KIBALE COMMUNITY FUEL WOOD PROJECT REPORT Expansion Phase I: June 2007 – May 2008

To: Date Submitted: Project Title: Kibale Community Fuel Wood Project (KCFWP), Expansion Phase I Project Location: Communities surrounding Kibale National Park, Uganda Primary Investigators: Rebecca Goldstone and Michael Stern Organization Name: Chimp-n-Sea Wildlife Conservation Fund Address: USA: 480 Hogback Rd Johnson VT 05656 UGANDA: Box 730 Fort Portal, Uganda Phone: USA: 610-256-0959 UGANDA: +256-77-5273949 Email: kibalewood@yahoo.com Project Web Page: www.chimp-n-sea.org Amount Awarded: \$

The major goals and objectives of the KCFWP are:

1) To establish demonstration areas that promote increased fuel efficiency and home-grown wood;

Specifically, four new demonstration areas were to be established during Expansion Phase I.

2) To enhance appreciation for Kibale National Park and its wildlife while teaching and encouraging the use of environmentally sustainable practices;

Specifically, one new natural history museum was to be established during Expansion Phase I, and outdoor movie shows, training workshops, and writing contests were to be continued in existing target areas, and expanded to two new parishes bordering the park.

These goals were accomplished, and surpassed in some areas. By May 2008, the project was actively working in 4 of the parishes that border Kibale National Park. During Expansion Phase I: Six new demonstration areas were established; Two new Science Centers were established; 214 families built efficient stoves; 25 video shows were presented; 12 educational contests were held; 12 workshops were conducted.

Fulfillment of these measurable goals is helping achieve the project's ultimate purpose of protecting Kibale National Park from human encroachment and improving park-people relations through facilitation of energy stability and encouragement of true appreciation of the forest.

Please find details on all the activities undertaken during Expansion Phase I on the following pages, and **thank you** for the vital role you have played in achieving these accomplishments.

CONTENTS:

7 page report plus 3 attachments: Attachment 1: Excerpts from Educational Contests Attachment 2: Survey Results Attachment 3: Map of Kibale National Park and Target Areas

Demonstration Areas, Trees & Stoves

Existing Demonstration Areas

During its pilot year, the KCFWP established six demonstration areas. Each area consists of at least 100 *Sesbania sesban¹* trees planted as a border around the entire farm or selected crops, as well as a rocket stove in the nearest kitchen. Volunteers at each area are trained in rearing trees, caring for them, and teaching others to do the same. Seeds are always on hand for interested individuals, and written information about firewood use and tree care is also made available.

In accordance with our methodology, the success of the demonstration areas is dependent on the individual volunteers who look after the trees at each area. As noted in previous reports, some were more motivated than others. Four of the six pilot year demonstration areas were still in good shape by the end of Expansion Phase I^2 .

During Expansion Phase I, the project has provided help to strengthen those demonstration areas that showed continued interest. At Isunga Catholic Church and Kyanyawara Christian Fellowship, the two most successful demonstration areas from the pilot year, water tanks were added to facilitate the creation of on-site tree nurseries. (Water tanks and nurseries had been initially decided against, since such expensive equipment could have lead to decreased investment from the community. By providing tanks at only those sites where the community is motivated, their chances of success are increased.) Both the Isunga and Kyanyawara demonstration areas have continued to do well since installing the water tanks, and have each produced crops of several hundred *Sesbania* seedlings.

A small education center was also created at the Isunga demonstration area, as it is more than 20 kilometers from the closest KCFWP Science Center (more details on this under the Education heading, below).

One of the areas that was not doing well at the end of the pilot year (Kyanyawara Church of Uganda) has been given a breath of fresh air: the church's new pastor is much more interested in trees than the previous one, and we are hopeful for this demonstration area's future success³.

