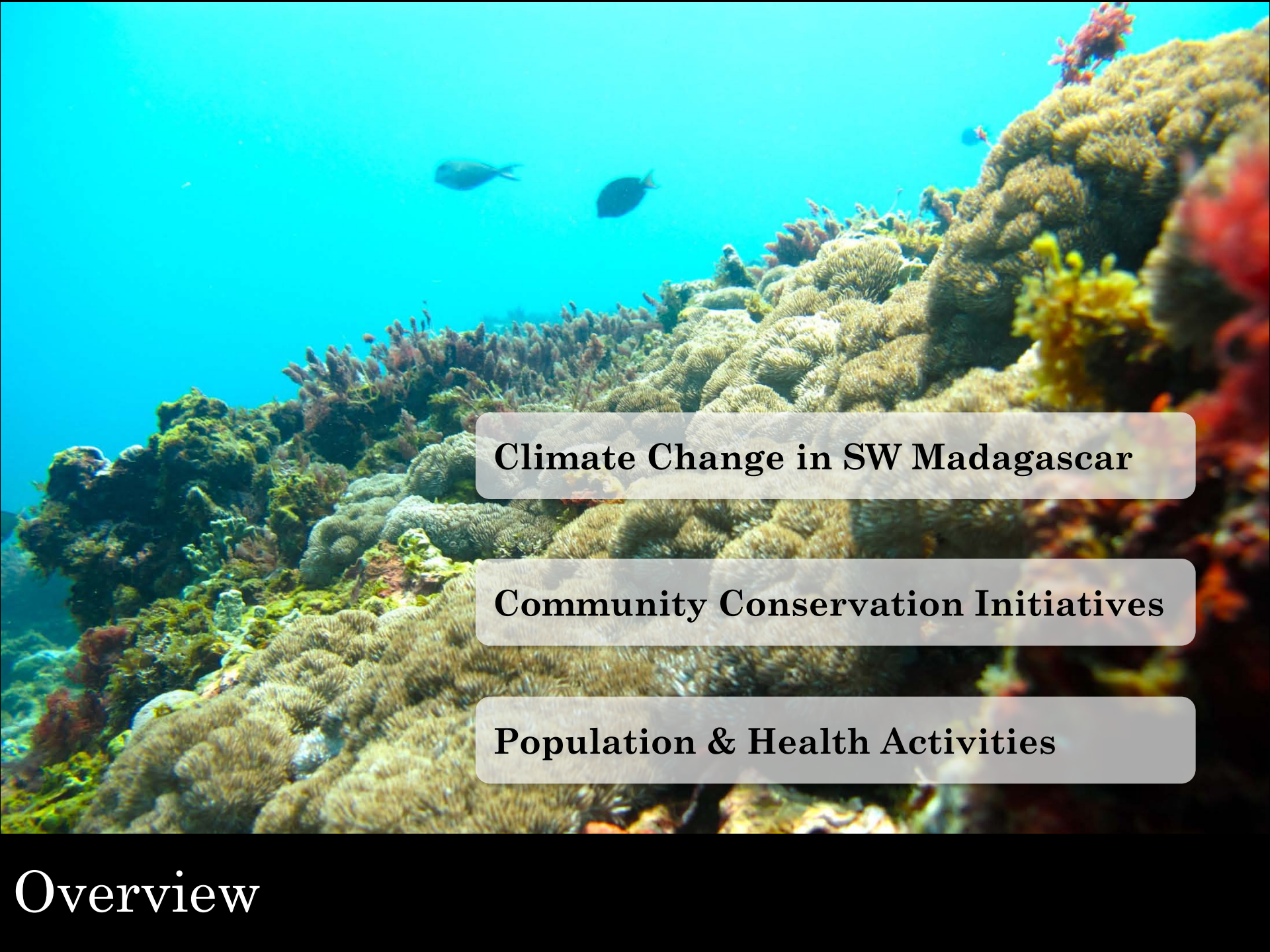




Experiences from Coastal Madagascar:

*The Importance of Integrated
Population, Health and Environment
Programming in Building Resilience
to Climate Change*

Matthew Erdman & Kame Westerman



Climate Change in SW Madagascar

Community Conservation Initiatives

Population & Health Activities

Overview



blue ventures

discovery through research





4th Largest Reef System in the World



The Vezo People

A child with a purple bucket walking on a beach towards a large rock formation in the ocean.

