Assessment of The Dian Fossey Gorilla Fund International’s Ecosystem Health and Community Development Program

Suraja Raj

Hubert Department of Global Health, Rollins School of Public Health

Background

• Dr. Dian Fossey founded the Karisoke Research Center in 1967 at the Volcanoes National Park (VNP) in Northwestern Rwanda to research endangered mountain gorillas (Gorilla berengei berengei).
• In 1978 Fossey established The Digit Fund, the precursor to DFGFI that focused on anti-poaching efforts.
• DFGFI has expanded into the Democratic Republic of the Congo and now includes, biodiversity research and conservation education.
• Conflict between the humans and the park have long existed due to proximity of primate and human populations, and access to resources.
• In 2002, the Ecosystem Health Community Development (EHCD) program was started to address the health/development needs of the human population surrounding the VNP. It includes:
  1) Mass drug administration for intestinal parasites and hygiene education
  2) Rehabilitation of the local clinic in the Bisate catchment area
  3) Improving access to clean water
  4) Providing essential protein and agricultural access through crop programs and animal husbandry

Population Served

• Rwanda is the most densely populated country in Africa
• Subsistence farmers around VNP, ~ 20,000 people in Bisate catchment
• Water access problem—no retention of rain water due to volcanic soil
• Springs from VNP provide water
• Potential for disease transmission between human and great ape population (97% genetic similarity)

Project Partners

• Emory University, Global Health Institute (GHI)
• Emory University, Center for Global Safe Water
• The Dian Fossey Gorilla Fund International (DFGFI)

Key Findings

Table 1: Prevalence of Parasites from 2002-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall</th>
<th>Soil Transmitted Helminths</th>
<th>Other Worms</th>
<th>Protozoa and Fungi</th>
<th>All Parasites</th>
<th>Polyparasitism</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>907 (90.5%)</td>
<td>838 (80.9%)</td>
<td>32 (3.5%)</td>
<td>85 (8.7%)</td>
<td>1040 (100%)</td>
<td>93 (9.0%)</td>
</tr>
<tr>
<td>2005</td>
<td>884 (88.4%)</td>
<td>781 (75.9%)</td>
<td>32 (3.5%)</td>
<td>89 (8.8%)</td>
<td>1045 (100%)</td>
<td>93 (9.1%)</td>
</tr>
<tr>
<td>2008</td>
<td>349 (53.2%)</td>
<td>277 (50.0%)</td>
<td>32 (5.7%)</td>
<td>36 (6.6%)</td>
<td>420 (65.1%)</td>
<td>50 (8.1%)</td>
</tr>
<tr>
<td>2010</td>
<td>1015 (54.0%)</td>
<td>601 (53.5%)</td>
<td>32 (3.5%)</td>
<td>77 (7.7%)</td>
<td>1131 (56.8%)</td>
<td>106 (9.4%)</td>
</tr>
<tr>
<td>2011</td>
<td>1034 (54.0%)</td>
<td>506 (53.5%)</td>
<td>32 (3.5%)</td>
<td>77 (7.7%)</td>
<td>1142 (56.8%)</td>
<td>106 (9.3%)</td>
</tr>
</tbody>
</table>

Objective 1

• Parasite prevalence seems to be decreasing
• Soil transmitted helminths, caused by poor sanitation and hygiene, make up the majority of parasitic burden

Objective 2

• Lack of monitoring and evaluation
• The sector is saturated with livelihood activities: (income generation, etc.)
• There is a gap in hygiene and sanitation activities

Recommendations

• Consider building internal capacity by better integration of EHCD with other DFGFI programs, data management, trainings, grants, and leverage of existing DFGFI programs
• Explore utilizing potential Emory collaboration with staff and students for program development
• Consider omitting the essential protein and agricultural access arm since livelihood sector is saturated, shifting the focus of the current program to WASH
• Explore collaborations with other local organizations to improve the deworming and hygiene education program
• Consider creating an M&E plan with indicators relevant to both human development and conservation goals

Acknowledgements

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