Research Note:

Gratitude, Guilt, Goodwill, and Giving Back: Lessons From Madagascar

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Motivated by friendship, loyalty, empathy, and sometimes guilt, and constrained by regulations from institutional review boards, and national ministries, it is often difficult to find the right ways to give back to the communities that pave the way to our higher education. The question that often keeps me up at night is whether or not my work will ever be useful. I have dedicated the past 15 years of my life to my interests and research in Madagascar, and, much like the US anthropologist Margaret Mead, “I expect to die, but I don’t plan to retire.” What I have been able to give so far seems paltry when compared to the vast benefits I have received by living and learning in Madagascar. My research focuses on the intersection of environmental change and human health, looking specifically at the importance of wildlife communities to human nutrition. This topic is interdisciplinary and attractive to local communities who tend to see these interconnections clearly as they live within them on a daily basis.

I believe that the greatest benefit I have been able to deliver has been training rising Malagasy researchers and creating jobs. Many employees and fellow researchers on my
team have been working with me for a decade. I have trained and taught research methods to university students in national public universities from departments including Animal Biology, Sociology, Anthropology, Veterinary Medicine, Philosophy, Economics, Botany, Nursing, and Medicine. In addition to these students who work jointly with me to conduct research for their honors and masters theses or dissertations, I also have a team of full-time employees. My research organization, called MAHERY (an acronym for Madagascar Health and Environmental Research, and meaning “strength” in Malagasy) has created full-time jobs for eight families (Figure 1). This, to me, is the research’s greatest success.

![Figure 1](image.png)

*Figure 1. Members of Madagascar Health and Environmental Research (MAHERY). © Jon Betz, National Geographic Society.*

Since its inception in 2004, the MAHERY team has worked with more than 1,000 households in over 40 communities in the Maroantsetra region of Madagascar. In the area in which we work, markets are incredibly rare and there is no electricity, running water, or consistent access to goods. Because we work with so many households, we cannot afford to provide much compensation, often only old clothes or photographs. However, the photographs are a special gift that is greatly appreciated. Very few of these families would have access to this more “urban luxury” if it were not for our team offering to take family portraits and returning with the photos each year.

On a community level, we have attempted to give back more substantially. For many communities, we have given back by creating a history and genealogy from the original
settlers to the present day. This started as a side interest of mine but turned into something that each of the communities really treasures. Another research program that I hope will deliver long-lasting benefits to communities concerns botanical ethnomedicines. For the past 7 years, the MAHERY team has been investigating a broad spectrum of medicinal plants and their uses. Recently, the MAHERY research team has published our findings in the journal *PLOS ONE* and received funding from the National Geographic Genographic Legacy Fund to create a book on medicinal plant species. In conjunction with local communities, we have created the book in the Malagasy language with illustrations of each of the 241 medicinal plant species and information on illnesses treated, method of preparation, and dosage. The beauty of this project is that it was conceived by friends in local communities. They fear that many of their children, and also relatives that live in areas more distant from the forest, are losing this type of knowledge and see me and my research team as a vehicle to preserve it.

The MAHERY team has developed our research program with a truly collaborative approach. Local community and research team members with no formal education have been coauthors on scientific articles in international journals such as *PLOS ONE* and the *Proceedings of the National Academy of Sciences* (PNAS). Additionally, many research participants are actively collecting data as part of our citizen science programs, becoming researchers themselves. For example, we have enrolled 16 individuals to monitor approximately 75 tree species (with replicates) to understand fruit and flowering phenology patterns. Others are collecting temperature and rainfall data to pair with the tree phenology data.

In several communities, we have begun to implement one development intervention. Our team has found that the relationship between biodiversity conservation and human health is very complex in this region, where local people rely on endangered species for food because they do not have access to sufficient alternative domesticated meat. Local people actually prefer the taste of chicken but these are very difficult to raise because of disease and lack of feed. In December of 2012, a team of veterinarians from the San Francisco Zoo, an epidemiologist from Australia, and a medical anthropologist from Mozambique came to study our research site. They found that there was a particularly virulent strain of Newcastle Disease in the area but no vaccine available locally. Without the vaccine, this disease can wipe out 60-80% of the flock seasonally. Our team trained local people to improved husbandry conditions to increase biosecurity, prevent disease transmission, and improve nutrition to increase the chickens’ immune response. We have now secured funding to import the critically important vaccine. Potentially, this intervention could both benefit the nutrition of local communities and reduce reliance on wildlife, indirectly promoting biodiversity conservation. Our aim is to address biodiversity loss by tackling underlying socio-cultural causes, and providing alternatives. If this is successful on a small scale, we intend to expand this project to the regional level.

These small successes in giving back by providing benefits to the communities and people I research have not come without self-doubt and internal debates over the challenges I have faced. I will provide two examples, one personal and one professional. As a personal example, one of my friends in Madagascar began working on my team. As
he became financially stable and thus more attractive to women, it caused a strain on his marriage. I found myself wondering whether or not it was my position to impose my own values on what he should or should not do with regard to reconstituting his family.

This story raises an important point. The money that is received by a person may not bring equal benefits to an entire household. Initially, my research focused exclusively on hunting which is an exclusively male practice in Madagascar. For this reason, I necessarily hired only male assistants. Advancing the careers of my male assistants had many positive benefits but also unintended negative consequences such as increased alcohol consumption, infidelity, and reduction in time spent on child care. Since our research program became more multidimensional and focused on household behavior, economics, and human health, we have increased the numbers of female employees.

On the professional side, as I have spent more time in the Maroantsetra region of Madagascar, I began to adopt different scales of research and different projects in different communities in order to have both a breadth of communities (for statistical purposes) and a depth of detail to understand nuances of behaviors. There is jealousy towards the few communities where I have decided to focus our in-depth efforts. After recognizing this sentiment, I have tried to open communication with the “marginalized” communities. They describe their feeling through a common Malagasy proverb, “bongan-dambo, latsaka ivelany” (just like the pig’s testicles, we fall to the outside of the body). Though I have tried to explain our research design to the less central communities, this is a difficult problem to which I do not anticipate a solution.

Instead of a formalized structure of giving compensation for knowledge received (i.e. a payment for every interview), I sense that our research program has become more of a continuous exchange of ideas and benefits (albeit lopsided). This is possibly due to my own relationship with the community being different from that of many other researchers. I live within my own research site. Since finishing high school, I have lived longer in Madagascar than anywhere else. It is my hope that rather than compensating those who work directly with me, we can work together to create sustainable ways of benefitting the entire community. This may be naive and perhaps I overestimate my own place in the community, but this is still my hope.