

WOMEN, CONSERVATION AND NATURAL RESOURCE USE:  
A CASE STUDY OF BWINDI, UGANDA

by

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April 2014

Masters project submitted in partial fulfillment of the  
requirements for the Master of Environmental Management degree in  
the Nicholas School of the Environment of  
Duke University

2014

When we try to pick out anything by itself,  
we find it hitched to everything else in the Universe.

*John Muir*

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Muir, J. 1911. "My First Summer in the Sierra." Boston: Houghton Mifflin. [Sierra Club Books 1988  
Edition: 110.]

## Abstract

In developing countries, men and women use and depend on natural resources in distinctly different ways. Women are predominantly the water-gatherers, the firewood-collectors, and the farmers, as well being the family-caretakers. Furthermore, women in developing countries often lack many basic rights such as land ownership, access to income, and access to education. Their health and wellbeing are inextricably linked to their dependence on natural resources. Their lives are connected to the natural environment such that deforestation or losing access to resources within a protected area negatively impact women living in that ecosystem in multiple unanticipated ways.

Owing to the importance of natural resources in women's daily lives, it becomes imperative for conservation activities in protected areas to consider gender. My Master's Project, thus, sought to understand the consequences of protected area conservation on women's lives. To do so, I conducted a qualitative case study in Bwindi, Uganda. I interviewed 36 women in 11 villages along the protected area of Bwindi Impenetrable National Park to understand their perceptions of conservation and to investigate the ways their needs and concerns could be more fully integrated into conservation management.

Bwindi Impenetrable National Park (BINP) is home to approximately half of the world's mountain gorillas (*Gorilla beringei beringei*). BINP is one of Uganda's most successful tourism locations and the Uganda Wildlife Authority which manages the park created a revenue-sharing program to distribute funds to park-bordering communities in order to encourage conservation value of the protected area.

My study investigates and interprets what conservation looks like for local women living along the park border, in order to bear witness to their stories and determine the successes or failures of current conservation practices in Bwindi, Uganda. My results indicate a disconnect exists between the dominant conservation narrative promoting the conservation of the mountain gorilla and the value local women place on conservation. My study, furthermore, examines the claim of community-integrated conservation and the projection of global conservation values onto local people living beside a protected area.

## Acronyms

BINP—Bwindi Impenetrable National Park

CARE—Cooperative for Assistance and Relief Everywhere

CTPH—Conservation through Public Health

DRC—Democratic Republic of Congo

EGI—The Environment and Gender Index (created by IUCN)

ICRW—International Center for Research on Women

IUCN—International Union for Conservation of Nature

NDP—National Development Plan (Uganda)

UNEP—United Nations Environmental Programme

UNESCO—United Nations Educational, Scientific and Cultural Organization

UNP—Uganda National Parks

USAID—United States Agency for International Development

UWA—Uganda Wildlife Authority

WCS—Wildlife Conservation Society

# 1. Introduction

*Only by seriously considering how local people will tangibly and immediately benefit from conservation activities will the protection of these resources be ensured.* – Peluso, 1993

*As the majority of the world's poor, women play decisive roles in managing and preserving biodiversity, water, land and other natural resources, yet their centrality is often ignored or exploited. This means that a chance for better management of those resources is lost, along with opportunities for greater ecological diversity, productivity for human sustenance and economic development. Moreover, while environmental degradation has severe consequences for all human beings, it particularly affects the most vulnerable sectors of society, mainly women and children.* – Women and the Environment Foreword, United Nations Environment Programme

In developing countries, the relationship a woman has with the natural environment is substantially influenced by her gender. Women are the primary actors in growing food and in the gathering of water, firewood, and non-timber forest resources. Since women rely more on the natural resource sector than men do, women are disproportionately at risk to the negative effects of environmental degradation, including deforestation and drought (Ray 2007, Mwangi et al. 2011, Rocheleau 2001, Agarwal 1992). Though women have a specialized knowledge of the environment because they spend a majority of their time interacting with it, in developing regions of the world they are often unrecognized as managers of natural resources and as agents of conservation development since they lack rights to land, capital, and political voice (Ray 2007, Mwangi et al. 2011, Wan et al. 2011).

