USAID COMMUNITY CAPACITY FOR HEALTH PROGRAM
Mahefa Miaraka

USAID POPULATION, HEALTH AND ENVIRONMENT (PHE) INTEGRATION ACTIVITY IN MADAGASCAR:

Report on the Monitoring and Evaluation Framework on Population, Health and Environment Indicators

Submitted: September 19, 2019

USAID
FROM THE AMERICAN PEOPLE

ADVANCING PARTNERS & COMMUNITIES

JSI RESEARCH & TRAINING INSTITUTE, INC.

USAID POPULATION, HEALTH AND ENVIRONMENT (PHE) INTEGRATION ACTIVITY IN MADAGASCAR

Report on the Monitoring and Evaluation Framework on Population, Health and Environment Indicators

September 19, 2019
Revised December 22, 2019

Cooperative Agreement No. AID-OAA-A-12-00047

Submitted to:
Advancing Partners & Communities
JSI Research & Training Institute, Inc.
2733 Crystal Drive 4th Floor
Arlington, VA 22202 USA

Prepared by:
JSI Research & Training Institute, Inc.
USAID Community Capacity for Health Program – *Mahefa Miaraka*
Résidence Lavalley
Près Lot IIK 50H Mahatony
Alarobia, Antananarivo (101) Madagascar

Cover photo: During the rainy season, locals must use a pirogue to travel down the Antainambalana River to Maroantsetra. Photo credit: Melanie Borcover, Mahefa Miaraka

Acronyms and Abbreviations

ACT	*Artemisinin-based Combination Therapy*
BHC	Basic Health Center
CHV	Community Health Volunteer
DB	Database
DLA	Decentralized Local Administrations
FP	Family Planning
HEWG	Health and Environment Working Group
IGA	Income Generation Activities
LLIN	Long-lasting Insecticide Treated Net
JNAP	Joint National Action Plan
MAR	Monthly Activity Report
MEDD	Ministry of the Environment and Sustainable Development
MEEH	Ministry of Water, Energy and Hydrocarbons
MEI	Madagascar Emergence Initiative
MPPSPF	Ministry of Population, Social Protection and Promotion of Women (Ministère de la Population, de la Protection Sociale et de la Promotion de la Femme)
MSANP	Ministry of Health
NHEP	National Health and Environment Policy
NRM	Natural Resource Management
ORS	Oral Rehydration Salts
PHE	Population, Health and Environment
PHE-DB	Population, Health and Environment Database
PIRS	*Performance Indicator Reference Sheet*
PPR	*Performance Plan and Report*
RDT	Rapid Diagnostic Test
SANA	Situational Analysis, Health and Environment Needs Assessment
SDGs	Sustainable Development Goals
VOI	Local Grassroots Communities
VSLA	Village Savings and Loan Association
WASH	Water, Sanitation and Hygiene
WCS	Wildlife Conservation Society

Table of Contents

List of Figures:

List of Tables:

1. Background

Long before Madagascar's political commitment to health and environment, related activities have been carried out by various implementing NGOs since the 1990s. Following the Libreville Declaration (Gabon), which Madagascar signed in 2008, various policy papers including the Situational Analysis, Health and Environment Needs Assessment (SANA) and the National Health and Environment Policy (NHEP) were developed. Despite progress on national strategies and policies, it is still difficult to have an accurate view of the evolution of population, health and environment (PHE) approaches at the national level. To fill this gap, the national monitoring and evaluation framework serves as a useful tool in this regard. Until now, Madagascar has not had any document relating to the monitoring and evaluation framework.

The proposed monitoring and evaluation framework has data elements that include indicators of different types. Their availability and sharing among implementing partners not only makes it possible to carry out a situational analysis of PHE approaches, but also to determine the added value of integrated PHE approaches as opposed to vertical approaches. Determining potential added value, could provide an opportunity to develop strategies in order to improve the implementation of integrated PHE approaches in Madagascar.

Given the importance of the monitoring and evaluation framework, one of the main thrusts of the PHE project focused on its design and development, in partnership with the members of the Health and Environment Working Group (HEWG) and those of the PHE Network. Achieve this goal would not have been possible absent effective partnership.

2. Methodology

1)   Online survey of implementing partners, members of the PHE Network:

- •   Collection of existing indicators used by partners

- •   Identification of intervention areas and partnership models

2)   Sharing and exchanging information through technical meetings and workshops

- •   Group work based on the areas of intervention

- •   Aligning the indicator framework to national and international standards.

3. Monitoring and Evaluation Framework for a PHE Program

Several models are presented in reference documents. Given the complexity of linking integrated activities, we have opted to use the simplified framework as presented in "*A Guide for Monitoring and Evaluating Population - Health - Environment Programs, second edition, September 2018*" from MEASURE Evaluation.

