

# What is the status of the forest in Village 2?

Hanneke van 't Veen, Vincent Gerald Vyamana and Moshy Salehe Mpembela

## Changes in forest biomass in Village 2

### Challenge

Forest biomass loss in parts of the Village Land Forest Reserve (VLFR), likely due to expansion of agriculture.



2017 – Rainy season



2019 – Dry season

### Opportunity

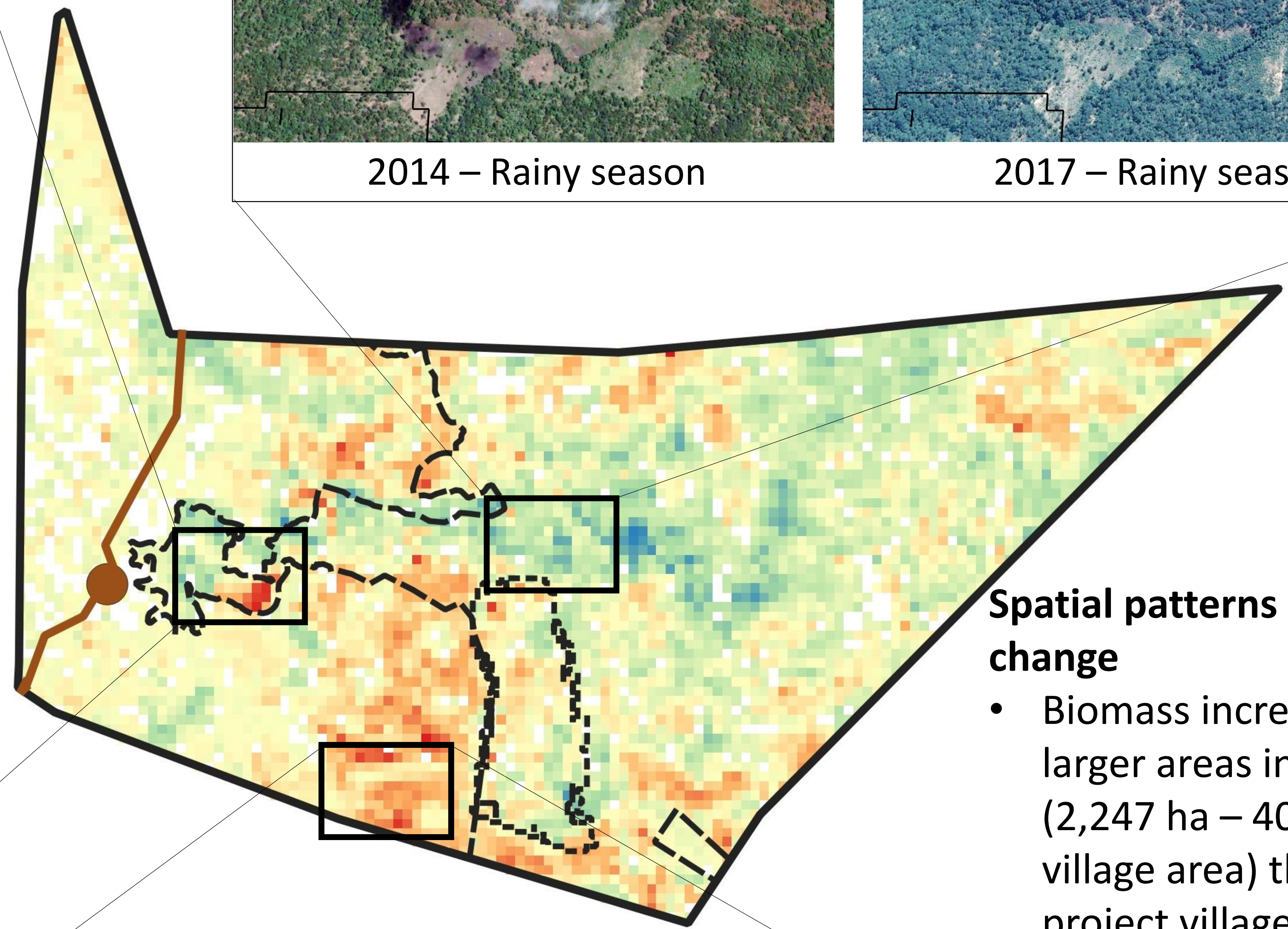
Forest biomass recovery within the Village Land Forest Reserve (VLFR)