In order to add to our understanding of the relationship between women, natural resource use, and conservation, I conducted a qualitative case study in Bwindi, Uganda from July-August 2013. In this paper, I offer an account of thirty-six women's voices, analyzing what they reported as their relationship to the protected area they live next to and the positive and negative impacts of conservation on their lives. My first objective is to present—as much as is possible in the format of a Masters Project—their voices, as well as the findings I gathered from analyzing their points of view. It is vital to understand their challenges, hopes, and motivations in order to move toward a more participatory and authentic version of community-integrated conservation. This is in no way to discount the voices of men in Bwindi and the impact of conservation on their lives. My desire to focus on women is due to the fact they have been historically [and continue to be] disregarded. As a result, I want to intentionally, and specifically, focus on their voices and their needs.

My secondary objective in this paper is to investigate the nature of community involvement in conservation in Bwindi. The message being promoted internationally is that Bwindi Impenetrable National Park (BINP) is a successful model of community-integrated conservation. I wanted to discover if this claim held true after being scrutinized through in-depth field research. Thirdly, I hope to present a powerful case illustrating the

need to have gender awareness mainstreamed in conservation practices and the importance of listening to women when making environmental decisions.

I begin this Master's Project with a brief background on the inclusion of local people in conservation management. In the history of managing protected areas, it is only in the last few decades that the people living next to protected areas have been able to have a decision-making role. With this foundation, I then provide a background of the history of integrating gender awareness into conservation work. I then set the context to my specific study area—both Uganda the country, and Bwindi, the focal area. I follow with my methods and analysis, findings, and finally offer my discussion and recommendations.

### 1a. Background: Protected Area Conservation and Communities

It was only a few decades ago, in the work of conservation in developing countries, that the voices of both local women *and* men were ignored. Historically, the majority of conservation efforts in developing countries were about creating protected areas to keep local people out so that the colonial powers could enjoy hunting and their concept of pristine nature (Miller et al. 2011, West 2006). Up until the 1980s, the dominant conservation narrative was one that promoted the protection of nature above all else. However, since the 1980s, a new narrative arose that espoused “Social Conservationism” (Miller et al. 2011). Social Conservationism demands that the needs and concerns of those people living beside protected areas should be integrated into conservation decisions. It became apparent that in many cases across the world, local people were bearing the costs of conservation—specifically wildlife conflict and loss of access to natural resources— more than they were benefiting from protected areas (Blomley 2003, Miller et al. 2010, Tumusiime et al. 2012, Brockington 2002, West 2006, Büscher 2011). The cost of such losses to already impoverished communities, the majority of whom survive as subsistence farmers, exacerbates a cycle of poverty and economic insecurity (Miller et al. 2010, Tumusiime et al. 2012). With such critiques of protected area management, Social Conservationists began calling for a more equitable and integrated version of protected area management, one that would be more ethical by acknowledging that the livelihood and wellbeing of park-edge communities *are* a part of conservation work in developing countries.

There is an extensive literature (Cepek 2011, Mosse 2004, Christie 2004, West et al. 2006, Bush et al. 2012, Vihemäki 2003, Brockington 2002, Peluso 2003, Büscher 2011) connecting the failure of protected areas to reach their objectives of successful biodiversity conservation to the lack of integrating local people's needs and concerns in management decisions. In recognition of these failures, protected area conservation management is evolving to have local people not as passive recipients of conservation benefits and costs, but rather to be—at various levels— decision makers (Vihemäki 2003, Tumusiime et al. 2012). Thus, conservation management is expected to serve not only the purpose of protecting biodiversity but to also ethically respect and assist local people's lives (Miller et al. 2010, West et al. 2006, Naughton-Treves et al. 2005). This is a significant challenge since globally the highest levels of biodiversity are predominantly found in the economically poorest areas of the world (Naughton-Treves et al. 2005).