Abnormal Rainfall

Shorter Cool Season

Unpredictable Winds

Climate Change: a Growing Concern



Poverty

Isolation

**Few Livelihood
Alternatives**

**Complete Dependence on
Local Natural Resources**

Social Vulnerability



Social



Ecological

Building Resilience



VELONDRIAKE

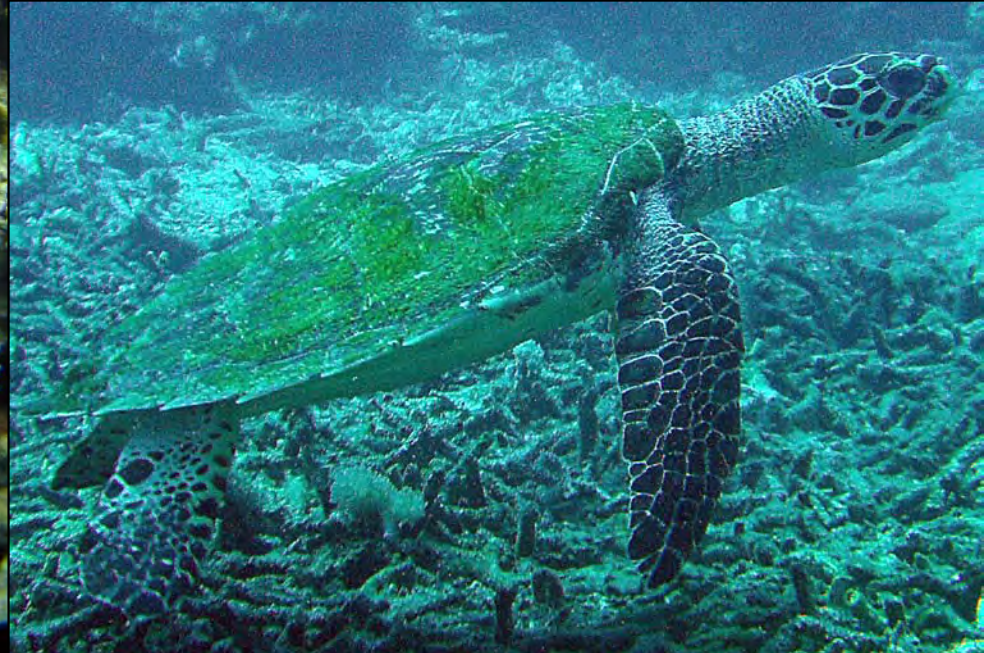
A Locally- Managed
Marine Area
(LMMA)



