



**SEVEN YEARS IN CONSERVATION OF THE
GISHWATI FOREST RESERVE:
CHALLENGES AND HOPE**

MARCH 2015

Forest of
Hope



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① Executive summary

Forest of Hope Association (FHA) is a Rwandan Non Governmental Organization engaged in the conservation of the Gishwati Forest Reserve in Western Rwanda. Founded in January 2012, FHA emerged from the Great Ape Trust/Gishwati Area Conservation Programme (GACP), which ran from 2008 to the end of 2011. FHA's main activities are forest protection, conservation education, human-wildlife conflicts resolution, improving local livelihoods and facilitating research on the biodiversity of the Gishwati Forest Reserve.

From 2008 to current, impressive conservation impacts have been achieved at Gishwati: illegal use of the forest declined sharply; the size of the reserve increased from 886 to 1,484 hectares, the number of chimpanzees grew from 13 to 25, the 600 hectares added to the core forest are naturally regenerating and chimpanzees started using this area.

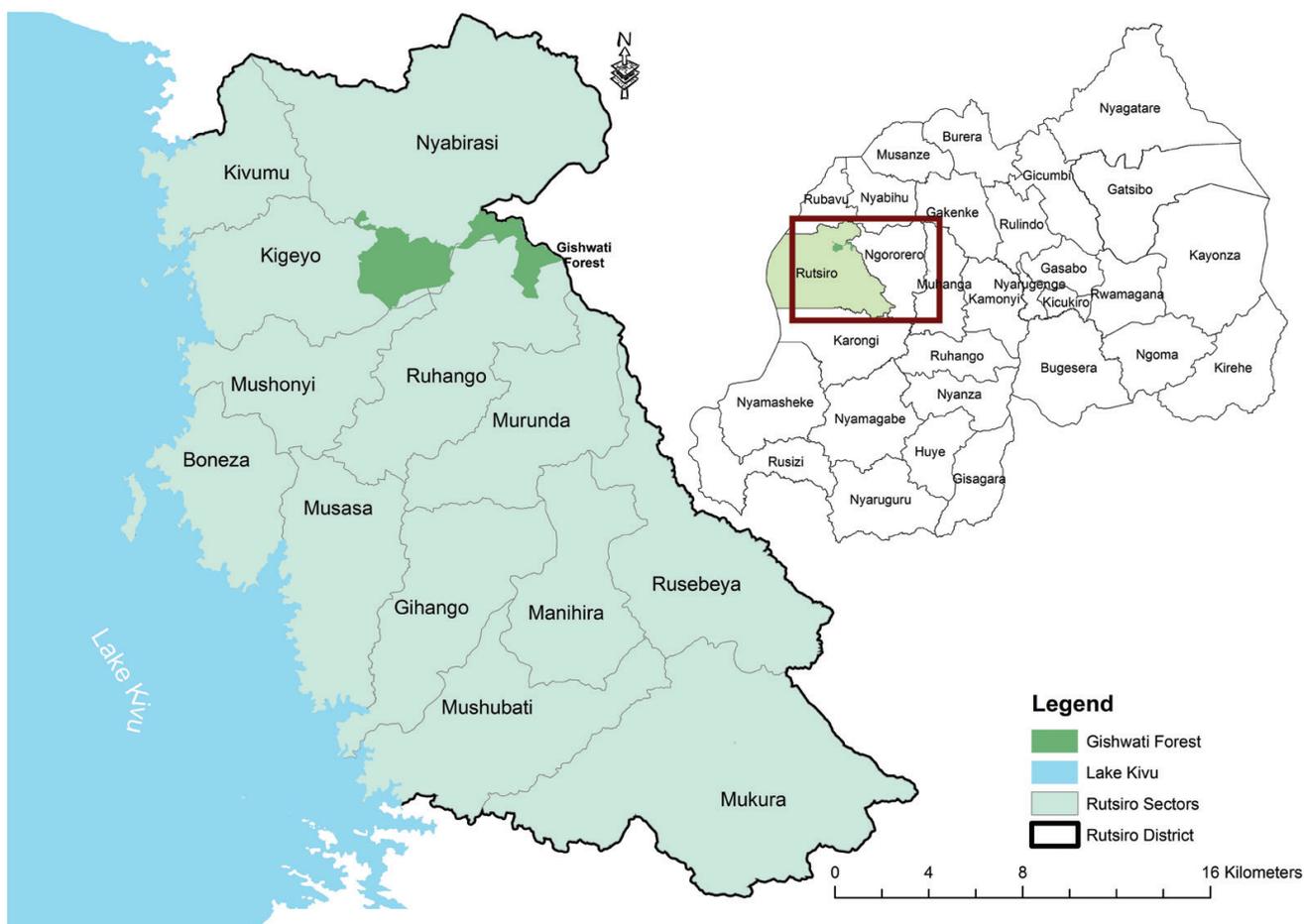
Social impact is also obvious: local jobs have been generated (GACP employed 29 people and currently FHA has full time 12 staff whose 10 are from local villages, 13 school eco-clubs were established and participate in annual competitions, the capacity of 10 local cooperatives is increased in cooperative management and improving their products, and the capacity of 3 community groups is increased in community tourism development.

FHA, after its predecessor GACP, has been critical to the survival of Gishwati Forest and its biodiversity. With no formal government protection, FHA has been the only organization working to conserve and restore the forest since 2012. There is no doubt that without its presence, massive illegal cutting for charcoal, timber and firewood, and agricultural incursions would have restarted.

A remarkable aspect about this NGO is that it uses small grants to solve big conservation and livelihood issues. FHA impressive achievements confirm that no matter how much money is invested, passion and commitment are strong factors for success. Despite limited financial means to operate at a large scale, FHA has the skills, knowledge and appropriate infrastructure to be an effective organization. This is not just because the staff members are keen conservationists but also because they feel a deep sense of ownership of the Gishwati Forest Reserve and of FHA itself. Most of employees are from local villages; they know and have lived the history of Gishwati degradation and its immediate consequences and, since 2008, they have experienced the positive changes in terms of improved ecosystem services and the local economy that are provided by a restored Gishwati Ecosystem.