Conservation NGOs that advocate principally for biodiversity protection, such as African Wildlife Foundation and Conservation International—in acknowledging that protected areas are successful when local people are accounted for—are incorporating social-conservation intentions into their practices. For example, the Wildlife Conservation Society (WCS) has developed the program of “Living Landscapes” which attempts to satisfy the dual objectives of enhancing local people’s livelihood and education needs with WCS’ wildlife conservation goals (WCS, <http://wcslivinglandscapes.com>).

Büscher (2011, 87) challenges these efforts as powerful “market speak” aimed at pleasing global audiences – and tourists—who want to be convinced that biodiversity conservation in developing countries is improving local lives, when in actuality these efforts perhaps have more to do with power and control. Peluso (1993) and West (2006) speak to the ways in which conservation is used as a means of control, especially when resources are scarce and/or highly valuable. Peluso (1993, 202) writes, “coercion and resource control can be used to increase the state’s powers of social control, thereby enabling the state to extract more revenue from conservation.” Peluso (202) acknowledges that as this happens local people make significant “sacrifices in lifestyle, autonomy, or real economic gain.” The nature of acknowledging local communities’ needs and integrating them into conservation work in a meaningful way is a complex proposition that is still in its infancy.

Although the efforts of Social Conservationism intended to increase awareness of local people’s needs and concerns, they have largely failed to integrate women into the conservation discourse. Women remained mostly absent from conservation efforts; often they were marginalized for numerous reasons, including lack of capital and lack of time to go meetings and workshops (Sodhi et al, 2010). Writing in 1991, in “Gender, Ecology, and the Science of Survival: Stories and Lessons from Kenya,” Rocheleau declares, “Researchers and practitioners have paid little attention to gender,” and she continues to point out the invisibility of women in protected area conservation. The scholarly literature illustrates how women and men move differently in the natural environment (Ray 2007, Mwangi et al. 2011, Rocheleau 2001, Agarwal 1992, Das 2010, Wan et al. 2011). In the example of the Zambrana-Chacuey region of the Dominican Republic, Rocheleau (2001) found that women are responsible for food trees, and those that provide medicine, shade, and firewood, while men specifically work with timber trees for economic gain.

I argue that conservation activities in developing countries must integrate gender awareness into their practices. Sodhi et al. (2010) in their article “Empowering women facilitates conservation” identify that women are exceptionally needed in conservation for three reasons: “women are better at communicating with women regarding environmental issues, women may be more adept at identifying female related issues in conservation thereby bringing fresh angles to solving environmental problems, and women can provide leadership and serve as role models for younger female conservation professionals.” Similarly, Agarwal (2009) determined that women’s participation in forest management decisions led to better conservation outcomes.

In short, this Master’s Project reinforces the findings of these earlier researchers who argued that considering conservation without gender awareness is harmful to

conservation's own objectives because it fails to integrate half of the voices that need to be heard. In order to create a protected area management system that both benefits biodiversity *and* local people, women must be specifically acknowledged as vital voices in that process.

## 1b. Background: Women, Gender, and the Environment

*To promote gender equality and empower women (3)*

*To ensure environmental sustainability (7)*

These are goals number three and number seven of the eight United Nations' Millennium Development Goals, established and adopted in 2000, with the immense objective of making the world a significantly better place by 2015, particularly through the eradication of poverty (United Nations. <http://www.un.org/millenniumgoals/>) As of this writing, the deadline for these goals is less than a year away, and there is still much work to do in achieving both gender equality and environmental sustainability.