New Demonstration Areas

Six new demonstration areas were established during Expansion Phase I:

• Three new demonstration areas were formed in Kahangi parish. Two were established with partnering churches (Kyansimbi Catholic Church and Kyansimbi Protestant Church), the third at the private residence of the local KCFWP Community Liaison. There has been earnest dedication to the trees in these areas, however the trees have met mixed levels of success. The two churches had only mediocre success with their trees. Unpredictable rainfall has been the biggest problem this year, especially in this region on the far northern boundary of Kibale. Quite simply, the unpredictable rains have made it very difficult to keep young seedlings alive. We will continue to provide motivational and logistical support to these partners through the next two rainy seasons. The third area in Kahangi is enjoying

¹ Sesbania Sesban is an indigenous, fast growing legume, the ideal firewood crop for those with little space to spare.

² Though this has always been the project's design, we were nonetheless very pleased to find the areas so well maintained after two years, considering that the volunteers at the demonstration areas receive almost no rewards other than the trees themselves.

³ By November 2008, the Kyanyawara Church of Uganda had a successful border of *Sesbania* around their farmland.

greater success than either of the churches. The staff member who maintains it, Patrick Mutegeki, is extremely proud of his success, and regularly welcomes visitors to his home to instruct them in the project's methods of tree planting⁴.

- Two demonstration areas were formed in Sebitoli parish, one at the new Science Center and the second at a neighboring church, the Sebitoli Church of Uganda. The membership at this church is not as excited about tree planting as many of the others, possibly because of the available wood found on neighboring tea plantations, a factor we had not considered. If the church demonstration area in Sebitoli continues to be lacking in motivation, we may simply increase time spent promoting fuel efficient stoves in this area (with the new Science Center continuing to provide a demonstration of how well *Sesbania* can grow). Another factor that seems to be affecting the success of tree planting in the Sebitoli parish is that many of its residents are renters and have no permanent commitment to the land. Regardless of if their stay is 1 month or 10 years, the community does not feel invested in the area and therefore are less inclined to protect it, even if doing so would reduce their own daily burdens. We are continuing our efforts here, but do not expect results to reach the level of success being met in other parishes.
- The sixth new demonstration area was established in Isunga parish, one of the pilot year target areas, on the private farm of the local KCFWP Community Liaison, John Kabuleta. (John was highlighted in our spring 2008 Update, available at www.chimp-n-sea.org/projects/kibale-community-fuel-wood-project/newsletters/). He has been our most successful Community Liaison, and as a highly respected member of the community we anticipate great things for his demonstration area.

Private Woodlots

In addition to demonstration areas, the project also attempted to motivate individuals in new ways. To that end, a tree growing contest was held in each of the pilot year areas. While unpredictable rains in Isunga parish led to minimal success, in Kiko parish 35 families entered the contest and grew *Sesbania* as a border around their farms. Many had great success, and two winners each received a new bicycle. Others who submitted were taken directly to the homes of the winners, so they could learn how to improve their methods. An extremely large crowd at the award ceremony makes us believe that this motivational tool will encourage even more people to plant *Sesbania* in the future, and the contest will be repeated for at least one more year⁵.

Analysis of Tree Planting Campaign

Overall, we remain excited by the results, and have found that community motivation has grown over the last year. The number of people growing trees at home, and those growing *Sesbania* in particular, has risen dramatically (78% of people surveyed now grow trees, 72% of whom grow *Sesbania* - see Attachment 2 for more details). When we visit a village, proud community members approach and invite us to their homes to view their trees. Their pride and excitement fuels the

⁴ Patrick's enthusiasm has paid off: Upon visiting in November of this year, we saw that his closest neighbors have planted trees and are caring for them extremely well, effectively tripling the size of his demonstration area.

⁵ Upon visiting Kiko Parish in November, it was clear that the contest had the intended effect: many more families are now growing *Sesbania*, several with hundreds of trees planted in the promoted style. Choosing the winner of this year's contest will be very difficult!

project with enthusiasm, and community members not yet participating become more interested as a result of the excitement of others.

Each demonstration area will always need training and attention to maintain success, but with the help of the KCFWP's Ugandan Community Liaisons, this can be accomplished. Dealing with changing weather patterns is a problem, but not one under our control. The project will adapt by increasing focus on the efficient stoves and other ways to maximize energy conservation.