Figure 1: PHE Monitoring and Evaluation Framework
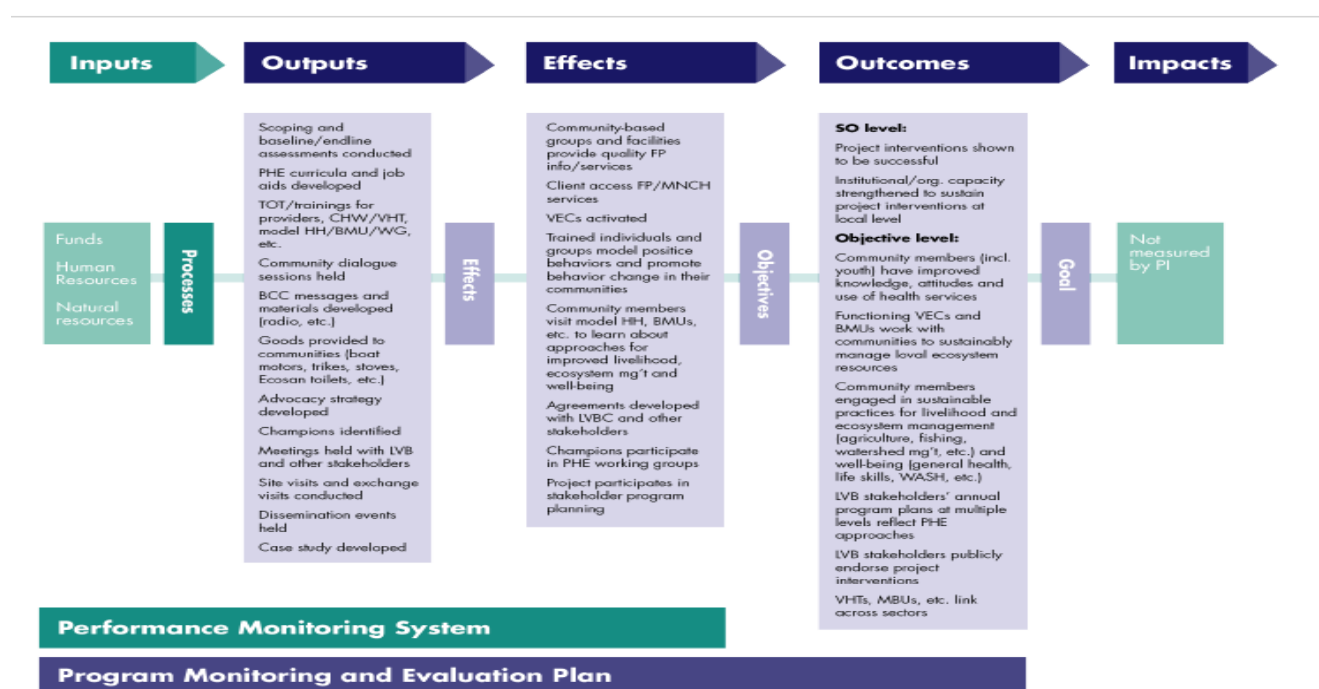
Source: A Guide for Monitoring and Evaluating Population – Health – Environment Programs, second edition, September 2018

3.1 Theory of Change

A theory of change is a necessary tool for determining the activities to be undertaken, the link between the intervention, the implementation strategy, the expected results and the objective of the project or program. It is also used to select the indicators and data to be collected, and to design the project's monitoring and impact assessment tools.

In order to achieve a set objective, the formulation of the theory of change should take into account the needs of the local community or project beneficiaries. The process of identifying needs must take into account not only existing problems but also their root causes. It is in fact a situational analysis that takes into consideration various underlying factors (political, economic, social, environmental, health, cultural, etc.).

Following the situational analysis, the next step consists in identifying the actions to be undertaken to reach a desired outcome(s). The choice of activities can be changed throughout the intervention according to the interaction of activities in communities. For instance, in some communities the distribution of long-lasting insecticide-treated nets (LLINs) for malaria control had unintended consequence of LLIN being used as fishing nets in coastal conservation zones. In case, it is important to define activities in order to inform the community of proper use and handling of LLIN, in order to reduce any misuse.

Once the objectives are set (both general and specific), and the implementation strategies and activities to be undertaken are well defined, it is necessary to choose and monitor appropriate indicators: the activities carried out in relation to the activity plans (monitoring indicator), the results achieved (result indicator) and the impact of the project (impact indicator). The identification of these indicators should take into account existing national and international framework documents (National Policy, Sustainable Development Goal, etc.).

In terms of an integrated PHE approach, a standard theory of change does not exist. Different methodological approaches and implementation strategies carried out by NGOs or community associations, pose a challenge to a standard formulation. Thus, each NGO or association formulates its own theory of change depending on its field of intervention and methodological approach.

For example, the following figure presents a theory of change in the District of Maroantsetra, following a partnership between the USAID Community Capacity for Health (*Mahefa Miaraka*) community health program and Wildlife Conservation Society (WCS).