FHA does not only lead the conservation and management of Gishwati Forest Reserve, but also plays an important role as an intermediary between the government and local communities. It successfully engages in conflict resolution around Gishwati forest resource use and in finding solutions to difficult social and livelihood issues within communities by using local knowledge and other opportunities.

In the coming months, building upon the work performed by FHA, the Gishwati Forest will become a National Park and its management will formally pass to the the Rwanda Development Board (RDB). This builds FHA momentum for further strong partnerships for the conservation of this forest and its fauna including primates species and also for further development of the tourism potential of Gishwati and its landscape.



② Background

2.1. History

The Gishwati Forest is located just south of Volcanoes National Park in Western Rwanda. After the mid-1970s, Gishwati had been dramatically reduced from its original surface of 260 km² by a series of human activities, including a 200 km² integrated forestry and livestock project supported by the World Bank, a 30 km² military zone, and camps for displaced persons after the 1994 genocide.

In the 1990s, the Gishwati region included two remnant natural forests: the Kayove Forest Reserve (now Gishwati Forest Reserve) covering 5,800 hectares and the so called military domain zone covering 6,580 hectares. By 2002, the Kayove Forest Reserve was reduced to 600 hectares and the whole military domain had been cleared.

Since 2002, different actors have shown an interest in restoring forests of Gishwati. In 2005, the Government Reforestation Project (Projet d'Appui à l'Aménagement Forestier au Rwanda – PAFOR) started restoring one part of Kayove Forest Reserve, following the relocation of people away from this area into a zone where agricultural activities were permitted. This increased the size of the forest from 600 hectares to 886.

In 2007, the President of Rwanda, Paul Kagame, met with Ted Townsend, Founder and Chair of the international NGO Great Apes Trust during the Clinton Global Initiative meeting in New York, and they both pledged to found a national conservation park in Rwanda. The aim was to ensure benefits to global climate, biodiversity and the welfare of the Rwandan people. As a result and in collaboration with the government, the Great Apes Trust established the Gishwati Area Conservation Programme (GACP) in 2008.

When GACP began, the forest resources were being used without control by local people through cutting down native trees to make charcoal, removing firewood and seeking water to prepare food and fodder for their cattle. This cattle were allowed to wander and graze freely in the forest, trampling native plants and destroying the fragile ecosystem. In addition, this forest was used by local people in search of natural fibres, vines, honey and native fruits.

As a result of GACP's conservation and restoration activities from 2008 to end 2011, the size of the forest grew from 886 to 1,484 hectares and illegal activities declined sharply during this period. Unfortunately, the initiative came to an abrupt end due to lack of funding, leaving a gap in the management of the forest. Senior employees of GACP therefore decided to take action. In January 2012 they created the FHA with a short term aim of filling the gap and a long term goal of engaging communities in conservation of protected areas.

2. 2. The Challenges at Gishwati Forest

Gishwati Forest Reserve includes land in four sectors of Rutsiro district: Kigeyo, Ruhango, Nyabirasi and Mushonyi. Together these four sectors have a population of over 85,000 and a density of around 430 people per km² - a level more commonly associated with urban than rural areas in most countries.

Local communities rely on subsistence farming and pressure on land is intense. Almost 50% of households farm on plots no bigger than half a hectare, and very few plots are bigger than one hectare. This issue of land scarcity is by itself a huge source of threat to the long-term protection of Gishwati forest, in addition to many others:

- illegal use of forest resources including illegal mining, cattle grazing, charcoal making, firewood collection, timber harvesting, collection of handcraft materials and wild honey
- insufficient local support for conservation activities
- lack of sustainable sources of funding for long-term conservation
- insufficient understanding of Gishwati Forest Reserve dynamics and wildlife
- insufficient wildlife habitat

The ecosystem services that Gishwati Forest Reserve generates are enormous. The carbon sequestered in the core forest of 886 hectares alone has been estimated by the Drake University (USA) at a potential contributive value of US\$3 million per year to the Rwandan economy. In addition, the Reserve serves local farmers by absorbing and slowly releasing rainwater, while preserving the topsoil and preventing sometimes disastrous landslides and also stabilizing the microclimate. The forest filters and purifies households' waste and agricultural runoff. It produces organic material that enriches soil and recycles vital soil nutrients without the need for expensive chemical inputs. The forest is an ideal habitat for birds, bats and insects that pollinate crops and aid in the bio-control of pests.

Conversely, under a regime of deforestation, these benefits are not only lost locally, but impacts are also felt miles downstream. For example, unchecked soil erosion turns rivers coffee-brown, and hydroelectric and water-dependent factories must close for months each year to clean the mud out of equipment. Such is the case for the Gihira Water Treatment Plant located in Rubavu district. A regression to widespread deforestation of Gishwati would only worsen this situation, while conditions will likely improve when reforestation efforts are sustained.



