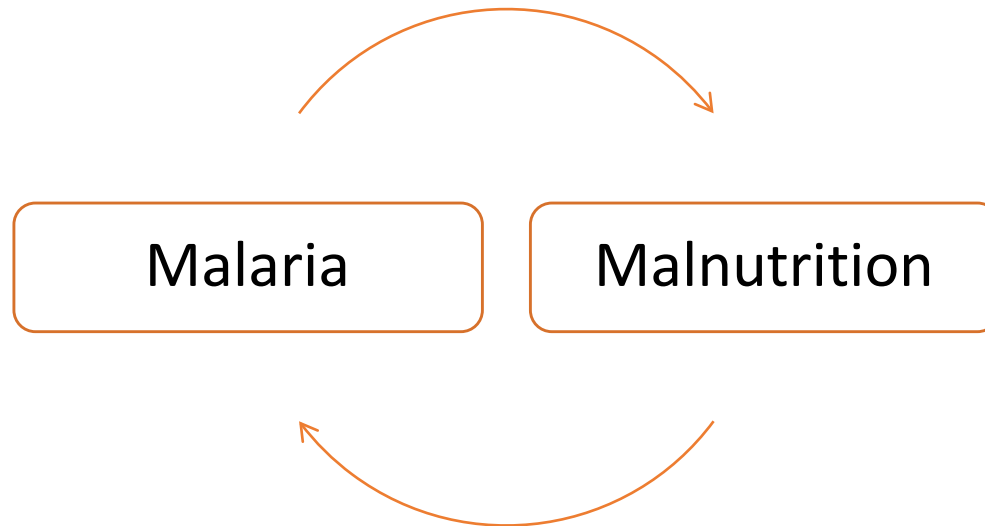# Targeting malaria-malnutrition co-interventions in remote communities in Madagascar

Context and justification

- The burden of malaria is thought to have significant downstream effects on community nutritional outcomes, livelihoods, and development

```
        Malaria          Malnutrition
```

Challenges to malaria control in Madagascar

1. Access to public health centers
2. Insufficient malaria diagnostics and treatment
3. Lack of high-resolution data on malaria incidence
4. Poor understanding of Malnutrition-Malaria interaction

Objectives

1. Characterize mechanisms underlying malaria risk and nutritional deficits in Madagascar

2. Deploy mobile clinic surveillance units for rapid assessment

3. Demonstrate progress towards malaria and nutrition goals can benefit from a multi-sectoral approach

4. Increase the capacity for disease and nutrition monitoring and response in Madagascar

Methods:

✓ **Sites: District of Mananjary, SE Madagascar: 12 rural communities >50 or more households**

✓ **Sites stratified by the distance from urban center**

✓ **Mobil clinic: Monthly follow-up for 2-3y**

○ Selected sites

Methods:

Field methods: Community based malaria and malnutrition surveillance

• Study populations:

Households (and the individuals within) in rural communities

• Laboratory analyses:

1. Malaria and mosquito vectors

2. Intestinal parasite burden

3. Nutritional markers:

Methods:

- Partnerships and collaborations:
- ✓National Malaria Control Program (NMCP),
- ✓Local community health workers,
- ✓Local clinicians,

Project Status:

June 2021 :

1. Ethical approval (Harvard IRB and Madagascar MOH CERBM)
2. Site selection and enrollment
3. Approval from local government and traditional authorities
4. Training local mobile health clinic staff in research methods

July 2021:

- Deployment of mobile clinic research team

Acknowledgments