2014 – Rainy season

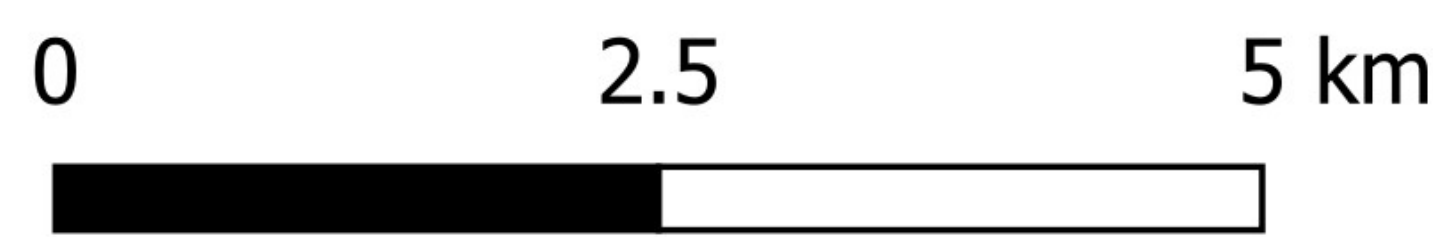
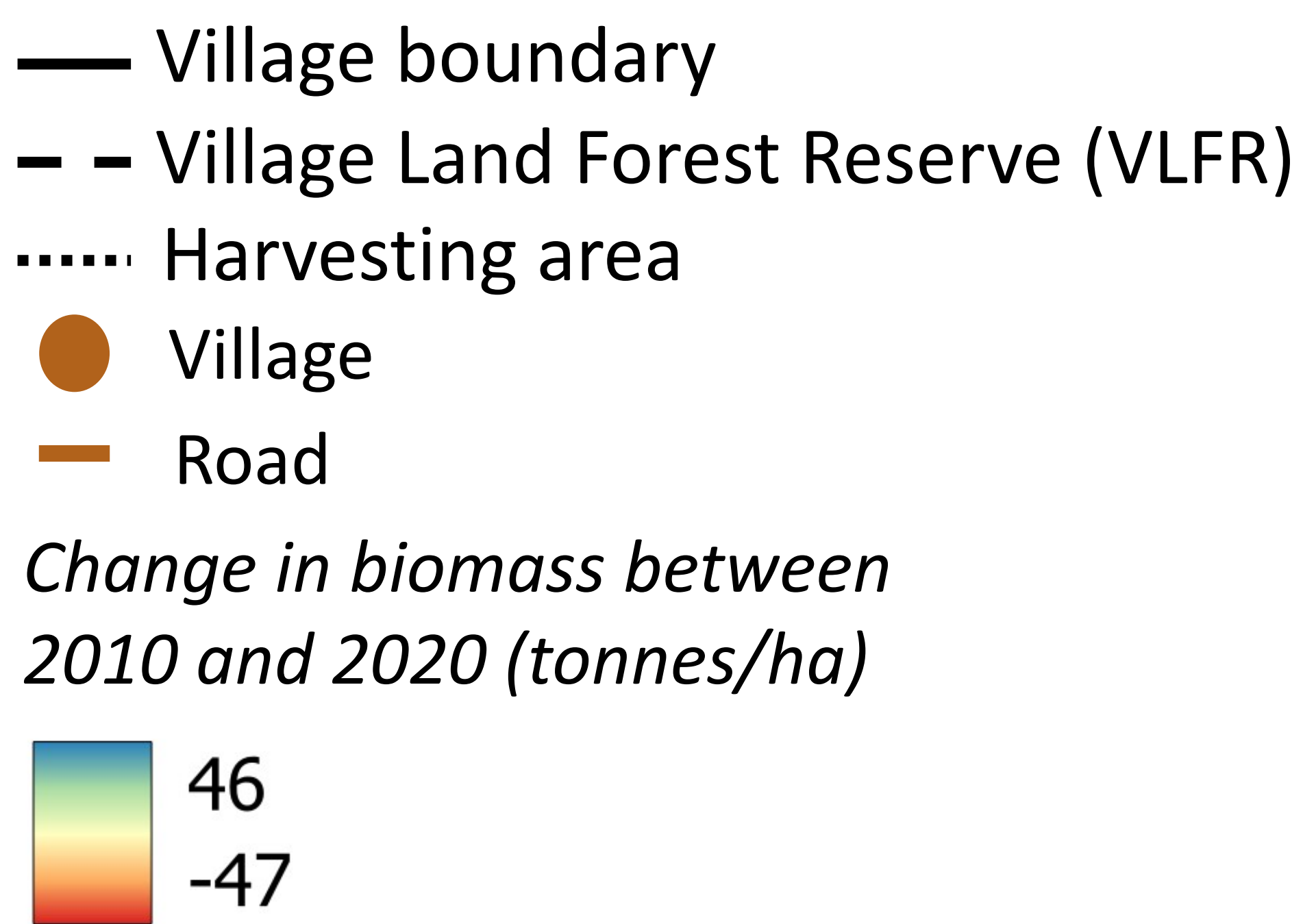