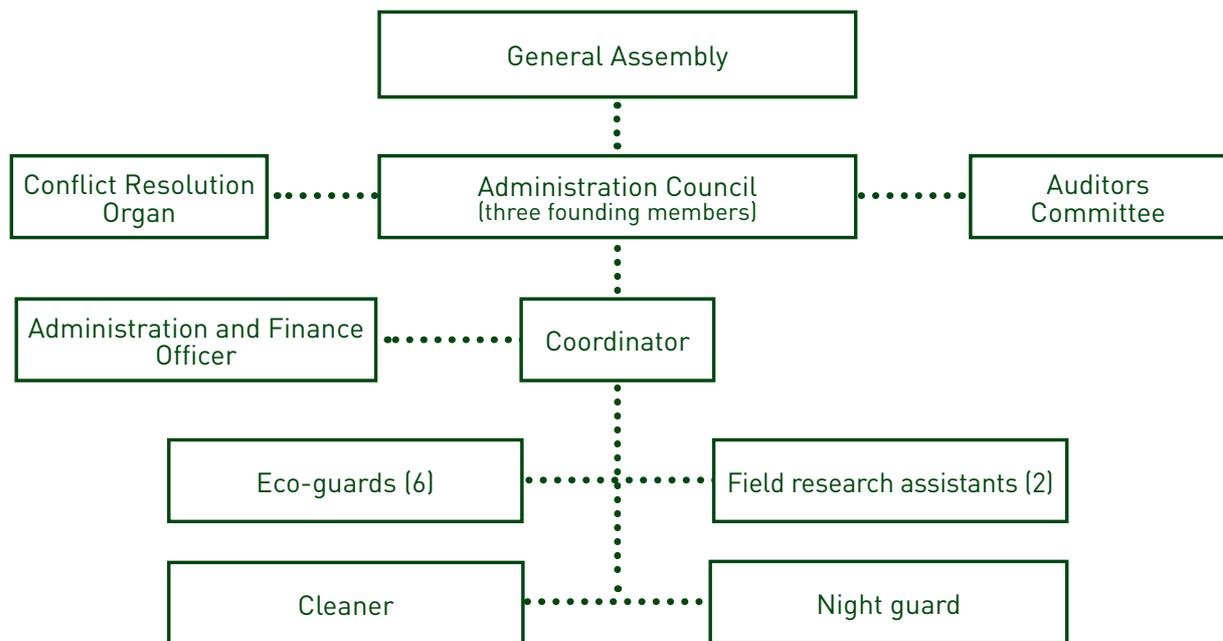


③ Activities and achievements

The key steps to protect the Gishwati Forest and its floral and animal treasures were focused on restoring part of its area after decades of shrinking, together with plans and measures to protect it. This is done through direct active guarding by patrols. However, this would never have been a sufficient nor satisfactory solution alone. That is why, FHA strongly engages local communities in forest conservation via education, human-wildlife conflict resolution and development of eco-tourism as alternative source of revenues to reduce dependency on forest resources. In addition to that, facilitating research on biodiversity is also an important part of FHA priorities.

3.1. Organization

FHA is a small organization. It has an Administration Council composed of the three founder members and employs twelve people: six Community Forest Protection Initiative Agents, a Coordinator, a Finance and Administration Officer, a Cleaner, a Night Guard and two Field Research Assistants.



FHA is formally constituted as a non-government organisation with a mission of engaging local communities in conservation and restoration of protected areas. Its objectives are :

- To sensitize local people about the importance of conserving protected areas ;
- To improve local livelihoods through income generation and capacity-building ;
- To reduce human-wildlife conflicts



3.2. Forest Protection

After the closure of GACP, the main concern of FHA was to ensure that unsustainable activities such as cattle grazing, firewood collection, bean poles collection, timber harvesting, charcoal making, mining, honey harvesting, collecting grass for animals and cutting small trees for sticks by boys who look after cows on the farms do not resume. FHA experience shows that there are caring people whatever size of the habitat and chimpanzees :the support of World Wide Fund for Nature (WWF)-Sweden and the International Gorilla Conservation Programme (IGCP) helped FHA to continue the active forest protection since 2013 to date.

To reinforce the protection of the Gishwati Forest Reserve, in June 2013, FHA launched the « Community Forest Protection Initiative » (CFPI), a new approach that aimed at helping communities around the Reserve to play an active role in its protection. The role of the CFPI Agents is to patrol the entire forest and to educate local people about its importance and its biodiversity. In case someone is found conducting illegal activities in the forest for the first up to the third time, that person is asked to sign a statement, and on the fourth consecutive time, the person is reported to Cells and Sectors' officials and the national Police to answer on his wrong doing before the law.

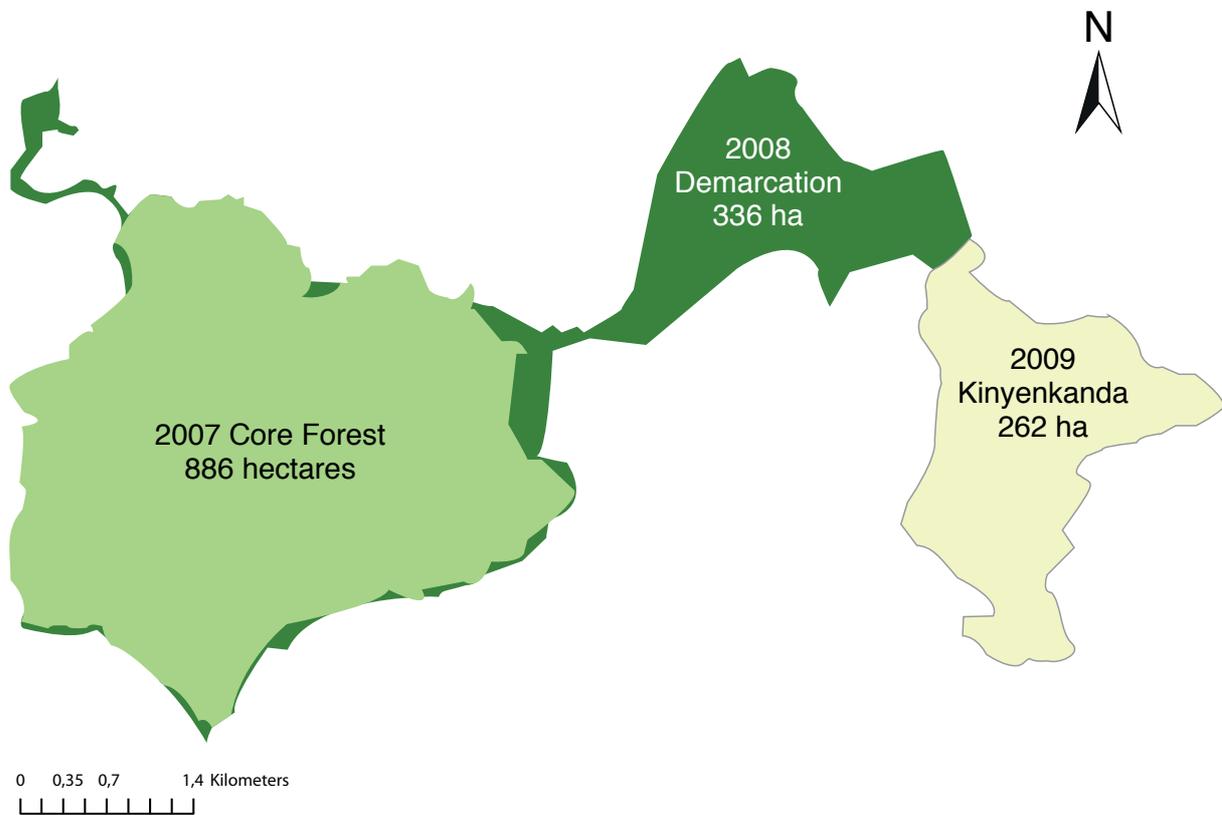
The most encountered illegal activity is cattle grazing. To reduce it, the agents work closely with local leaders to organize awareness meetings with farmers. The farmers are then warned that whoever will be found grazing cows in the forest will be punished.