Figure 2: Theory of Change of the Integration of Population, Health and Environment
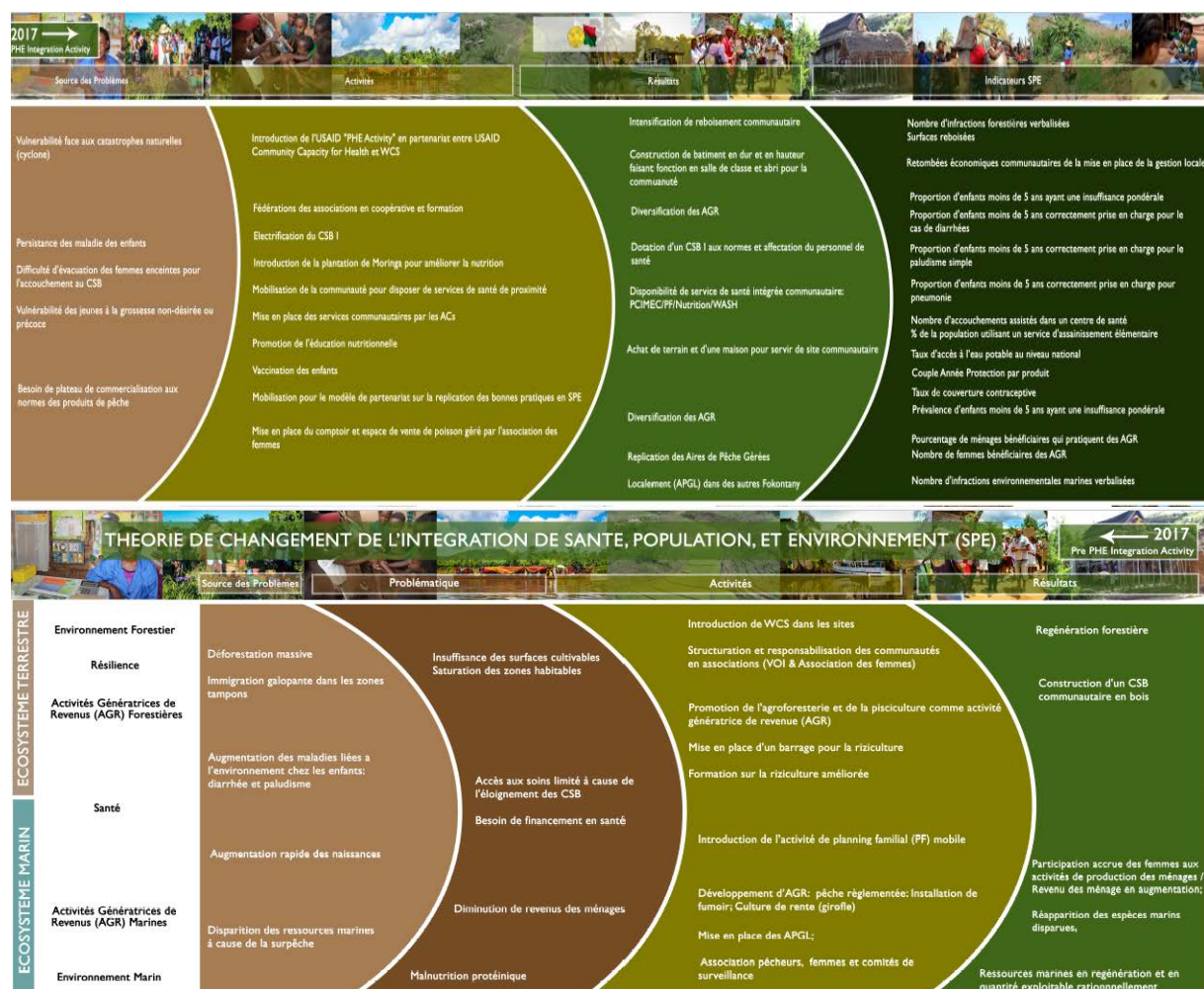
4. Method for Selecting Indicators

4.1 Identification and Grouping

- Among the 39 member associations/organizations of the PHE Network in Madagascar, 16 members contributed by sharing their indicators.