2017 – Rainy season



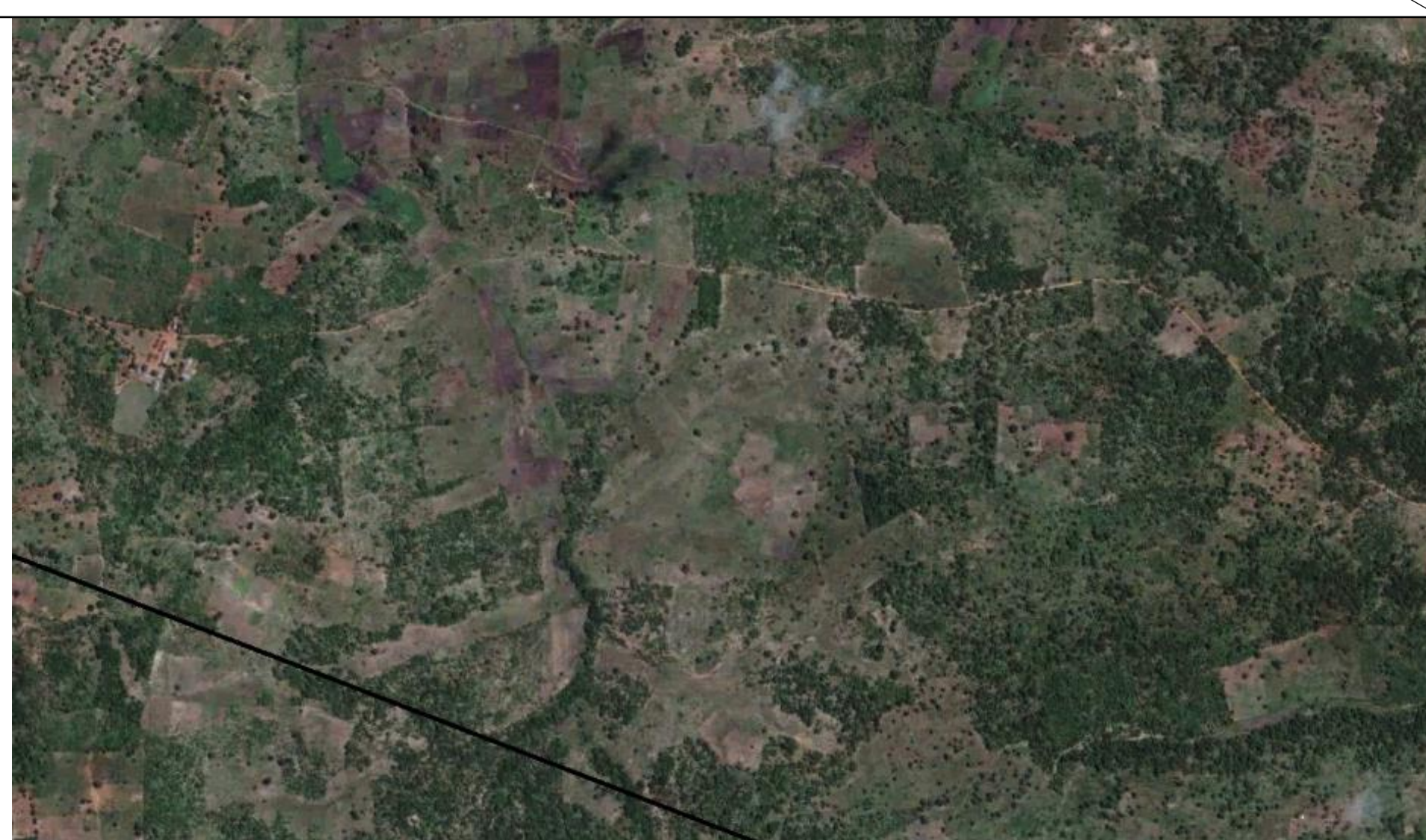
### Spatial patterns in biomass change

- Biomass increases in larger areas in Village 2 (2,247 ha – 40.9% of the village area) than in project villages (5,091 ha - 20.5% of the village area).
- Forest biomass recovery is found in areas where charcoal is produced.
- Forest biomass loss seems mainly related to expansion of agriculture.