- **FHA:** ensure planning the work of CFPI agents; pay and provide materials and equipment to CFPI agents; assist CFPI agents and Executive Secretaries of Cells in preparing and sharing monthly and occasional reports with stakeholders; prepare quarterly stakeholder meetings to monitor the progress and discuss issues; and organize stakeholder CFPI monitoring and evaluations ;
- **Rutsiro District:** co-manages the work of CFPI through empowering and monitoring Cells surrounding the forest to enforce the law and to document and report people who illegally use the forest resources; ensures sensitization of local people to take part in forest protection ;
- **Police:** Assists in law enforcement ;
- **Army:** Organizes one joint forest patrol with CFPI agents per month and assists in other patrols in case of high threats ;
- **RDB:** Continues and speeds - up the discussions with Ministry of Natural Resources (MINIRENA) to upgrade the Gishwati Forest Reserve into a National Park and advocates for urgent larger protection of the Gishwati Forest Reserve and the biodiversity that it shelters ;
- **RNRA/Forestry department:** advocates for urgent larger protection of the Gishwati Forest Reserve and the biodiversity that it shelters as well as managing all legal procedures as an institution that has forests in its attributions.

To strengthen this effort, under a grant from Critical Ecosystem Partnership Fund (CEPF), FHA is developing the transitional management plan for the Gishwati Forest Reserve to guide future conservation interventions and to support the change in conservation status from Forest Reserve to National Park. Also FHA started creating Community Forest Protection Committees around the forest. Members will supervise the work of CFPI Agents and will have to report offenders to Cells officials and to the National Police. FHA will train members of these Committees and Cells officials in laws pertaining to environmental management, mining, forestry and wildlife to facilitate their work. Also FHA will train Cells officials in best practices to enforce the laws basing on the punitive sanctions provided by these laws. Neither CFPI Committees nor CFPI Agents enforce the law. The law enforcement is the role of Cells and Sectors officials and national police.

3.3. Forest Restoration



Different areas of Gishwati Forest Reserve are at different stages of regeneration with, in some cases, many young trees that need particular attention. The core forest of 886 hectares is the main habitat for chimpanzees, monkeys and birds; the 336 hectares added in 2008 were reforested between late 2009 and early 2010 and the 262 hectares added in 2009 to stabilise steep hillsides in Kinyenkanda are under regeneration.

Demarcation of legal boundaries with support of the local communities was instrumental to the success of the reforestation and conservation efforts.

The core forest provides habitat for a number of threatened species including:

- Eastern chimpanzees (*Pan troglodytes schweinfurthii*, listed as Threatened on the IUCN Red List);
- Golden monkeys (*Cercopithecus mitis kandti*, listed as Endangered);
- Mountain monkeys (*Cercopithecus l'hoesti*, listed as Vulnerable);
- More than 130 species of birds including 14 that are endemic to the Albertine Rift and two IUCN Vulnerable species: Martial Eagle (*Polemaetus bellicosus*) and Grey Crowned Crane (*Balearica regulorum*).

Protecting the habitat of these endangered species is obviously the first and most important measure that must be taken to save them. This is why FHA is particularly pleased with the significant increase of the chimpanzee population encountered in Gishwati, from 13 in 2007 to 25 individuals currently. FHA coordinates the removal of eukalyptus from the Reserve. Eukalyptus is an exotic species that compete out the indigenous vegetation. More than 20 hectares have been harvested by local people under the supervision of FHA.



3.4. Community Education



3.4.1. Farmers

FHA works with local farmers who own plots adjacent to the Gishwati Forest Reserve. The main collaboration concerns is to mitigate crop raiding and to reduce illegal activities within the forest. The most frequent illegal activity is illegal cattle grazing. FHA organises meetings with farmers and discuss how they can reinforce the fences around their ranches to reduce free movement of cows from the ranches to the forest. As detailed below, they also work with the Jyambere Cooperative, an initiative created by GACP to continue its work on crop raiding mitigation.

Also under GACP, we trained local farmers in planting trees and taking care of them. We distributed seedlings that farmers planted along the fences of the ranches to reinforce them.

3.4.2. Eco-clubs and Community meetings

Ensuring awareness in the local community of the importance of Gishwati forest and the biodiversity that it shelters is a fundamental step to reduce the primates habitat degradation, poaching, and the risks of diseases transmission between humans and primates. Community education efforts have therefore been a prime objective of FHA since its foundation, building upon the work started by GACP in 2008.

FHA supports 13 eco-clubs in schools by educating them about environment and hygiene, sensitising them about the importance of the Gishwati Forest Reserve, and educating them about planting and taking care of planted trees.

From 2008 through 2010, eco-clubs members competed in songs, sketches and dances about environment and the Gishwati Forest and its biodiversity. Also numerous visits to the forest itself were organized. In 20011, eco-clubs, competitions were organized about planting and taking care of trees.