- 181 total indicators were collected

- After grouping the indicators, 114 were selected (Figure 3)
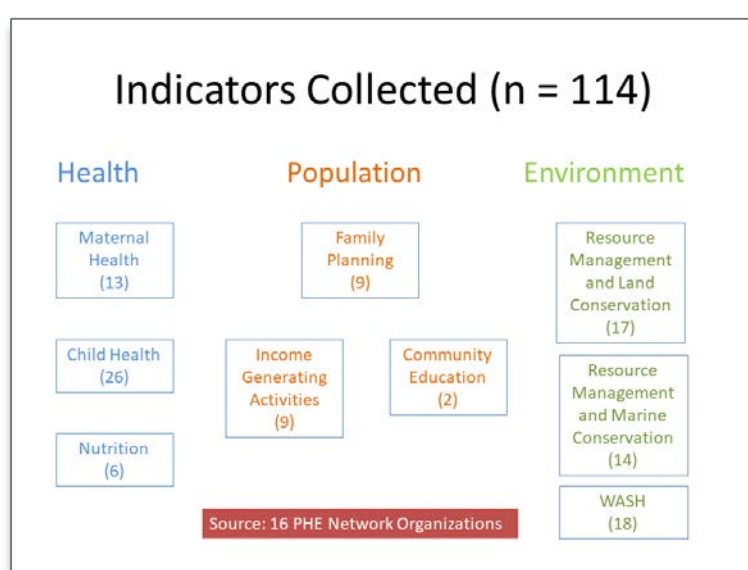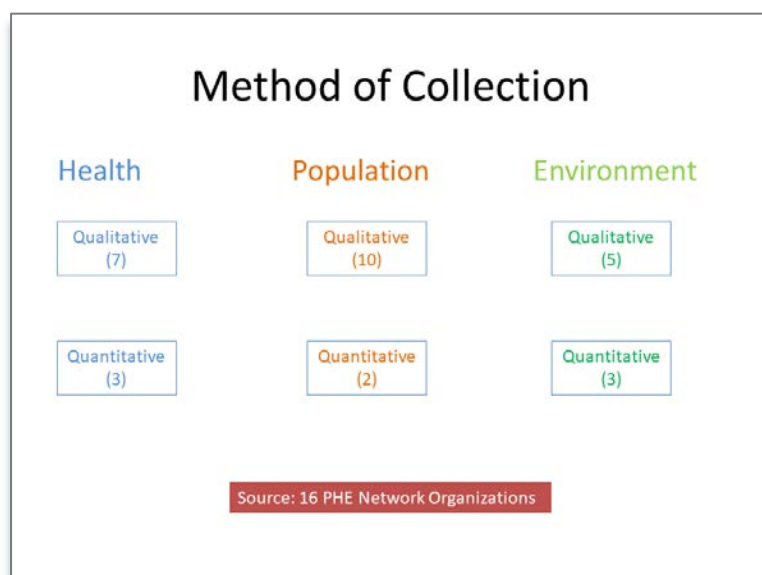
Figure 3: Grouped Indicators

Figure 4: Classification by Type/Sector

4.2 Document Review and Work Meeting with Partners

The indicators used in PHE approaches should be aligned with both national and global indicators. Thus, the following documents were taken into account:

- Joint National Action Plan (JNAP) on health and environment (national reference)
- Sustainable Development Goals, (global reference)
- Performance Plan and Report (PPR), USAID (global reference)
- Performance Indicator Reference Sheet (PIRS) (global reference)

The links or relationships between the indicators emerged from the document review and workshop discussions (Figure 3).

IF the following four assumptions are met:

- The existence and application of national and international frameworks with the support of strategic actors;
- Availability of information and synergy of activities among stakeholders;
- Community understanding of the benefits of an integrated PHE approach;
- Development of partnership between stakeholders.

THEN the integrated approach provides added value compared to vertical approaches.

Examples:

- **IF** households have access to health service packages such as treatment, nutrition, combined with access to WASH, **THEN** the health of family members will improve. This results in a decrease in expenditure on health, and the ability be fully productive which contributes to stable household incomes.
- **IF** families use family planning, **THEN** there will be less population pressure that contributes to the conservation and management of local natural resources.
- **IF** alternative economic activities are undertaken by communities **THEN** overall health status can improve and communities' dependence on destructive farming and fishing practices will decrease.

Table 1: Classification of Final Indicators by Type

Component	Types			
	Impact	**Result**	**Monitoring**	**Total**
Alternative Income Generating Activities	1		1	2
WASH		2		2
Environmental Management	1	1	2	4
Integration			5	5
Family planning		2		2
Child Health		4		4
Maternal Health		1		1
Total	**2**	**10**	**8**	**20**

4.2.1 Memorandum of Understanding on the Establishment of a Population, Health and Environment Database

In order to ensure the management and continued operation of the PHE database (DB), a protocol was developed by the four relevant Ministries, namely the Ministries of Public Health (MSANP), Environment and Sustainable Development (MEDD), Water, Energy and Hydrocarbons (MEEH) and Population (MPPSPF), as well as the PHE Network. This protocol has 15 clauses (see annex), including:

- The overall overview, objective and expected results of the use of the DB are defined in the first three clauses;
- The MSANP will host the DB, and managed by the team of the Directorate of Studies, Planning and Information Systems using DHIS2;
- Clauses 06, 07 and 08 stipulate the commitments of the four Ministries on data collection and the management of the database.

