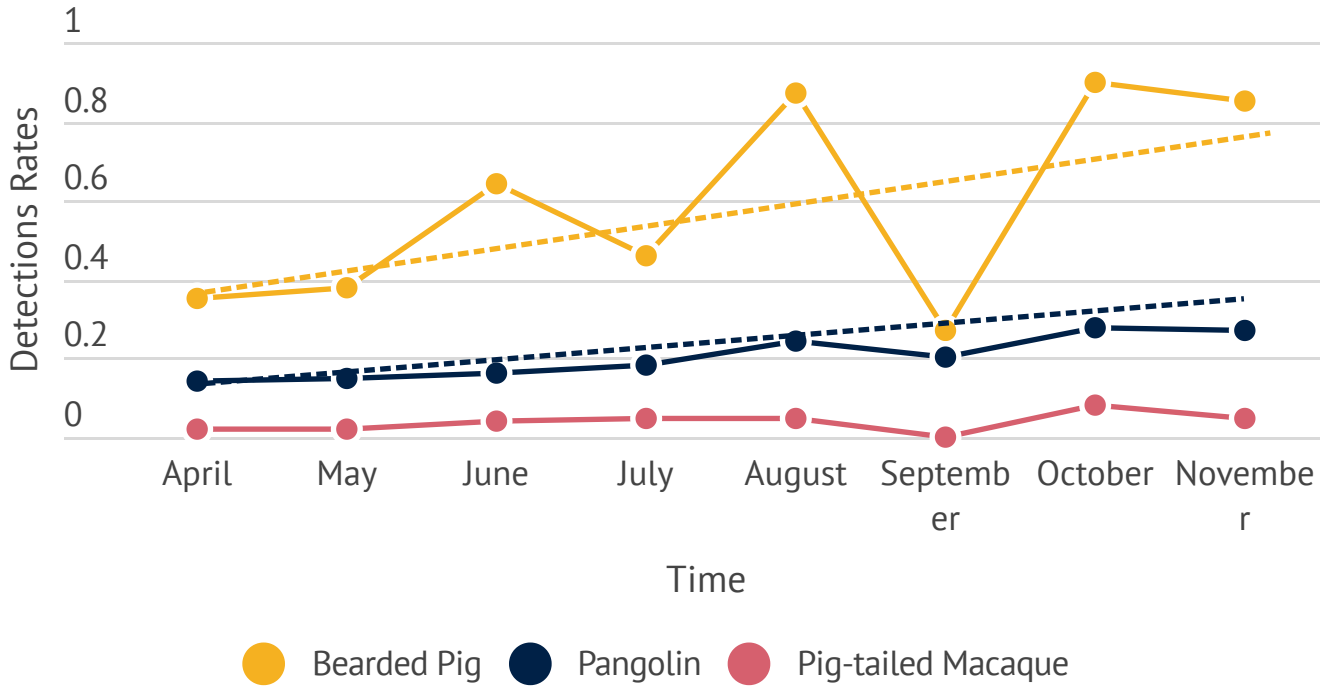


-45% tree cover loss

In our terrestrial site there has been a 45% decrease in tree cover loss, see graphic below



IMPACT: WILDLIFE



Please note these are preliminary findings and more time is needed to account for species change through time. Preliminary findings show population stabilization to slight increases in several of the key species (Sunga Pangolin, 4 hornbill spp) observed. One species showed a decrease during the time period, the Malaysian Porcupine. Other species did not have enough consistent detections to track.

Conclusions

Our model acts as a mechanism that improves human well-being for rural communities across multiple indicators - health, economic, and education.

Our survey provides evidence that our model acts as a conservation catalysts - decreasing illegal logging and hunting.

Our model acts as a mechanism to support more sustainable activities in buffer zones of protected areas - organic farming, reforestation, and sustainable fisheries management.

Our survey provides evidence that a spatial scale increasing rates of forest loss have halted and now fallen through our community-led conservation approach.

Our survey provides evidence communities are extremely satisfied with our program and that the majority of households not enrolled wished to join.

Our model provides a mechanism for communities to engage in sustainable forest management, sustainable fisheries management, and species protection.

Preliminary Findings

At Planet Indonesia we use a **before - after - control - treatment** design to monitor change through time within and between groups. This report should be viewed **as preliminary findings**. The same survey will be repeated in 2020 to track change within the same groups through time. Therefore, early results presented here are based on differences **between control and treatment groups**, while more meaningful results will be supported by evidence that human well-being increased (before - after) and environmental loss decreases (before - after) in significant magnitude within our programs (treatment) than those outside of our program (control). Stay tuned for more impact results!