Starting with 2012, eco-clubs are empowered to raise environmental awareness of community members in their villages. The following is an example of 2013/2014 activity :



- In May 2013, FHA launched an educational campaign which ran during 12 months. The FHA Coordinator visited the 13 eco-clubs in schools surrounding Gishwati and explained the components of the activity.
- From June 2013 to August 2013, FHA designed and developed education materials including various posters and booklets describing main primates of the reserve, main anthropogenic activities that are harmful to the forest and its biodiversity, the cycle of transmissible diseases between humans and primates and best practices to reduce the threats.
- In September and October 2013, FHA trained members of the eco-clubs on the appropriate use of the education materials. The trainees were school teachers and two representative students from each club. At the end of the session, FHA distributed the materials to schools representatives and launched the sensitization campaign.
- From November 2013 to March 2014, eco-clubs conducted awareness sessions in the communities living around their schools. The students used various methods to reach out a large number of households and maximise the transmission of the message. This included house-to-house visits, attending places where people naturally gather such as markets, commercial centers, or performing dances to attract people in the village.
- In April 2014, FHA evaluated the impact of the project. 130 members of the communities (10 households in the village around each school) were randomly selected for an interview which included questions about the conservation message, with focus on the importance of the Gishwati Forest Reserve and its biodiversity. Questions also focused on transmissible diseases between human and primate, the main human related threats to the forest and the best practices to reduce threats. The main results were shown as follows : a total of 1,966 households and an estimated 11,796 inhabitants were covered by the campaign. The evaluation showed that more than 90 % of the interviewees have been well reached by the conservation message.
- This evaluation helped to rank eco-clubs according to their performance in this activity and different prizes were offered.
- The campaign increased the positive attitude ratings towards the Gishwati Forest Reserve from 66% measured in 2011 to 73.5 %. In particular, more than 78 % of participants gave an enthusiastic response about the best practices to reduce threats to the forest and primates. The level of the awareness on the transmissible diseases (67.7%), which is a new concept for the local community, also clearly confirms the communication effectiveness of this activity.

This activity was made possible by a grant awarded to FHA by the International Primatological Society (IPS).

Based on these very positive results, FHA plans to pursue the eco-clubs's support in the future to help with awareness and conservation education. Students have demonstrated their capacity to educate the community when they are motivated and supported by adequate material. This is an outstanding way to deliver the Gishwati Forest protection message to the present local community and future generations.

FHA Coordinator organizes regular meetings with local community mainly on Umuganda day (monthly community work) to educate local people about the importance of the forest resources to the provision of ecosystem services. He also explains to them opportunities and means of getting alternatives to the resources they usually seek, though illegally, from the Gishwati forest.

3.4.3. Reading group

Young students from the local schools regularly gather under FHA supervision for joint reading exercises devoted to environmental matters. In addition to contributing to basic reading practice, this is also a powerful way to spread the conservation messages into the community through the youth. More than 50 children gather at the field station and get educated about environment and the biodiversity of Gishwati Forest Reserve. FHA also maintains a small library at the field station that students and teachers from nearby secondary and primary schools regularly visit to get reading materials.

3.5. Human-wildlife Conflict Resolution

Crop raiding by wildlife (mainly primates) and illegal cattle grazing remain key issues that undermine the conservation of Gishwati Forest Reserve and create conflicts between the forest managers and local farmers. In September 2012 and August 2014, FHA received two grants from Rufford Small Grants Foundation (RSGF) to support local farmers in starting a beekeeping business as an alternative solution to prevent these illegal activities.

The program incorporates supporting members of the JYAMBERE cooperative to improve and expand the two apiaries and continue to build their capacity in modern beekeeping.



GACP had supported the creation of JYAMBERE in 2008 as a way of mitigating conflicts between local farmers and the forest. This includes reducing maize plantation at the edge of the forest by progressively replacing it by potatoes and transforming their agricultural plots into pastures.

To strengthen this initiative, in 2012 FHA started supporting these farmers to develop a beekeeping business around the forest. This helps them to generate income to fence their pastures to prevent cows from entering the forest. The revenue also helps them to buy alternative maize seeds and flour as they continue to transform their agricultural plots into pastures.

JYAMBERE cooperative already joined other three beekeepers' cooperatives in Gishwati area. These are COAPIRU (Cooperative des Apiculteurs de Ruhango), CODACE (Cooperative de Developpement Apicole et la Sauvegarde de l'Environnement) and COVED (Cooperatives des Volontaires pour l'Environnement et le Developpement) that are grouped in a union called UNICOAPIGI (Union de Cooperatives Apicoles de Gishwati) that collects and sells honey and other processed bee products.

Currently, FHA is helping JYAMBERE to expand the beekeeping sites around the forest. This will help the cooperative to increase income from honey sale and therefore help these farmers to increase their contribution in forest protection and proliferation of pollinators while injecting the revenue in local economy.

For perspective, one modern beehive may yield 25 kilos of honey per year, providing a revenue estimated at around 70 pounds for each cooperative member. To be noted also is the fact that beekeeping is not a labour-intensive activity and honey harvesting generally takes place during lean periods in agriculture, mainly during the months of June and July.

The Gishwati honey is very competitive on the national market because natural forests provide a unique source and variety of high-quality nectar and pollen.



Also honey is traditionally valued in Rwanda. It plays a vital role in traditional medicine and household diet. People in rural areas also use honey to increase fermentation and taste of banana and sorghum beer.

3.6. Community Development/Eco-tourism

Together with beekeeping, ecotourism is another good way to generate revenues for the local population, reducing thereby the temptation for them to misuse the forest resources.

Since 2009, GACP, followed by FHA, have been providing support and assistance to several cooperatives located around the Gishwati forest and active in various fields related to eco-tourism. Assistance was provided in building their capacity in cooperative management and business plan development, linking them to markets, and supporting four of them in ecotourism development. These cooperatives include:

- 3 cooperatives grouping beekeepers
- 1 cooperative of traditional healers
- 2 cooperatives of tree nurseries development
- 1 cultural dancers association
- 1 cooperative producing handcraft products
- 1 cooperative grouping local farmers



The support provided consists in training, advice to increase production, grouped marketing efforts and basic tourism development. In particular, during the year 2014, ABATETABIKWIYE (Dancers), KOVARAKU (Handycraft) and COAGIRU (Traditional healers) cooperatives started to receive tourists, even if this is still at a low level.