### Challenge

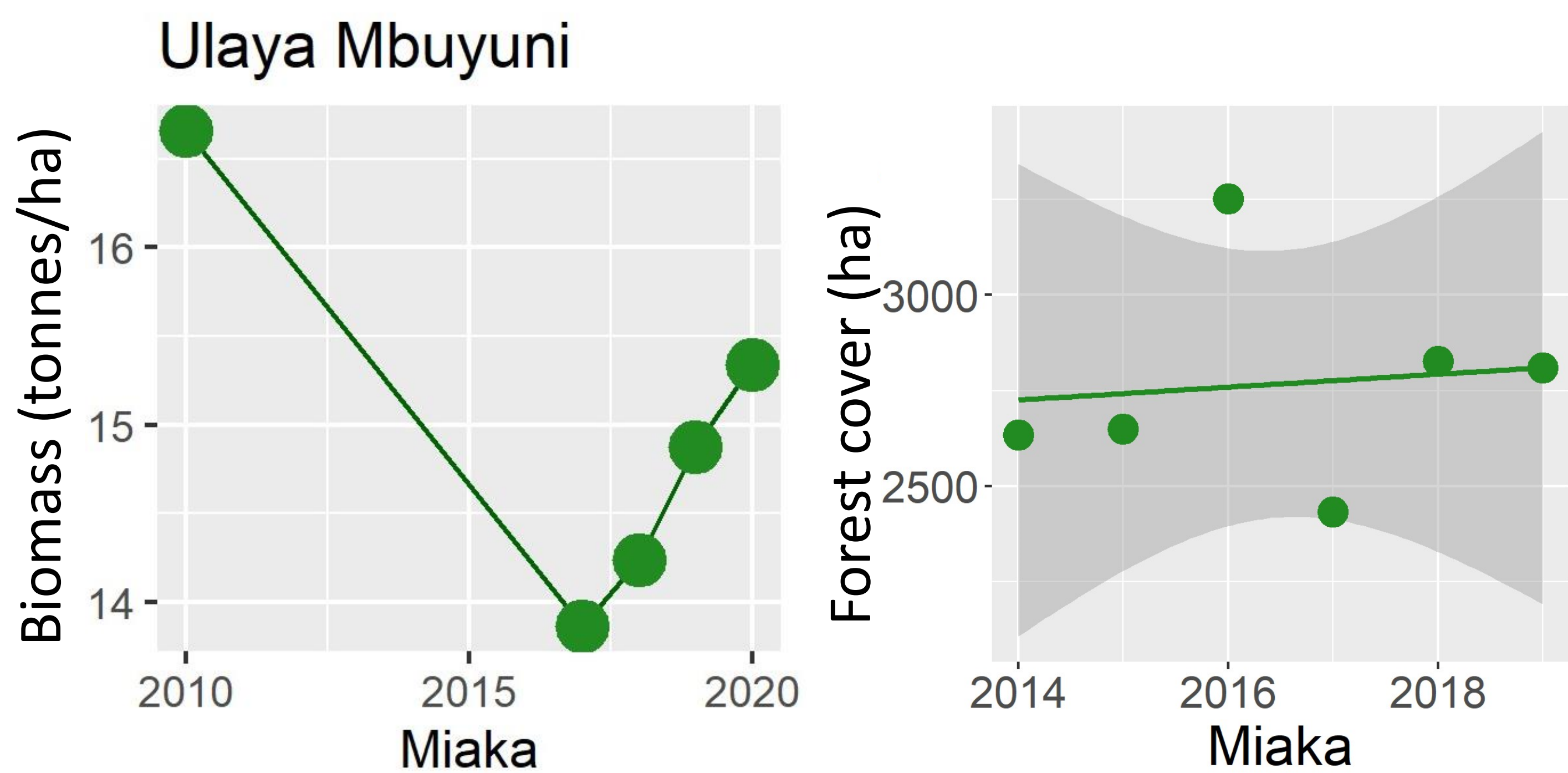
Large declines in forest biomass due to agricultural expansion, likely mostly occurring prior to 2014.