As indicated in the Pilot Year report, harvesting the *Sesbania* trees several times each year has not proven successful. Though reputable sources (e.g. ICRAF) have promoted this method, we have not found it practical around Kibale. We are currently encouraging people to let their trees grow for one year before harvesting. Trees at the demonstration areas were not cut this year, as we feel they are most impressive when they are left to grow and mature. Also, the best of these trees are now serving as sources of seeds for the local communities.

Stove Building

214 families built efficient stoves during Expansion Phase I. Included in this tally are more than 15 families who learned about the stove from their neighbors and built one for themselves without any assistance from our staff. The number of stoves built this year shows a more than 50% increase over the number of stoves built during the pilot year. Since project inception, 356 stoves have been built. Using the figures obtained from this year's analysis, this equates to **conservation of more than 2,500 pounds of wood** *per day*, much of which would have come from inside Kibale.

As was noted during the pilot year, some community members have made small adaptations to the stove design, either to make it more practical for their lifestyle or to enhance its appearance. We have not found any of these adaptations to compromise the stove's efficiency. The stoves require very little maintenance and, though made primarily of mud and dung, continue to maintain their efficiency and stand the test of time⁶. Most of the stoves built during the expansion phase were built between November 2007 and May 2008, after the new Community Liaison staff had been trained. Their dedication and hard work has been tremendous, and we are confident that the number of stoves being built will continue to increase.

Education Campaign

Traveling Movie Shows

The education campaign continues to be extremely well received, and traveling movie shows still draw very large crowds. 25 shows were conducted at eight different locations during Expansion Phase I.

Planned to occur weekly, movie shows were put on hold at two points during the year. One problem (encountered periodically June – September 2007) was that we did not have enough grid power to charge the batteries. This problem was solved when we received funding to install solar panels. The solar works amazingly well, and we have had no power concerns since the installation. The shows were abruptly put to a second halt during an Ebola outbreak in December 2007. The government suspended all gatherings for nearly a month until the disease was controlled.

An average audience consisted of 250 people, approximately half adults and half children, for a total audience of 6,340 people. There has been a decline in our average attendance, however this is in large part due to smaller populations in the new target areas of Kahangi and Sebitoli. (Audiences continue to average 350 in the pilot year areas.) Movies continue to focus on Ugandan

⁶ Walking around the pilot year areas this November, we were extremely pleased to see the first stoves built still being used after more than two years.

wildlife, as well as wildlife from around the globe. For villager's comments on the movie shows, please see Attachment 1.

Science Centers

The Science Centers are located in village centers bordering Kibale and are open free of charge to all visitors. Inside, they are essentially natural history museums, filled with artifacts of animals that live in or around the national park and an ever-growing science library. Outside, they are demonstration areas for trees, stoves, and other methods of energy conservation and improved farming practices. The Science Centers (still the only institutions of their kind in Uganda) provide a welcoming educational environment where local citizens can explore science and nature while learning their role in protecting it.

The original Science Center is in Kiko parish, on the central-Western boundary of Kibale (see map, Attachment 3). It has continued to attract interested villagers in large numbers. In October, the community surprised us with an enthusiastic celebration for the first anniversary of the Center. Three local clubs presented songs, dances and skits that extolled the benefits of tree planting and the rocket stove, and also thanked the Science Center staff for providing a new opportunity for education in the area. New books have been continually added to the Center's library, and new equipment, such as microscopes and binoculars, has helped keep the community's interest.

In November, a new Science Center opened in Sebitoli, one of the new target areas. The Center is in a local trading center less than one kilometer from the North-Western boundary of Kibale. The Chief Warden of Kibale National Park was present to officially open this new establishment in front of a crowd of nearly 200 people. Because of a lower local population size, attendance at the Sebitoli Center has been lower than that at Kaburala. However, throughout its first year of operation, the Center has enjoyed a steady stream of visitors. While both centers were closed during the Ebola outbreak, the past year saw a total attendance of 6,970 visitors.