KOVAKARU is connected to the market, receives different buyers of handcrafts and is assisted to participate to international exhibitions. The cultural dancers « ABATETABIKWIYE » are also assisted to participate in the District open days and were supported to buy uniforms that they use during their performances. District open days and were supported to buy uniforms.

3.7. Facilitating Research

The Gishwati Forest has been a prime area for scientific research, with support given by GACP as of 2008, taken-over by FHA in 2012.

Dr Rebecca Chancellor and Dr Aaron Rundus from West Chester University of Pennsylvania lead research on Gishwati chimpanzee behavioral ecology since 2008. They started by cutting trails in the forest to allow the researchers and visitors to go through the forest.

Their research team has been collecting data on :

- Chimpanzees' behavioral ecology : diet, viruses, DNA analysis, nest surveys to census population size and ranging, crop raiding and habituation.
- Tree phenology : there are 2,400 individually identified trees for phenology in the Gishwati Forest.
- Forest and vegetation study by tree plots sampling



The research team is trained in data collection, GPS, behavioral observation and survey techniques. Dr Chancellor and her colleagues already published two papers as a result of this work: one on Gishwati chimpanzee feeding ecology and one on Gishwati Chimpanzee genetics.

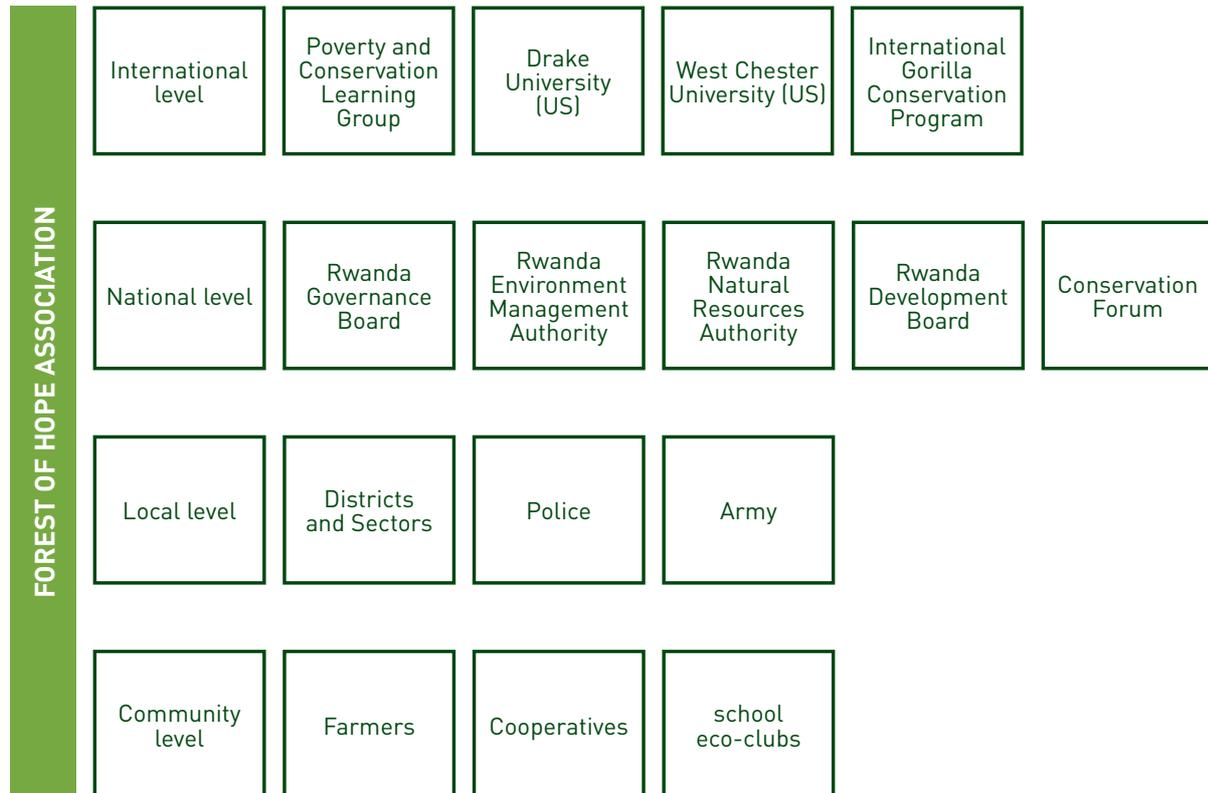
These scientists also started in 2013 a study on the Behavioral Ecology of Golden Monkeys in the Gishwati Forest Reserve. Currently, they are collecting data on the role of food availability on feeding competition in eastern chimpanzees (*Pan Troglodytes schweinfurthii*) living in Gishwati Forest Reserve, Rwanda.

Also Drake university does research on Gishwati Forest dynamics and crop raiding. FHA's partnership with Drake University aims at testing the most effective strategies for mitigating maize destruction by chimpanzees and monkeys around Gishwati Forest Reserve. In 2013, Drake University produced the first report of a piece of research on Mitigation of Primate Crop Raiding conducted since 2012 to determine how far distance maize should be avoided from the forest edge to mitigate crop raiding, based on where the sight of chimpanzees can cross. Additional data were collected from June to August 2014 to cover all of the agricultural plots adjacent to the forest. These data will help to produce a map that will help to predict how far from the forest border crop raiding will likely occur. The map will be useful in supporting the beekeeping cooperative to reduce maize around the forest. Dr Michael Renner and some of his students visit Gishwati every summer for data collection. Also in 2011, Drake University helped to calculate the carbon sequestered in the core Gishwati forest as mentioned above.