5. Detailed List of Standard Indicators

5.1 Health Indicators

Maternal and Child Health

Children with diarrhea receiving oral rehydration solution (ORS)	
Definition	Percent of children under 5 years of age with diarrhea in the last two weeks receiving oral rehydration salts (ORS) (i.e. fluids made from ORS packets or pre-packaged ORS fluids).
Measurement level	Result
Method of calculation	Numerator: Number of children under 5 years of age with diarrhea in the two weeks preceding the survey given fluid from ORS packets or pre-packaged ORS fluids. Denominator: Number of children with diarrhea in the two weeks preceding the survey.
Disaggregation	None
Data source	MAR / Ministry of Public Health
Data level	Health facility
Collection method	Survey / Routine

Reporting frequency	Monthly

Proportion of children under 5 years of age receiving proper care for pneumonia

Definition	Percent of children ages 0-59 months who are correctly prescribed an antibiotic for pneumonia
Measurement level	Result
Method of calculation	Numerator: Number of children ages 0-59 months with valid classification who are correctly prescribed an antibiotic for pneumonia (including doses, number of times per day and number of days). Denominator: Total number of children ages 0-59 months with diagnosed pneumonia.
Disaggregation	None
Data source	MAR / Ministry of Public Health
Data level	Health facility
Collection method	Survey / Routine
Reporting frequency	Monthly

Children aged under 5 years who are underweight

Definition	Percent of children aged under 5 years whose weight-for-age is below -2 standard deviations of the WHO Child Growth Standards median.
Measurement level	Result
Method of calculation	Numerator: Number of children aged 0–59 months who are underweight. Denominator: Total number of children aged 0–59 months who were measured.
Disaggregation	None
Data source	MAR / Ministry of Public Health
Data level	Health facility
Collection method	Survey / Routine
Reporting frequency	Monthly

Proportion of children under 5 years of age receiving proper care for simple malaria

Definition	Proportion of children RDT-positive (under 5 years of age) who are treated with Artemisinin-based Combination Therapy (ACT)
Measurement level	Result
Method of calculation	Numerator: (Number of children under 5 years of age suffering from fever diagnosed RDT+ who receive ACT)*100 Denominator: Number of children under 5 years of age suffering from fever and who are RDT+
Disaggregation	None
Data source	MAR / Ministry of Public Health
Data level	Health facility
Collection method	Survey / Routine
Reporting frequency	Monthly

Number of births attended by skilled health personnel

Definition	Percent of live births attended by skilled health personnel during a specified time period.
Measurement level	Result

Method of calculation	Numerator: Number of births attended by skilled health personnel (doctors, nurses or midwives) trained in providing life-saving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, childbirth and the postpartum period, to conduct deliveries on their own, and to care for newborns. Denominator: The total number of live births in the same period.
Response to changes in indicator level	Sum of assisted deliveries in a health center
Disaggregation	None
Data source	MAR / Ministry of Public Health
Data level	Health facility
Collection method	Survey / Routine
Reporting frequency	Monthly

Water, Sanitation and Hygiene (WASH)

Rate of access to drinking water at the national level	
Definition	Percentage of people with access to an improved source of drinking water
Measurement level	Result
Method of calculation	Numerator: (# of people with access to an improved source of drinking water)*100 Denominator: Total population number
Disaggregation	Urban, Rural
Data source	Ministry of Water, Energy and Hydrocarbons
Data level	District
Collection method	Routine/Survey
Reporting frequency	Quarterly

Percentage of people able to use a basic sanitation service	
Definition	Percentage of people with access to basic sanitation
Measurement level	Result
Method of calculation	Numerator: (Number of people with access to basic sanitation)*100 Denominator: Total population number
Disaggregation	Urban, Rural
Data source	Ministry of Water, Energy and Hydrocarbons
Data level	District
Collection method	Routine/Survey
Reporting frequency	Quarterly

Family planning

Couple-Years of Protection (CYP)	
Definition	The estimated protection provided by family planning (FP) services during a one-year period, based upon the volume of all contraceptives sold or distributed free of charge to clients during that period.
Measurement level	Output
Method of calculation	The CYP is calculated by multiplying the quantity of each method distributed to clients by a conversion factor, to yield an estimate of the duration of contraceptive protection provided per unit of that

	method (Wishik and Chen, 1973; Stover, Bertrand, and Shelton, 2000). The CYPs for each method are then summed over all methods to obtain a total CYP figure.
Disaggregation	None
Data source	MAR / Ministry of Public Health
Data level	Health facility
Collection method	Survey / Routine
Reporting frequency	Monthly

Contraceptive prevalence rate (CPR)	
Definition	The percent of women of reproductive age who are using (or whose partner is using) a contraceptive method at a particular point in time, almost always reported for women married or in sexual union.
Measurement level	Result
Method of calculation	Numerator: Number of women 15-49 using a contraceptive method Denominator: Total # of women 15-49
Disaggregation	None
Data source	MAR / Ministry of Public Health
Data level	Health facility
Collection method	Survey / Routine
Reporting frequency	Monthly