In May, toward the end of Expansion Phase I, a small library was opened at the Isunga Catholic Church demonstration area, along the Western boundary of the park. Over the past several months, this library has developed into a small Science Center in it's own right, and we look forward to continuing to add to its collection.

Workshops and Contests

Twelve tree and stove workshops were conducted during the past year, with a total attendance of 755 people. These occurred at the demonstration areas, at individual's homes, and in busy trading centers.

At each workshop, the rocket stove and hay-box are pitted against a traditional stove in head-to-head competition. During these competitions, on average, the rocket stove/hay-box combination cooks both beans and potatoes using 40% less wood than it takes the traditional stove to cook only beans. This is a higher level of efficiency than we are seeing, on average, from individuals using the rocket stove in their homes (see Results section, below, for details). Most likely, this is because a skilled project employee who knows how to maximize the stove's efficiency conducts the workshop. In this regard, the workshops serve to advertise the potential afforded by the new technologies, and both convince new people to build stoves and train those already owning stoves how to use them better.

In addition to the workshops, educational contests also help advertise the project's goals while keeping the communities motivated. During Expansion Phase I, twelve educational contests were held, three in each of the target areas. 1,097 total entries were received, 100 of which were awarded prizes. The themes of the contests run in a cycle, so that each contest is offered once each

year. Seeing how entries differ from year to year will aid in the long-term analysis of the project's effectiveness. Examples of some of the entries are included with this report, as Attachment 1.

Including attendance at movie shows, Science Centers, workshops and contests, over 15,000 people who live in communities bordering Kibale National Park were directly involved in the KCFWP's activities during the past year.

<u>Staff</u>

Community Liaisons

In October 2007, the staff levels of the KCFWP were increased to include Community Liaisons in each of the four target areas. These staff members undergo continuing training in the project's methodology and education techniques, and walk around their home villages two days each week promoting the project's goals and ideas. They have been instrumental in accomplishing the activities that are detailed above.

Student Interns

Four student interns were selected from applicants from local schools to assist at the Science Centers. In addition to general assistance, the interns also complete periodic research papers on topics of their own choice, using the Center's libraries as references. Most of the interns performed quite well, though one did need to be replaced due to lack of motivation. Sam Murungi, initially hired as an intern, has now been promoted to the level of a regular Science Center employee. The remaining interns are continuing training and will hopefully be promoted sometime in the future, if their progress continues.

Manager and Directors

Since project inception, it has been planned to slowly hand over the KCFWP to community management, with a certain level of autonomy reached by the end of the three-year pilot and expansion phase. This process has been proceeding extremely well to date. The directors are now living away from Kibale, and visiting only periodically to check up on the manager, staff, and their progress. Currently, Rebecca and Michael are still living in Uganda⁷, and plan to visit the project at least once every 6 - 8 months. Margaret Kemigisa, Project Manager, submits monthly financial and progress reports to us, and we have been pleased with her accuracy and attention to detail. Receipts for all project expenses are examined when we visit Kibale, and all the finances have been accounted for honestly and appropriately. We also have regular telephone meetings with Margaret, to listen to her comments and concerns and offer advice or guidance when necessary. We are confident that with Margaret's leadership on the ground and continued support, the KCFWP will continue to make a positive difference for both the wildlife of Kibale and the people who are living around the park.

⁷ Why not come on over and see us? Visits to any of the aspects of the KCFWP can be easily arranged, and can be combined with a more classic safari to Uganda, offering you or your members a chance to witness the project you support first hand. Becka and Michael are now the managers of the Apoka Safari Lodge in Kidepo National Park, a beautiful place to view savannah wildlife in a pristine setting and the perfect compliment to Kibale's rainforest wonders. Just send us an email if you think it could be fun, or, if you would like to get in touch with other donors who have visited/arranged visits for their members, please let us know.