2016 – Rainy season

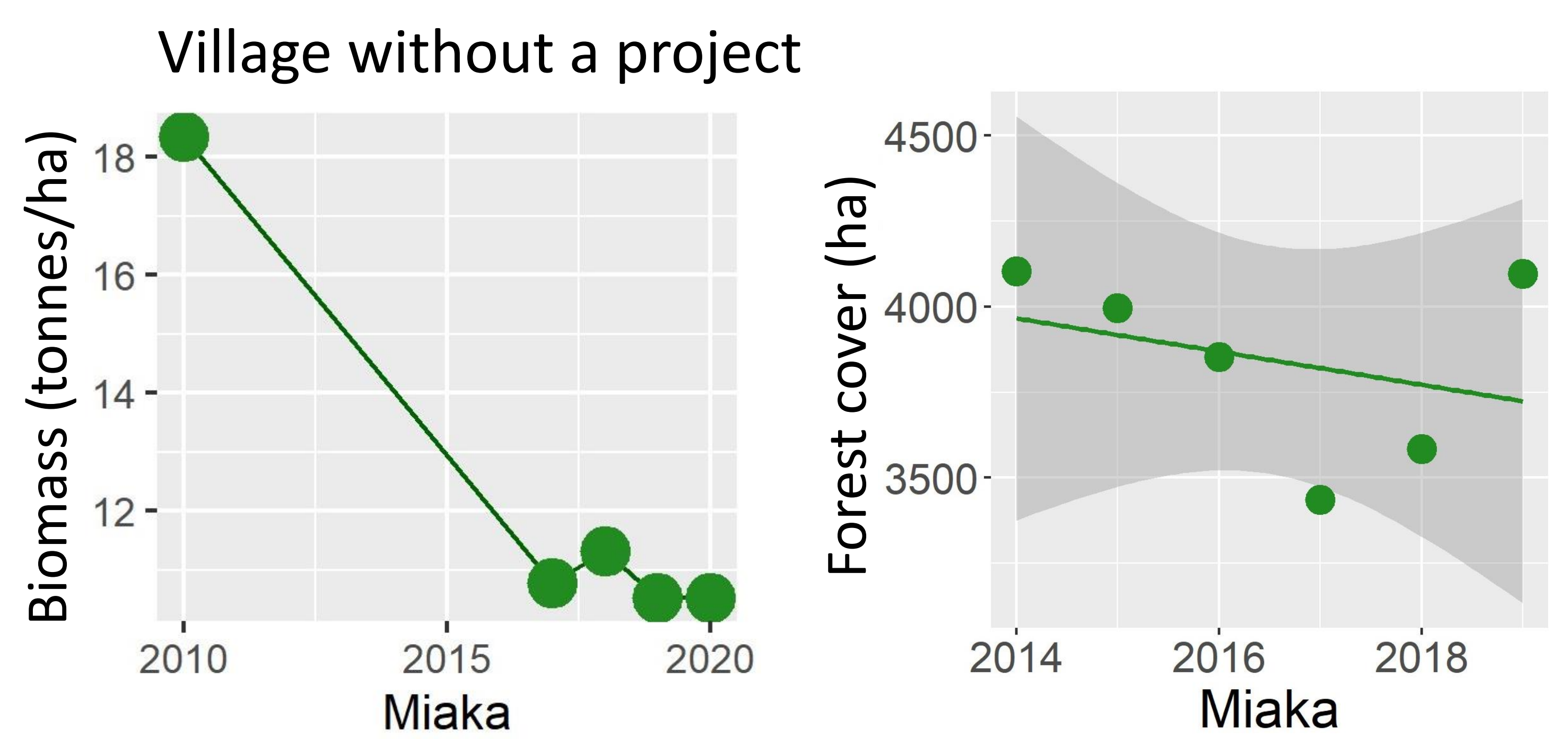
## The status of the forest in Village 2 compared to villages without a project

### Forest biomass increases in Village 2



- Forest biomass first declines and then increases again after 2017 with  $\pm 1.5$  tonnes/ha.
- In many regions a decline in forest biomass is observed between 2010 and 2020.
- Total forest area is stable between 2014 and 2019.

### Forest biomass decreases in a village without a project



- Forest biomass in a non-project village on average decreases ( $\pm 7$  tonnes/ha) and subsequently stabilizes at  $\pm 11$  tonnes/ha between 2010 and 2020.
- Total forest area slightly declines between 2014 and 2019 – likely partially related to charcoal production.