Indeed, FHA facilitates the work of several other scientists and institutions to expand the number of species and types of problems studied in Gishwati. So far more than 26 foreign scientists and students visited Gishwati and some completed their Master's and PhD degrees using data that they collected in and around the Gishwati forest. Also, more than 12 Rwandan students did their memoires in Gishwati and two of them received from FHA financial and technical support.

3.8. Partnerships

The impressive achievements of FHA would not have been possible without numerous and strong partnerships at all levels, ranging from prestigious international institutions to small local initiatives. In summary:



Internationally, FHA works with Drake University, and West Chester University (both located in the US), the Poverty and Conservation Learning Group and the International Gorilla Conservation Program.

In Rwanda, FHA works in partnership with the Rwanda Governance Board, Rutsiro district government, Army, Police, Rwanda Development Board (RDB), Rwanda Natural Resources Authority (RNRA), the Rwanda Environment Management Authority (REMA) and the Conservation Forum.

Around the Gishwati Forest, as detailed above, FHA works with local Farmers groups, Cooperatives, Eco-clubs and schools, instrumental in achieving its critical role of educating and involving the local population in the conservation task.



3.9. Key lessons learnt

Involvement of local community

- Community based forest protection: In Gishwati, Community Agents educate offenders for three times before they are reported to law enforcers if they persist in their wrong doing. This process helps local people to understand the impact of their unsustainable activities on the forest and on their own future and therefore decide to stop them. That is why FHA Community Agents do not have guns, they need to work with local people in a friendly environment.
- Conservation education and awareness : Gishwati is a good example showing that local people support the conservation of protected areas when they are helped to understand the overall importance and the role of these areas in improving local agricultural productivity and livelihoods.
- Community support to establish the protected area boundaries: the active participation of the local community in the process of demarcating the boundaries of the Gishwati Forest Reserve, as opposed to a demarcation imposed by outsiders is a guarantee of the respect of the established boundaries because people feel a sense of ownership in them.
- Critical role of schools and students : students are more accessible to new messages and, once well informed, have been proven to become strong advocates of the conservation cause among their families and communities. Also the first step to a change is to understand the reasons prompting that change. Conservation messages are sometimes complex and might often sound contradictory to tradition and usages. This is why students, through schools, can be very strong relays of the conservation messages.
- Strong presence in FHA personnel at the field where interventions occur: this not only helps communication between the organisation and the local community. It also contributes to a feeling of ownership of the project and provides unvaluable insights about local needs and traditions, avoiding thereby numerous potential misunderstandings.

Developing economical alternatives

- Human-wildlife conflict resolution : in order to be willing to contribute to the conservation effort, local communities must be assisted in developing alternatives to several anti environmental behaviors, which are simply motivated by the need to provide subsistence to their families.
- Eco-tourism Development : tourism is a sustainable source of alternatives to communities. Once it is well established, the number of people who use the forest reduces because their revenue increases and therefore are able to buy the needed resources from elsewhere and that they would be searching in the forest.
- Role of cooperatives : cooperatives are a critical tool for sharing education and know-how, as well as for assembling the needed logistic and financial means of developing new sources of revenues for the local communities. Also local farmers are usually not trained in the management of their cooperatives. Assistance is therefore needed to build with them the tools required to set-up and maintain viable cooperative structures.

Contributing role of research

- Supporting strategic decisions to be made for Forest Protection: research provides the scientific backing required to make adequate choices and sound decisions for the long term.
- Helping generating attention and obtaining government and international support : Universities and Research institutions not only add credibility to the conservation project ; they also indirectly allow access to international organisations and institutions who would provide support the conservation project.

Good working relationships with government agencies

- FHA experience shows that technical support and advice from local government is a prerequisite for success in conservation. When we had no resources to protect the forest ; army, police, Rutsiro District and local leaders assisted in forest patrols and law enforcement. Currently, together with Rwanda Development Board (RDB) and Rwanda Natural Resources Authority (RNRA), quarterly meetings are organized to monitor the work of forest protection agents and to advocate for the larger protection of this forest.