5.2 Income Generating Activities (IGA)

Percentage of beneficiary households engaged in IGA*	
Definition	Percentage total # of women 15-49 of households involved in IGA Beneficiary of IGAs= those who received technical support and/or equipment and/or seed
Measurement level□	Impact
Method of calculation	Numerator: (Number of beneficiary households engaged in IGA)*100 Denominator: Number of households
Disaggregation	None
Data source	Ministry of Population
Data level	District
Collection method	Routine
Reporting frequency	Biannual

Number of women beneficiaries of IGA*	
Definition	Number of women who receive technical/financial support and/or equipment and/or seeds.
Measurement level	Monitoring
Method of calculation	Sum of women who receive technical/financial support and/or equipment and/or seeds.
Disaggregation	-
Data source	Ministry of Population
Data level	District
Collection method	Routine
Reporting frequency	Biannual

5.3 Environmental Management Indicators

Number of forest crimes reported*

Definition	Different types of forest crimes. Forest crimes: illegal exploitation, illegal transport, illegal possession, illegal export, clearing, bush fire. There is also a type of crime at the level of Protected Areas (e.g. turtle trafficking)
Measurement level	Monitoring
Method of calculation	Sum of different types of forest crimes. Forest crimes: illegal exploitation, illegal transport, illegal possession, illegal export, clearing, bush fire. There is also a type of crime at the level of Protected Areas
Disaggregation	-
Data source	Reporting statement /Ministry of Environment and Sustainable Development
Data level	District
Collection method	Routine/Survey
Reporting frequency	Quarterly

Number of marine environmental crimes reported*	
Definition	All crimes related to non-compliance with fishing zone regulations, non-compliance with the fishing season (all types of seafood products) and non-compliance with the fishing techniques and authorized gear plus (the introduction by humans, directly or indirectly, of substances or energy into the marine environment that may cause harmful effects), and the exploitation of endemic and protected species
Measurement level	Monitoring
Methods of calculation	Sum of reported marine environmental crimes.
Disaggregation	-
Data source	Reporting statement /Ministry of Environment and Sustainable Development
Data level	District
Collection method	Routine/Survey
Reporting frequency	Biannual

Reforested area*	
Definition	Reforested areas for a given period of time
Measurement level	Result
Method of calculation	Sum of reforested areas for a given period of time.
Disaggregation	-
Data source	Ministry of Environment and Sustainable Development
Data level	District
Collection method	Routine/Survey
Reporting frequency	Quarterly

Economic, community and environmental benefits of local resource management*	
Definition	Derivative revenues generated by NRM for the benefit of the community: Direct incomes linked to conservation, including ecotourism and development (operation provided for in the Internal By-laws). Timber royalties related to crimes according to the distribution predefined by the Internal By-laws; Benefits of associations and DLAs (decentralized local authorities, IGA, equipment or infrastructure)

Measurement level	Impact
Method of calculation	Sum of derivative revenues generated by Natural Resource Management
Disaggregation	-
Data source	Reports from VOI (Local grassroots communities) / Ministry of Environment and Sustainable Development
Data level	District
Collection method	Survey / Routine
Reporting frequency	Biannual

5.4. Integration Indicators

Number of community education and sensitization sessions organized*	
Definition	Integrated communication and awareness: awareness sessions during which messages on the links between two or more themes are conveyed (health, family planning, environment, IGA)
Measurement level	Monitoring
Method of calculation	Sum of awareness and communication sessions organized
Disaggregation	Environment, Family Planning, Health, IGA, integrated
Data source	NGOs/PHE Network/MEDD
Data level	District
Collection method	Routine / Survey
Reporting frequency	Biannual

Number of PHE partnerships between organizations or institutions from different sectors that are active*	
Definition	PHE partnerships between organizations or institutions from different sectors that are active.
Measurement level	Monitoring
Method of calculation	Sum of active PHE partnerships
Disaggregation	None
Data source	NGOs/PHE Network/MEDD
Data level	District
Collection method	Routine / Survey
Reporting frequency	Biannual

Number of CAs /NGO staff who have been trained to convey messages / facilitate discussions on topics related to other sectors*	
Definition	Number of people who received an integrated training on health, environment and agricultural techniques. People: CA or VOI or a Member of an association or a project beneficiary
Measurement level	Monitoring
Method of calculation	Sum of trained CAs / NGO staff
Disaggregation	None
Data source	NGOs/PHE Network/MEDD
Data level	District
Collection method	Routine / Survey
Reporting frequency	Biannual

