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## ISSUE BRIEF

### **Healthy People in a Healthy Environment in Madagascar: Better Results Through Integration**

“The problem is population pressure on natural resources. This pressure is caused by poverty. Poverty is caused by the large number of children in a family – there are six to eight children in one family. When the parents can’t feed their children, they put more pressure on the forest resources.” – Joëlie Baresant, who works with local farmers in Madagascar

#### **For the Environment**

The United States Agency for International Development (USAID) supports integrated population, health, and environment (PHE) programs in regions critically important to the conservation of biologically diverse ecosystems in eight countries in Africa and Asia. Through synergies between health, family planning, and the environment, these initiatives yield better results in terms of efficiency and sustainability than do similar, discrete programs pursued separately.

PHE projects operate in remote and sensitive landscapes where communities have little access to health services, particularly family planning and poor access to improved water sources and sanitation. Ironically, unmet need for family planning is often highest in those remote rural areas where the richest and most unique arrays of plants and animals are clinging to a precarious and threatened existence. For example, 80 percent of the animal species living in Madagascar are found nowhere else on earth.

When family planning is widely available and accessible, couples are better able to achieve their desired family size, which in turn has an impact on families’ health and well-being and contributes to better management and conservation of natural resources. In the process, population pressures on local ecosystems are eased.

Offering basic health services can dramatically reduce community morbidity and mortality and provide community members with incentives to become better stewards of the natural resources on which families’ livelihoods depend. On another, more immediate level, providing family planning and meeting basic health needs – like improving access to water and sanitation – help environmental organizations build good will in communities by responding to their needs in a holistic fashion.



#### **PHE Integration in Madagascar**

USAID implemented the PHE activity in Madagascar to determine if integrated activities achieved better results than those implemented separately. The very nature of the integration of PHE programs requires a partnership among a range of organizations. While the nine partner nongovernmental organizations (NGOs) that worked with over 160 communities in the target areas were technical specialists in natural resource management or health approaches, all but one were not experts in integrating across those fields. To fully integrate PHE, USAID recognized that these NGOs needed special skills and resources, which could be provided best and most efficiently by a Malagasy umbrella organization. In order to coordinate activities between partners and ensure a standard integrated approach, the Voahary Salama Association (VS) was established to provide technical assistance and build integrated PHE capacity. The Environmental Health Project (EHP) – together with other USAID-supported projects and the Packard Foundation – provided the necessary guidance and support to VS and its partners during this process.

## Themes and Approaches

The interventions in the Madagascar PHE activity focused on 10 themes – and a few key interventions within each – and led to improved health, agricultural production, nutrition, and household income:

1. Improved natural resources management
2. Year-round food security
3. Smaller families
4. Child health
5. Disease prevalence
6. Disease prevention
7. Women's health
8. Children's nutritional status
9. Community participation
10. Household livelihoods

## Key Findings

An evaluation of the PHE program in Madagascar compared results from baseline and post-intervention surveys in communities where PHE activities were integrated with communities with available, non-integrated services. Results showed that the community-centered and integrated PHE program achieved a greater impact over a three-year period than non-integrated sites. Twenty-nine out of 44 key PHE indicators had significantly better outcomes in integration communities. Thirty out of 37 key indicators that were measured repeatedly showed improvements between the 2001 and 2004 surveys for the integration group. As expected in a social experiment in which interventions were also implemented with the comparison group, the non-integration sites saw improvements as well, but only for 23 out of 37 key indicators, and these lagged significantly behind the integration sites for all indicators except two. Some examples:

- The contraceptive prevalence rate reached 17 percent in integration communities in 2004 (about a five-percentage point increase from 2001), compared with 8 percent in non-integration communities.
- Tree planting increased by 12 percentage points from 2001 and was practiced by 70 percent of households in integration communities, compared with 58 percent in non-integration villages.
- The proportion of children with normal nutritional status – the absence of moderate and severe chronic malnutrition (stunting) – increased by almost six percentage points from 2001 and was five percentage points higher in integration than in non-integration communities (53 percent compared with 48 percent).

Community-centered PHE fosters participation, especially by women. Women in integration communities were more engaged in mobilization efforts and community groups, especially in groups engaged in natural resource management activities, such as farmers' associations, which are traditionally dominated by men. Women's participation in community groups in general increased by four percentage points in integration communities to 33 percent, while it decreased by five percentage points in the non-integration group to 26 percent.

## Conclusion

Results from the evaluation of the PHE program implemented by VS and its partners showed that linking PHE interventions succeeded in reaching development goals more efficiently and effectively than a traditional non-integrated approach. Linking PHE interventions is not only good for families and communities, but also addresses and underscores the interaction between human health and "green" environmental issues, such as biodiversity conservation and sustainable use of natural resources. The hope is that synergies in health and environment activities will translate into greater benefits for populations and communities' well-being.

### For more information:

Healthy People in a Healthy Environment: Impact of an Integrated Population, Health, and Environment Program in Madagascar:

[www.ehproject.org/ehkm/eh\\_pubs.html#phe](http://www.ehproject.org/ehkm/eh_pubs.html#phe)

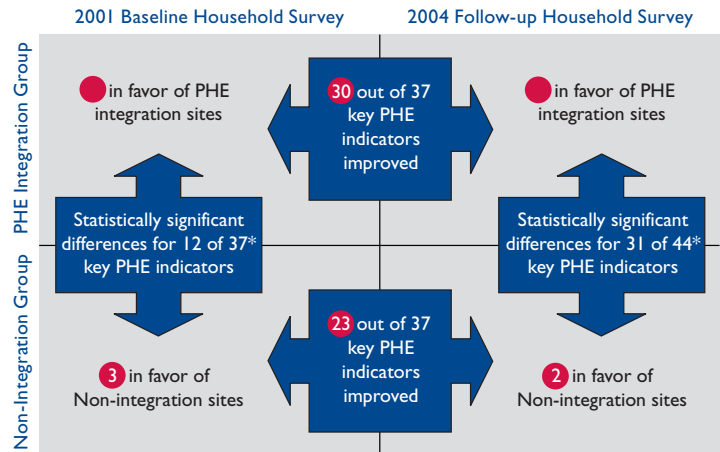
Finding Balance: Forests and Family Planning in Madagascar: [www.populationaction.org/multimedia/video/index.htm](http://www.populationaction.org/multimedia/video/index.htm)

Population, Health and Environment Web site: [www.ehproject.org/phe/phe.html](http://www.ehproject.org/phe/phe.html)

[www.usaid.gov](http://www.usaid.gov)

## Does PHE Integration Work?

### Evaluation Findings From a Social Experiment in Madagascar



\*Seven new indicators were only measured in 2004.