④ Priorities for the future

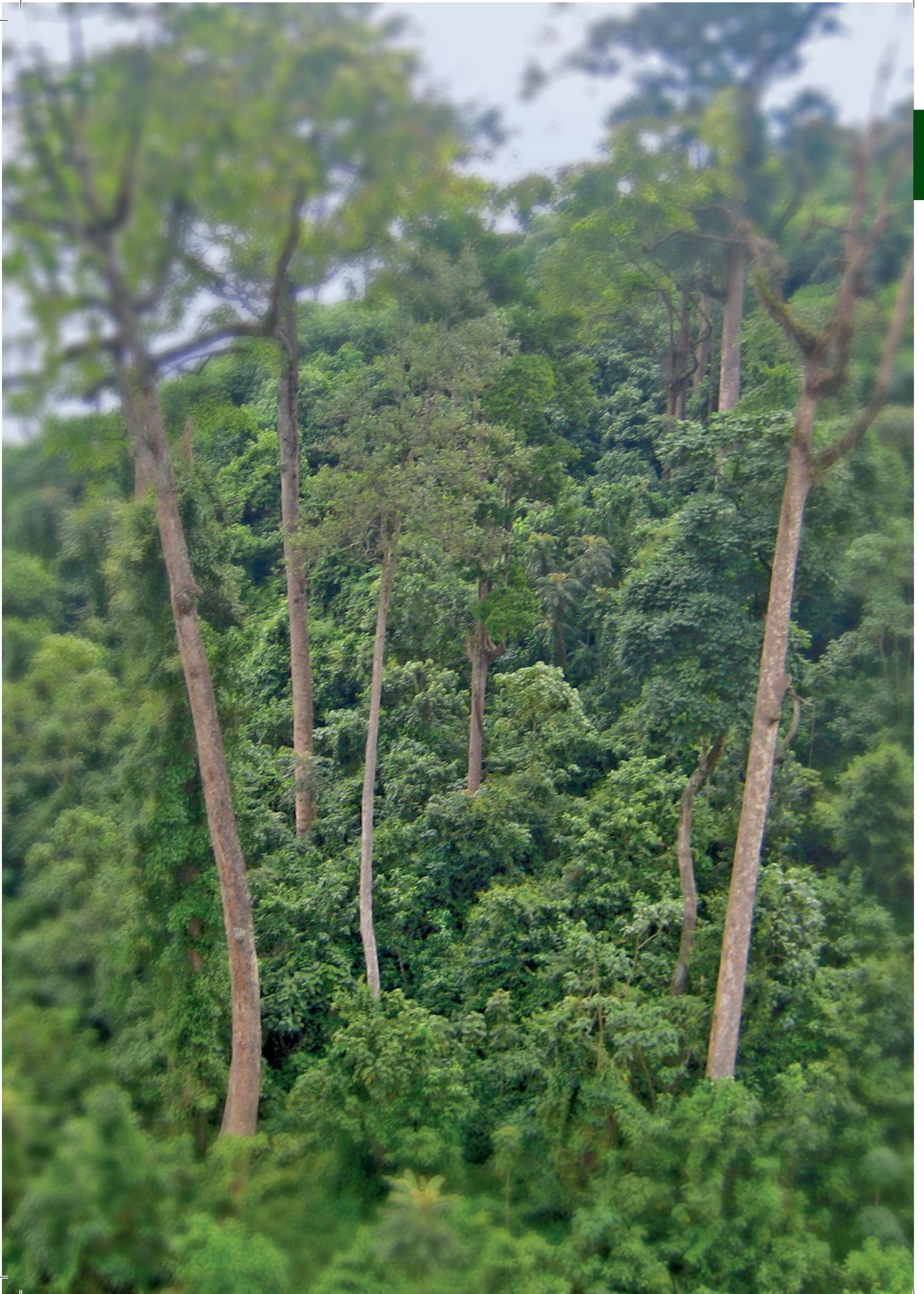
In the coming months, rewarding the efforts made by FHA in previous years, the Gishwati Forest Reserve will be upgraded to a national park. This is an important milestone in the sustainable conservation of the Gishwati through the government's bold step in recognizing once more the importance of Gishwati forest ecosystem, its rich biodiversity, its multiple services and the magnitude of the role that both play in national economy and heritage.

Rwanda Development Board (RDB) is the government agency that will govern Gishwati once it becomes a national park. FHA intends to strengthen its existing partnership with RDB for the sustainable conservation of this forest when RDB takes over the overall responsibility for its management and gets more engaged in its protection and tourism development.

FHA envisages putting more efforts in the following :

- Transferring to RDB, knowledge and skills related to best practices in forest protection and forest tourism development.
- Ensuring smooth coordination with RDB, other potential actors as well as with all the current stakeholders regarding new initiatives which will be initiated.
- Continuing working with the local eco-clubs for engaging the local community, based on the good results recorded during the first year of this activity.
- Keeping support to initiatives of community development and community tourism development.
- Pursuing its contribution in mitigating human-wildlife conflicts especially through continuous support of the JYAMBERE cooperative, which is proven player for improved livelihoods among the local communities and at the same time reducing the acuteness of the crop raiding and cattle grazing conflicts.
- Remaining enthusiastic supporter and facilitator of research projects concerning the forest dynamics, chimpanzee behaviours and other topics related to biodiversity to be conducted in the Gishwati Forest.





⑤ Funding sources and Allocation

For obvious reasons, FHA has been relying almost entirely upon donations for funding of its activities.

Since its creation in 2012, FHA has been funded by 9 donors, with duration for the grants varying from a few months to 3 years, as shown below.

FAH Sources of funding 2012 - 2014							
Funding body	Amounts (US \$)				%	Grant dates	Activities supported
	2012	2013	2014	TOTAL			
Critical Ecosystem Partnership Funds			39.937	39.937	28%	2014 - 2016	Forest management and Community engagement
World Wide Fund for Nature (WWF)-Sweden	7.246	7.565	22.150	36.961	26%	2012 - 2015	Forest protection and Engagement of communities
West Chester University	11.957	8.724	8.753	29.434	21%	2012 - 2015	Behavioral Ecology of Golden Monkeys and Chimpanzees
Rufford Small Grants Foundation	9.181		8.526	17.707	13%	2012 - 2015	Reduce conflict between local people and the forest
Community Conservation			5.000	5.000	4%	2013 - 2014	Community conservation groups
Drake University		4.184		4.184	3%	Summer 2013	Research on crop raiding
British Ecological Society			3.248	3.248	2%	2014 - 2015	Community education
International Society of Primatologists		1.984		1.984	1%	2013 - 2014	Community education
John Ball Zoo Society, Wildlife Conservation Fund			1.500	1.500	1%	2014 - 2015	Community education
Membership fee	180	194	210	584	0%	2012 - 2014	
Total	28.564	22.651	89.324	140.539	100%		
<i>Yearly average</i>				46.846			

As shown, FHA average revenues during these 3 years amounted to \$ 46,846, with a positive trend over time.

For 2014-2015, the budget is anticipated to amount to \$69,272 of expenses, of which more than 80% will be devoted directly to field activities, as summarized on page 34.

FHA 2014 – 2015 Funds Allocation

	\$	%
Strengthening the conservation of Gishwati Forest Reserve	21,765	31
<ul style="list-style-type: none"> • Five year plan, Community Committees, Trainings in law enforcement 		
Forest Patrol	14,008	20
<ul style="list-style-type: none"> • Support 6 Agents, Evaluations, organise workshop to advocate for larger protection of Gishwati 		
Reduce Conflict between local people and the forest	8,256	12
<ul style="list-style-type: none"> • Support to JYAMBERE Cooperative 		
Research facilitation about the role of food availability on feeding competition in eastern chimpanzee	7,724	11
<ul style="list-style-type: none"> • research assistants, students, equipment 		
Community Awareness and Conservation Education	4,748	7
<ul style="list-style-type: none"> • Eco-clubs and library 		
Total field activity	57,672	82
Coordination and Management	12,600	18
TOTAL	69,272	100

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