Fishing Method Restrictions



Social Marketing Campaign



6 Permanent Marine Reserves



A Permanent Mangrove Reserve



Nearly 60 Temporary Octopus Closures



Building Management Capacity



Ecological Monitoring



Raising Sea Cucumbers



Farming Seaweed

Alternative Livelihoods



Education



Family Planning Program



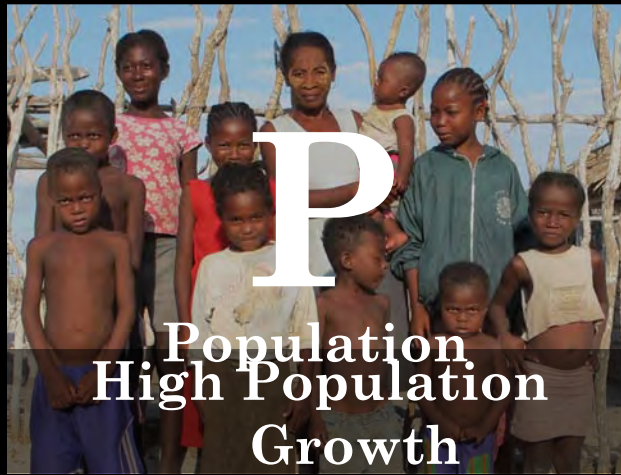


E Environment

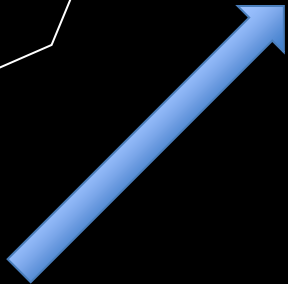


P Population

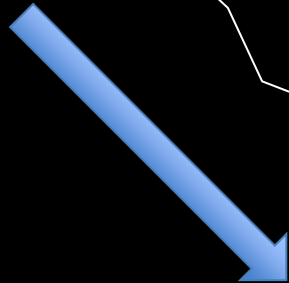




Family Size
Based on
Quantity



More Demand
for Natural
Resources

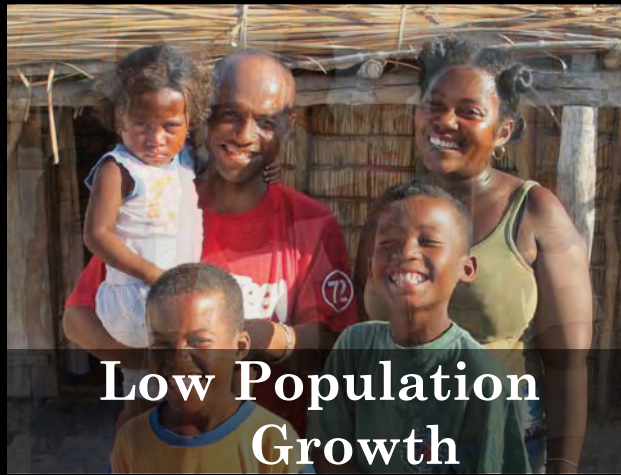


~~Conservation
and
Development~~



Lack of
Natural
Resources

**Family Size
Based on
Quality**



**Less Demand
for Natural
Resources**

**Conservation
and
Development**

Good Health

**More
Natural
Resources**

**Healthy
Environment**





Benefits of Integration



Increased Community Buy-In

A high-angle photograph of a group of diverse children, mostly of African descent, looking up and smiling at the camera. They are gathered closely together, and the background is a light-colored, textured ground. The children are wearing various colorful clothing, including orange, blue, and purple. The overall mood is joyful and positive.

Velondriake Statistics

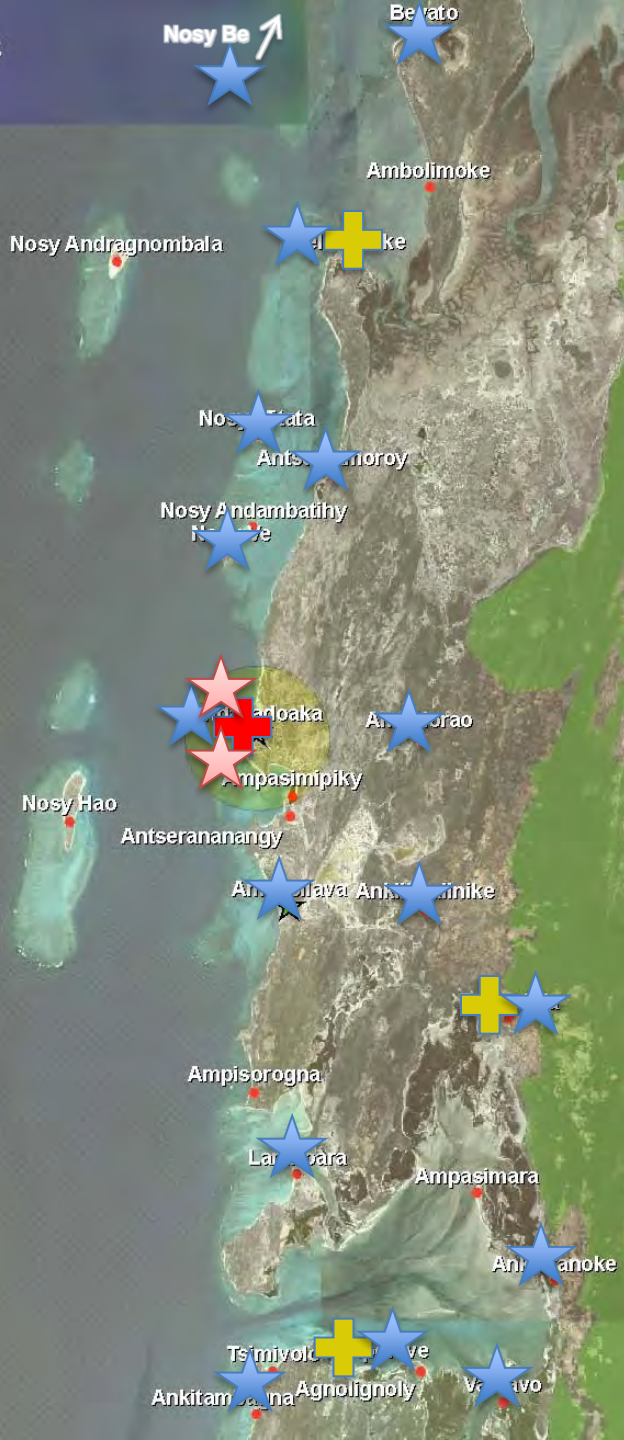
More than half the population is under age 15

High infant & maternal mortality rates

Average birthrate: 6.7 children/woman

Population doubling time of 10-15 years

Improves Effectiveness of Conservation Efforts



Clinics & Outreach

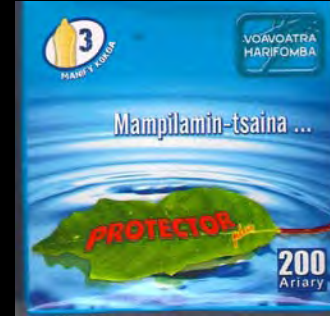
- + Main Clinic: Andavadoaka
- + Satellite Clinics: Befandefa, Belavenoke & Tampolove
- ★ 16 Community Based Distributors
- ★ 2 CBD Supervisors



Healthy lives. Measurable results.



