



Are global health strategies capable of securing long-term, human health outcomes if our health systems are not built to secure *both* human health and ecosystem health outcomes?







HIH approach

A disruptive & data-proven solution to the climate and nature crises

The HIH model leverages the pioneering <u>Radical</u> <u>Listening</u> methodology to center rainforest community solutions to return improved human health, forest health, biodiversity, and drawdown of CO2







Impact Data 2008-2018



 Stanford University analyzed the first ten years of data from Health In Harmony's proof-ofconcept program in Borneo, published in <u>Proceedings of</u> <u>the National Academy of</u> <u>Sciences</u> (Jones IJ, MacDonald AJ, Hopkins SR, Lund AJ, Liu ZY et al. 2020)





90% drop in illegal logging households



70% reduction in forest loss



\$65 million in carbon emissions averted



21,000 hectares of secondary forest regrown



2,500 critically endangered Bornean orangutans protected



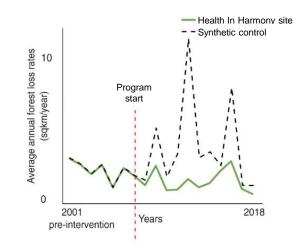
67% drop in infant mortality



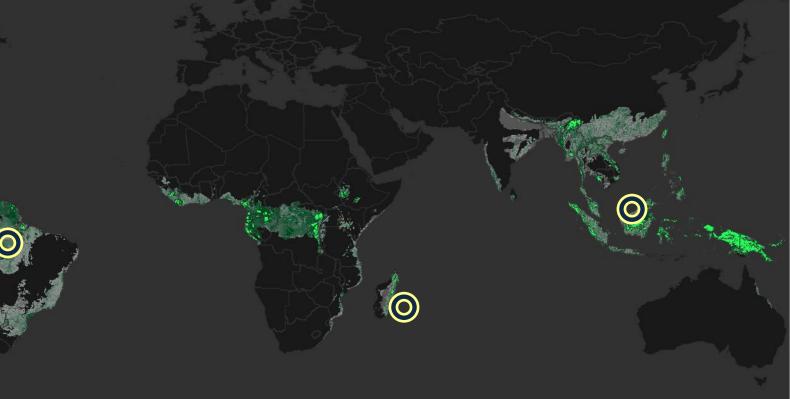
October 26, 2020

Improving rural health care reduces illegal logging and conserves carbon in a tropical forest

Forest Loss in Gunung Palung National Park



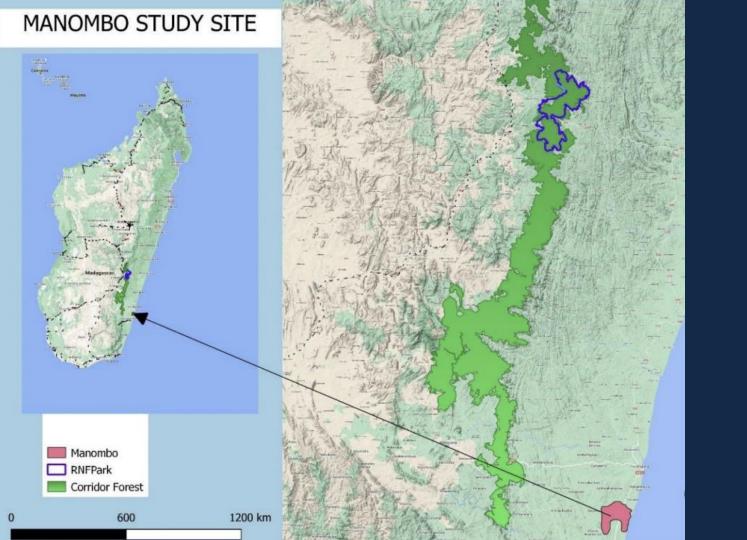




Keystone forests percentile rank

≤ 10th > 90th









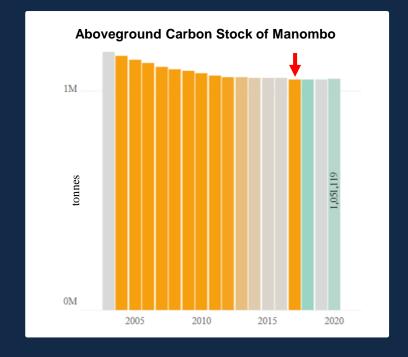




Deforestation may be reversing in Manombo

 Woodwell Climate Research Center analyzed forest carbon by satellite.

 The graph shows consistent deforestation from 2003 to 2017, and signs of forest regeneration from 2018 to 2020.



MADAGASCAR: One Health to prevent disease



QUESTION

Do community-designed solutions for forest conservation in Manombo,
1) restore biodiversity, 2) improve wildlife and human health, and 3)
reduce the risk of zoonotic spillover?

COLLABORATORS

 Univ of Antananarivo, Harvard T.H. Chan School of Public Health, Univ of Chicago, Zoo New England, Centre ValBio, US National Institutes of Health



METHODOLOGY

- Ten-year, longitudinal, prospective cohort study
- Forest ecology and biodiversity assessments
- Wildlife health exams and pathogen sequencing
- Human health analyses in a stepped-wedge design to understand the effects of reforestation, forest fire prevention, water quality, vector habitat reduction, and spillover





"Health In Harmony's innovative model has clear global health implications. Health and climate can and should be addressed in unison, and done in coordination with and respect for local communities."

— Michele Barry, Director of the Center for Innovation in Global Health, Stanford University.



HIH at COP26 - winner of the 2020 UN Global Climate Action Award.

Award-winning model

2022: World Economic Forum Top Innovator

2022: Finalist St Andrews Prize for Environment

2021: United Nations Climate Action Award

2021: WHO Case Study on HIH Madagascar

HIH programs meet 12 of 17 UN Sustainable Development Goals (SDGs) to deliver a step change for the biosphere, society and economy.

"This work demonstrates an actionable framework for aligning cross-sectoral goals...urgently needed to advance effective policy efforts aimed at achieving the United Nations' SDGs. Because the SDGs are deeply interconnected, there is both opportunity and urgency to address multiple targets at once. This work offers a case study of how programs can be designed, implemented, and evaluated to address health and conservation goals simultaneously." PNAS 2020.



