

# FOREST FORMATION AND CHANGE DETECTION MAPS AND ANALYSIS PROJECT



## Implementing Partner

[Center for Conservation Innovations \(CCI\)](#)

## Project Objectives

- ☐ to develop maps of forest formations in selected protected areas (PAs) and
- ☐ analyze forest cover change inside PAs and their buffer zones\*



# Background of the Project: 1<sup>st</sup> Phase

In November 2016, the Biodiversity Management Bureau (BMB) commissioned a study on the

- forest cover change within and outside protected areas (PAs) for 15 selected sites, with five protected areas coming from each of the major island groups of the Philippines

## **Objectives:** (two-fold)

- 1) to verify whether forested areas are declining inside PAs; and
- 2) to verify whether forest cover loss are effectively managed inside PAs than in areas outside PAs.



# Findings: (1<sup>st</sup> Phase)

- 1) the results from 15 selected PAs did not demonstrate forest extent halving inside those PAs;
- 2) the losses in forests outside of the PAs are of significant extent than the losses inside of the PAs; and
- 3) forest recovery in terms of tree gains outside the PAs are not significantly different from the forest recovery inside the PAs.



# Limitations: (1<sup>st</sup> Phase)

- 1. the number of PAs used in the analysis (15)**
- 2. relied on global data**
- 3. limited field validation on the ground.**

\*\*\* To ensure reliability of the global dataset, its documented forest cover loss must be verified on the ground

# 2<sup>nd</sup> PHASE FOREST FORMATION AND CHANGE DETECTION MAPS AND ANALYSIS PROJECT



## Collaboration with Other Agencies / DENR Regional Office

- ☐ NAMRIA – 2015 Land Classification maps
- ☐ PAGASA – for updated layers on Temperature and Rainfall data (meteorological data)
- ☐ Academic Partners – capacity-building for academic institutions within the project sites
- ☐ DENR-Regional Offices for logistics and other technical assistance during the field visit.



# 2<sup>ND</sup> PHASE FOREST FORMATION AND CHANGE DETECTION MAPS AND ANALYSIS PROJECT



## Project sites:

30 Legislated Protected Areas selected based on size, more or less with intact forest and proximity to BMB's regional network.



## Approaches & Methods



Species Distribution Modelling



Forest formation mapping w/ ground-truthing



Forest cover change detection mapping w/ ground-truthing