Number of PHE interventions that include a microcredit component*

Definition	Number of PHE interventions that include a community microcredit component (VSLAs - Villages Savings and Loan Associations- or cooperatives or associations)
Measurement level	Monitoring
Method of calculation	Sum of PHE interventions that include a microcredit component
Disaggregation	None
Data source	NGOs/PHE Network
Data level	District
Collection method	Routine / Survey
Reporting frequency	Biannual

Proportion of households engaged in PHE activities*	
Definition	Households that participate in the management of natural resources (Association, VOI), that benefit from and are engaged in alternative activities, that practice good hygiene, use Family Planning, in which women participates in IGA and/or NRM, and that access health services at the BHC/Health Hut in case a family member is ill.
Measurement level	Monitoring
Method of calculation	Numerator: Number of households engaged in PHE activities. Denominator: Total number of households
Disaggregation	To be defined
Data source	To be defined
Data level	To be defined
Collection method	Survey
Reporting frequency	To be defined

NB: Indicators relating to health, family planning and WASH are already included in the list of PIRS indicators (attached).
But the other indicators **(*)** are not yet in the list of PIRS indicators

Documents consulted:

Moreland, S. & Curran, J. (2018). A Guide for Monitoring and Evaluating Population- Health-Environment Programs, Second Edition. Chapel Hill, NC: MEASURE Evaluation, University of North Carolina.
Performance Monitoring Plan 2002-2005, Madagascar Green Healthy Communities Project,
Monitoring and Evaluation of Health- Population-Environment Programs. Boston, MA: JSI Research & Training Institute, Inc.

ANNEX 1:

MEMORANDUM OF UNDERSTANDING ON THE ESTABLISHMENT OF A POPULATION, HEALTH AND ENVIRONMENT DATABASE

Between

The Ministry of Health, represented by Professor Julio RAKOTONIRINA, acting as Minister of Public Health, hereinafter referred to as "MSANP";
And
The Ministry in charge of the Environment, represented by Mr. Alexandre GEORGET, acting as Minister of the Environment and Sustainable Development, hereinafter referred to as "MEDD";
And
The Ministry of Population, represented by Mrs. Lucien Irmah NAHARIMAMY, acting as Minister of Population, Social Protection and Promotion of Women, hereinafter referred to as "MPPSPF";
And
The Ministry in charge of Water, represented by Mr. Vonjy ANDRIAMANGA, acting as Minister of Energy, Water and Hydrocarbons, hereinafter referred to as "MEEH";
And with the support of the
Population-Health-Environment (PHE) Network, represented by Mr. Nantenaina ANDRIAMALALA, acting as Coordinator of the PHE Network, hereinafter referred to as "PHE Network";

Considering

The mission of MSANP,
The MSANP is in charge of designing, coordinating, implementing and monitoring the enforcement of the Government Health Policy, in particular the National Development Plan, the National Health Policy and the Health Sector Development Program, in accordance with the provisions of the aforementioned laws n°2011-002 of July 15, 2011 and n°2011-003 of August 01, 2011. The missions of MSANP derive from the vision in respect of health described in the Madagascar Emergence Initiative (IEM), especially through equitable access to quality health for all the population thanks to the implementation of Universal Health Coverage strategies.

The mission of MEDD,
On the basis of the principles and provisions of the Environmental Charter and International Agreements on Environmental Protection, ratified by Madagascar, the Ministry of Environment and Sustainable Development is in charge of designing, coordinating, implementing, monitoring and evaluating the State's policy regarding Environment and Sustainable Development. MEDD's mission consists in "Protecting and enhancing our unique environment and natural resources for the well-being of the Malagasy population and for the sake of the country's sustainable development".

The mission of MPPSPF,
MPPSPF is in charge of improving the socio-economic conditions of the population, establishing a system in order to protect and promote women, gender and minorities, as well as designing, coordinating and implementing a general policy framework for social protection to support vulnerable households.

The mission of MEEH,
MEEH is responsible for designing, managing, coordinating, harmonizing and implementing the State's General Policy in the energy, water, sanitation, hygiene and hydrocarbons sector in order to ensure a supply of energy, water and hydrocarbons that meets demand, is of high quality and at a lower cost.

The mandate of PHE Network,
Facilitate the development of new PHE partnerships between health and environmental organizations; strengthen the technical capacity of the Network members to implement high-quality PHE initiatives that comply with human rights; collect, analyze and communicate national PHE results (quantitative

and qualitative), as well as good practices and lessons learned; involve decision-makers and donors in order to create a more enabling institutional environment for the adoption of the PHE approach.

Considering the value and relevance of the information and data on indicators linking people, their health and their environment.