MARIE STOPES
INTERNATIONAL



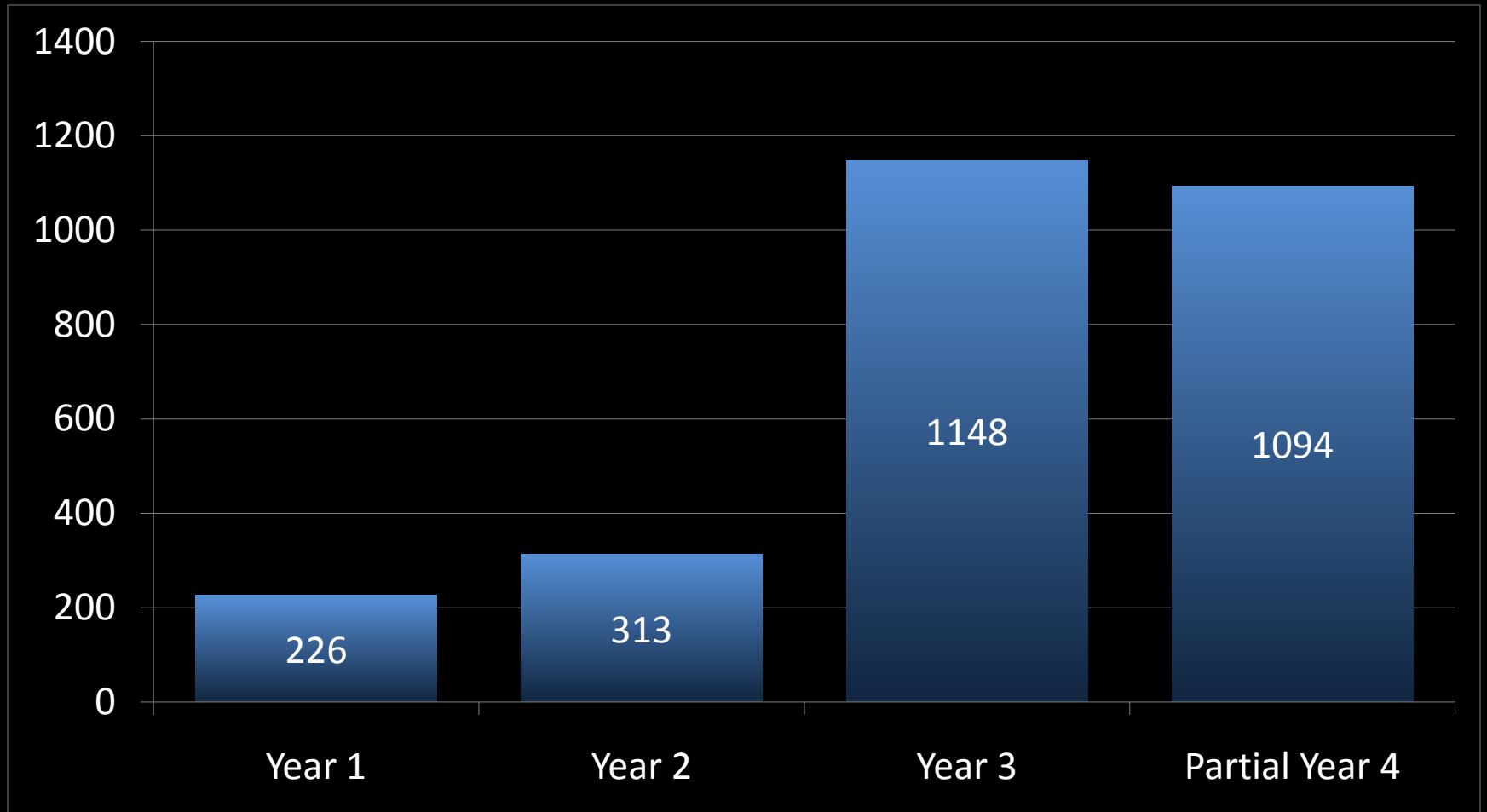
Contraceptive Offerings



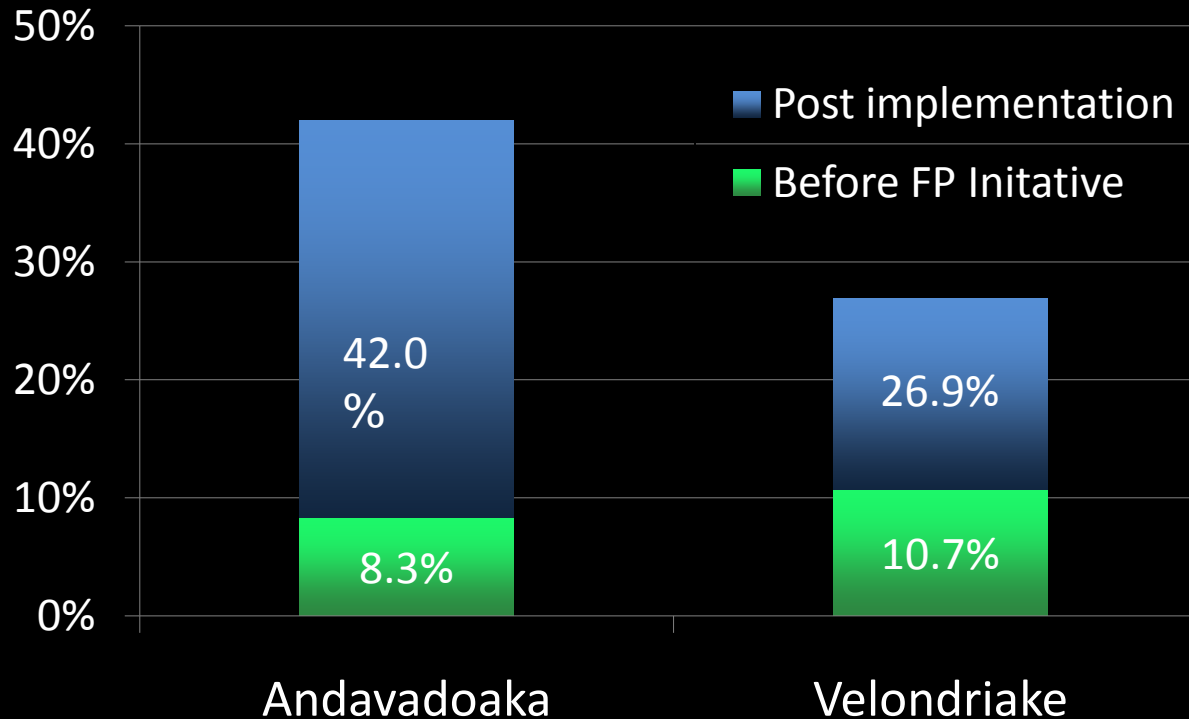
Peer Education



Patient Visits to Date



Contraceptive Prevalence Rate



* Contraceptive prevalence rate is the percentage of women between 15-49 years who are practicing, or whose sexual partners are practicing, any form of contraception.



Sûr'Eau
MANADIO RANO

Water, Sanitation
and Hygiene

Diarrheal
Treatment

ViaSUR
Fitsaboana ny aretim-pivalanana tsotra ho an'ny zaza latsaky ny 5 taona

1. TENA MANDAITRA SRO
Ny SRO manana ny fampiasan'ny zaza any amin'ny tsabotany fa mampiasan'ny tsabotany ny zaza.

2. TIAN'NY ANKIZY ZNC
Mampiasan'ny fampiasan'ny zaza any amin'ny tsabotany fa mampiasan'ny tsabotany ny zaza.

3. MORA HITA
Ny zaza any amin'ny tsabotany ny zaza any amin'ny tsabotany ny zaza.

Telo Voasary!

ViaSUR
ViaSUR: SRO&ZINC



Maternal &
Infant Care



Community Health Program



Expansion of FP & CH Services



Overall Challenges

Social



Ecological



Building Resilience



Looking to the Future



MACARTHUR
The John D. and Catherine T. MacArthur Foundation

 **USAID**
FROM THE AMERICAN PEOPLE

 UNFPA

RARE
inspirando la conservación

Major Funders

A person wearing a light-colored, holey t-shirt and dark shorts is standing on a sandy beach. They are holding a large, dark fish vertically by its tail. The fish's head is near the water, and a small amount of blood is visible dripping from its mouth. The background shows the ocean with waves breaking on the shore under a clear blue sky.

Thank You!
Misaotra Bevata!

All Photos © Garth Cripps & Matthew Erdman