Partners

The project has maintained its close relationship with the Ugandan Wildlife Authority, and has also begun to forge partnerships with other non-profits working in the area. One new partnership is with the Ugandan community group "KAFRED" (which promotes environmental sensitivity on the eastern borders of Kibale). The next Science Center will be opened in conjunction with KAFRED at their Bigodi Wetland Sanctuary site. Another partnership is with the UNITE program, based at the North Carolina Zoo. UNITE is involved with local schools that border Kibale, and will be sending an American teacher to conduct teacher training for their projects soon. This teacher will also act as a consultant for further development of the Science Centers and other aspects of the project's education campaign. These partnerships will hopefully strengthen the KCFWP's in-situ infrastructure, making long-term sustainability of the project more likely.

Results

Analysis of the third yearly survey revealed that the project is making a positive difference. Across all four target areas:

- 42% of families are now using efficient stoves
- Families using efficient stoves use 32% less wood than families with traditional stoves
- 78% of families are growing firewood at home
- 71% of those growing firewood grow *Sesbania*, as recommended by the KCFWP

For more details from the 2008 survey data, as well as a comparison of this year's data to the first two surveys conducted, please see Attachment 2.

Judging from the progress to date, long-term implications of the project are that growing fuel wood in the border design being promoted is indeed feasible around Kibale, which could lead to long-term safeguarding of this important wildlife habitat. However, changing weather patterns are a major hurdle. Uganda experienced deadly flooding in a usually arid portion of the country in mid-2007, and the start and end times of the two rainy seasons that have been typical around Kibale have become unpredictable, leading to farmers not knowing when to plant crops and trees. In the past year, we have seen farmer's newly planted seeds washed away by untimely torrential downpours, and have also seen crops drying and dying during normally wet times of the year. In such an atmosphere of uncertainty, planting and caring for trees in addition to crops may not be a reasonable expectation.

The next steps we see for the KCFWP are continued logistical support and education for our current community partners and expansion of the project to more communities bordering Kibale. Methods are being refined to increase success in tree planting, and we will continue to promote growing *Sesbania* at least through May 2009. Stove building and education will also continue.

Post May 2009, the project will run on a reduced budget. We hope to increase the role of foreign volunteers (why not come on over and volunteer?), while at the same time increasing the responsibilities that fall on Ugandan community members. An endowment fund to support the project in the long term will be formed, and we look forward to submitting a proposal for further support after we are fully confident that this model will be successful.

Thank you very much for your support of the Kibale Community Fuel Wood Project! If you have any questions or comments, please do not hesitate to contact us at any time.

ATTACHMENT 1

Countless meaningful experiences illustrating the project's impact have graced its first two years. From continued high attendance at project events to an increase in the number of people building efficient stoves, we are confident that a change in attitudes is underway. On an individual level, the following are excerpts from some of the contest entries regarding various aspects of the KCFWP:

About the Movie Show:

I was surprised to see a chimp holding its young one and kissing it like a human being. The animals in the film were so free and enjoyed themselves and even they were better than those which are being looked after in the homes. I was very sad when they saw the fire burning in the national park. Bymukama George

We saw some animals which resembled people, like a chimpanzee. Their physical appearance is like a human being. What made us to be pleased is the chimpanzee to have played like a human being by sleeping with his partner. So they produced their kids. Which means animals have to love one another like human beings. It taught us how we should love our husbands, our neighbors, and our children. Then I was convinced to love all of creation. And I would like to request you to teach us more about the creation. Kyomuhando Kellen, age 20

This film showed the behaviors of chimpanzees, they are almost like human. What I learnt from the film is that we are supposed to plant trees and we stop to go to the park. Because park is the home of chimpanzees. Orikiriza Immacuretti

What I learned from the film is that there is a very close relationship between us and chimpanzees. We should be kind to them by not harming them. No trapping them no spearing them. We should also plant our own trees. For firewood and building purposes other than depending on the national park. For the park is the only habitat for chimpanzees. Nkamusiima Daniel

It was such an interesting film that I will never forget it in my life. Alituha Joshua

What made me surprised, I saw a gorilla removing honey bees from a bee hive. The technology it was using was almost a human being's technology. Then, I traced the difference of gorilla from a human being I found it to be very little. Mukidi Patrick