The Parties
AGREED AS FOLLOWS:

CLAUSE 1: Overall Framework

Cross-sectoral and interdisciplinary action is essential to address complex health, population and environmental issues. The "Population, Health and Environment or PHS" approach is a holistic approach to sustainable development that links health and family planning services with community-based natural resource management, livelihood diversification and biodiversity conservation initiatives. The establishment of a common database repository in Population, Health and Environment - called PHE-DB - is required to provide a consistent global mechanism to monitor the evolution of connections between population, environment and health. Available data and information are intended to guide strategic and operational decision-making in the various areas of sustainable development, including health, environment, natural resource governance, biodiversity protection, and population, particularly the most vulnerable.

This PHE-DB thus contributes to the Monitoring of Sustainable Development Goals (SDGs), in particular
SDGs 1, 2, 3, 5, 6, 14, 15, 17.

CLAUSE 2: Purpose of the Memorandum of Understanding

The existence of a wide range of information, collection and analysis procedures specific to the various stakeholders working in the field of "Population, Health and Environment" spurred MSANP, MEEH, MEDD and MPPSPF to set up a PHE-DB with the support of the PHE Network.

The PHE-DB will be used to collect, manage and analyze data for the production of useful and reliable information by the relevant sectors but also for the country.

This Agreement reflects the willingness of the Ministries of Health, Water, Environment and Sustainable Development and Population as well as Madagascar's PHE Network so as to work together to monitor and support any initiative that improves the health of communities and the environment.

The objectives of this Protocol are to:

- centralize cross-sectoral data that link health, environment and population in order to monitor and analyze the evolution of indicators on these three components;

- produce data and information on PHE activities in Madagascar;

- promote exchanges between the sectors and stakeholders involved in the PHE field.

CLAUSE 3: Expected Results

The expected results of this Memorandum of Understanding are:
- Operational and available PHE-DB;
- Centralized data management;
- Access to PHE data to guide decision-making;
- Sharing and publication of PHE information;
- Availability of updated, real time and quality data (consistency, non-redundancy, security), as disaggregated as possible.

CLAUSE 4: Database Hosting and Management

The Structure in charge of the Health and Environment component within MSANP is designated as "host and administrator of the computer application used for data management related to this Memorandum of Understanding".

CLAUSE 5: Data Processing and Analysis

The Structure in charge of the Health and Environment component within the MSANP - in collaboration with the other Contracting Parties - ensures as well the analysis of data and the production of communication materials relating to the publication of PHE-DB data and information.

CLAUSE 6: MSANP Commitments

 MSANP commits to:

- designating a person in charge of managing PHE-DB;
- ensuring the operation of the PHE-DB;
- supporting the production of communication tools and materials based on the analysis of PHE data.

CLAUSE 7: MEEH, MEDD and MPPSPF Commitments

MEDD, MPPSPF and MEEH commit to:

- appointing a person in charge of the periodic populating of the PHE database, by relevant Directorates;
- providing all available information and data according to the conceptual framework of indicators annexed hereto, in order to populate the PHE-BD.

CLAUSE 8: PHE Network Commitments

The PHE Network commits to:

- supporting the collection and processing of data to be shared for a specific purpose, which is to populate the PHE-DB;
- urging the Network members to regularly send data according to the conceptual framework to the line Ministries;
- sharing the data collection forms according to the conceptual framework with the members of the PHE Network;
- monitoring the sending of PHE data by Network members to the line Ministries.

CLAUSE 9: Consultative Body

A consultative body bringing together representatives of each Party will be set up to ensure the Protocol implementation. Its main mission will be to:

- exchange necessary and/or useful information for the proper implementation of this Protocol or the proper management of the database;
- take stock of the use of the data and any difficulty encountered in their collection;
- make any necessary and/or useful technical and/or organizational decisions;
- approve the communication tools, along with the analyses and conclusions drawn from the PHE-DB data.

CLAUSE 10: Monitoring of the Memorandum of Understanding

A regular contact will be established between MSANP, MEEH, MEDD, MPPSPF and the PHE Network in order to take stock of the difficulties encountered and the improvements to be made (see List in Annex).

CLAUSE 11: Property Rights

Data and products resulting from the use of the transmitted data will be the property of MSANP, MEEH, MEDD, and MPPSPF. Any official publication shall mention these four entities along with the PHE Network.

CLAUSE 12: Modifications

Any modification under this Protocol and its Annex shall be made by an amendment duly accepted and signed by the Parties. Any amendment that meets this requirement shall become an integral part of this Protocol.

CLAUSE 13: Dispute Resolution

Any dispute that may arise during the implementation of this Memorandum of Understanding shall, as far as possible, be settled out of court between the Parties. If not possible, the dispute will be submitted to an arbitration procedure. The third arbitrator shall be appointed by mutual agreement between the Contracting Parties.

CLAUSE 14: Entry into Force and Duration

This Memorandum of Understanding will come into force once all Parties have signed it. It is concluded for a period of five years from the date of its signature by the Parties.

CLAUSE 15: Final Provisions

This Protocol shall be binding on the Signatory Parties, their successors and assigns who shall discharge their contractual obligations throughout its duration.

DISCLAIMER