Through this education I'm passing through, I wish to be a very good game ranger, because of the fact that the videos I've been shown have taught me the way how wild animals behave when they are in the game park. I've realized the notorious animals, in the game park, like lions leopards and the buffalo, are friendly to people. I hope I can be successful for that dream, and I pray hard to my fellow friends that they could also dream like what I'm dreaming to be. Kampurira Joseph

About the Science Center:

The most thing that made me happy in the science center is the books – wonderful ones when you read you learn about the environment. They teach us to protect them. They also brought school books which encourage us to learn biology, chemistry and other good ones. We have got the chance to read those books and perform better at school. Also they taught us to grow sesbania to give us firewood quickly. Also, to add nutrients in the soil. This has helped us not to go to the park to destroy trees. It has helped us not to suffer with firewood. Ategeka Moses Amooti

Poems:

Tree is My Name By Muhibwa, Richard Oh man oh man oh man Be kind to me as I am to you Forget not that I saved your family when you were starving You and your children crawled on my chest Broke off my breasts and sucked them Then you survived When you were sick You exposed my many feet and broke off my toes and chewed them Before you survived Oh man oh man oh man Be kind to me as I am to you Don't forget that I saved you and your crops when you and your crops were withering to death I sweated and cried for you My sweat and tears went up to the sky and they dropped down as rain You and your crops survived When you and your animals were suffocating to death You sat under my thick shade You took my bad breath and I took your bad one, too You and your animals survived Oh man oh man oh man For life on earth Let me multiply and you will multiply too _____ Rocket Stove Rocket Stove By Amooti Prossy Mukabura Oh my good and beautiful rocket stove I love you and will continue loving you Because you makes me happy by cooking my food quickly and you are easy to be used You gain my interest because you produce less smoke and you use less firewood You have saved my life from respiratory diseases which have killed my neighbor's wife

You have solved a problem of accidents caused by fire because fire only touches the saucepan Lets save or lives and save Kibale with rocket stoves

Mr. Gorilla By Amanyire John I am Mr. Gorilla, fighting for my rights Look, God created me too To live and grow Why hunt me? Why kill me? I am Mr. Gorilla, let me move freely Without any fear for my life People, come and see me I am good to you So let me live Why hunt me? Why kill me? I am Mr. Gorilla, friendly to all I thank those who support my life People of the park, people who come to see me Don't hunt me. Don't kill me. Please.

ATTACHMENT 2

All surveys have been conducted by KCFWP Community Liaison staff at randomly chosen houses within their target areas.

TABLE 1: Baseline vs. Current Data for All Areas

| | Baseline Data, All Areas (2006 for Kiko & Isunga, 2007 for Sebitoli & Kahangi) n=418 | Most Recent Dat (June, 2008) n=400 | a, All Areas | |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------|--|
| Is it a struggle to obtain firewood? | 93% YES | 92% YES | | |
| How do you propose to lessen the struggle? | 10% Take wood from KNP4% Use a fuel efficient stove62% Plant Trees | 4.5% Take wood from KNP10% Use a fuel efficient stove70.5% Plant Trees | | |
| Do you grow trees at home? | 55.5% YES | 78% YES | | |
| Do you grow <i>Sesbania</i> for firewood at home? | 10% YES | 56% YES | | |
| Do you use Traditional or | 3% Energy Saving | 42% Energy Saving | | |
| Energy Saving Stove? | 96% Traditional | 58% Traditional | | |
| Average Wood Use | 1.27 Heaps | 0.98 Heap (combined average) | | |
| (in heaps ⁸) | | Trad. | Fuel Eff. | |
| | | 1.13 | 0.77 | |
| | | Heaps | Неар | |
| Is firewood collected inside Kibale National Park? | 30% YES | 20.5% YES | | |
| "You can grow trees on | * 53% TRUE | 90% TRUE | | |
| small land" | *47% FALSE | 10% FALSE | | |
| "If we continue to reply on | *91% TRUE | 75.5% TRUE | | |
| forests for firewood, they will disappear" | *9% FALSE | 24.5% FALSE | | |

⁸ The average weight of a "heap" of wood is 10 kilograms.

^{*} figures with * do not include Kiko Parish, as these questions were added after the baseline survey of Kiko Parish.

| | Pilot Areas June 2006 (Baseline) | Pilot Are June 200 | | Pilot Are June 200 | |
|--------------------------------------------|----------------------------------------|--------------------------|-----------|--------------------------|-----------|
| T '4 4 1 4 14 ' | n=218 | n=200 | | n=200 | |
| Is it a struggle to obtain firewood? | 93.5% YES | 95% YES | | 94% YES |) |
| How do you propose to | 12% Take wood | 9% Take wood from | | 9% Take wood from | |
| lessen the struggle? Don't | from KNP | KNP | | KNP | |
| fight it bitch | 0.5% Use a fuel | 17% Use a fuel | | 10% Use a fuel | |
| | efficient stove | efficient stove | | efficient stove | |
| | 73.5% Plant Trees | 45.5% Plant Trees | | 73.5% Plant Trees | |
| Do you grow trees at home? | 55% YES | 61.5% YES | | 70.5% YES | |
| Do you grow Sesbania for | 7.5% YES | 12.5% YES | | 47.5% YES | |
| firewood at home? | | | | | |
| Do you use Traditional or | 3.5% Energy Saving | 31% Energy Saving | | 35% Energy Saving | |
| Energy Saving Stove? | 96.5% Traditional | 69% Traditional | | 65% Traditional | |
| Average Wood Use | 1.12 Heaps | 1.26 Heaps | | 0.94 Heaps | |
| | | (combined average) | | (combined average) | |
| | | Trad. | Fuel Eff. | Trad. | Fuel Eff. |
| | | 1.4 | 0.9 | 1.2 | 0.6 |
| | | Heaps | Неар | Heaps | Heaps |
| Is firewood collected inside | 37.5 YES | 21% YES | | 28.5% YES | |
| Kibale National Park? | | | | | |
| "You can grow trees on | *72% TRUE | 53.5% TRUE | | 95.5% TRUE | |
| small land" | *16% FALSE | 44.5% FALSE | | 3.5% FALSE | |
| "If we continue to reply on | *83% TRUE | 93.5% TRUE | | 56.5% TRUE | |
| forests for firewood, they will disappear" | *13% FALSE | 4% FALSE | | 43% FALSE | |

TABLE 2: Pilot Year Areas (Kiko and Isunga) Three-year Survey Comparison

^{*} figures with * include only Isunga Parish, as these questions were added after the baseline survey of Kiko Parish.

| | Expansion Phase I Areas June 2007 (Baseline) n=200 | Expansion Phase June 2008 n=200 | e I Areas | |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------|--|
| Is it a struggle to obtain firewood? | 94.5% YES | 90% YES | | |
| How do you propose to lessen the struggle? | 8% Take wood from KNP6.5% Use a fuel efficient stove51% Plant Trees | 0% Take wood from KNP15% Use a fuel efficient stove67.5% Plant Trees | | |
| Do you grow trees at home? Do you grow <i>Sesbania</i> for firewood at home? | 56% YES 13% YES | 86% YES 64% YES | | |
| Do you use Traditional or Energy Saving Stove? | 3% Energy Saving96% Traditional | 48% Energy Saving 51.5% Traditional | | |
| Average Wood Use | 1.42 Heaps | 1.02 Heaps (comb Trad. 1.11 Heaps | bined average) Fuel Eff. 0.92 Heap | |
| Is firewood collected inside Kibale National Park? | 23% YES | 12.5% YES | | |
| "You can grow trees on small land" | 44% TRUE 56% FALSE | 84% TRUE 16% FALSE | | |
| "If we continue to reply on forests for firewood, they will disappear" | 95.5% TRUE 4.5% FALSE | 94.5% TRUE 5.5% FALSE | | |

TABLE 3: Expansion Phase I Areas (Sebitoli and Kahangi) Two-year Survey Comparison

ATTACHMENT 3