Of course, the story of seeking gender equality and a healthy environment is not a new one. It is a story that begins long before the 2000 Millennium Development Goals. In 1976, the United Nations declared the beginning of a "Decade of Women" with the desire to focus international attention on addressing and integrating women into development projects (United Nations Global Issues, [un.org/en/globalissues/women/](http://un.org/en/globalissues/women/)). Before that decade had passed, internationally-influential organizations such as United States Agency for International Development (USAID) and the World Bank declared the "Decade of Women" a failed attempt and decided instead to focus on gender in development projects, with the hope that through addressing the differences between men and women, gender equality would be more accurately targeted (Samberg et al. 2012). Evolving from this idea, at the Fourth World Conference on Women in Beijing in 1995, the idea of "mainstreaming gender" arose—that is, demanding that gender be a central issue when addressing and implementing *any* development project (United Nations Women, [un.org/womenwatch/daw/beijing/](http://un.org/womenwatch/daw/beijing/)). Since that time, gender mainstreaming has been an essential aspect of development projects, including the conservation management of protected areas. Ten significant international agreements on gender, environment, and sustainable development occurred from 1979 to 2012 (Table 1). Organizations such as the World Wildlife Fund, the United Nation Environmental Programme (UNEP) and the International Union for Conservation of Nature (IUCN) have all adopted conservation practices and policies that explicitly address differences between men and women as they relate to natural resource use and dependency.

<p><b>United Nations Framework Convention on Climate Change (UNFCCC).</b> The Convention was adopted in May 1992, and opened for signature a month later at the UN Conference on Environment and Development in Rio de Janeiro, Brazil. It entered into force in March 1994.</p>	<p>Adopts a goal of gender balance in bodies established pursuant to the Convention and the Kyoto Protocol, in order to improve women’s participation and inform more effective climate change policy that addresses the needs of women and men equally. Calls on the national adaptation plan process to be gender-sensitive. Calls on the Green Climate Fund to promote environmental, social, economic, and development co-benefits and take a gender-sensitive approach.</p>
<p><b>United Nations Convention to Combat Desertification (UNCCD).</b> In June 1994 the UNCCD was open for signature by national governments; implementation began in 1996. In March 2011 the UNCCD developed a Gender Advocacy Policy Framework.</p>	<p>Stresses the important role played by women in regions affected by desertification and/or drought, particularly in rural areas of developing countries, and the importance of ensuring the full participation of both men and women at all levels. Calls for national action programs that increase the participation of local populations and communities, including women, farmers and pastoralists, and delegation to them of more responsibility for management.</p>
<p><b>United Nations Convention on Biological Diversity (CBD).</b> In 2012 a request was made to the Secretariat of the Convention to update the current Gender Plan of Action (2008–2012) to 2020, taking into consideration the Strategic Plan for Biodiversity 2011–2020 and its Aichi Biodiversity Targets.</p>	<p>Promotes women’s knowledge and practices in the conservation and sustainable use of biological diversity in the agricultural sector. Promotes gender-specific ways in which to document and preserve women’s knowledge of biological diversity. Calls for gender balance in various bodies. Points to the gender and cultural impacts of tourism.</p>
<p><b>Convention on the Elimination of all forms of Discrimination Against Women (CEDAW).</b> The principal instrument for the protection of women’s rights is the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) adopted in 1979 by the General Assembly of the United Nations (UN).</p>	<p>Ensures women the opportunity to represent their Governments at the international level and to participate in the work of international organizations; Ensures equal rights to bank loans, mortgages and other forms of financial credit; Ensures that women in rural areas can participate in and benefit from rural development; participate in development planning at all levels; obtain training, education, and extension services; have access to agricultural credit and loans, marketing facilities, appropriate technology; and are treated equally in land, agrarian reform, and land resettlement schemes.</p>
<p><b>Agenda 21.</b> Agenda 21 was adopted at the United Nations Conference on Environment and Development, in Rio de Janeiro in 1992.</p>	<p>Chapter 24, entitled Global Action for Women towards Sustainable Development, calls upon governments to make the necessary constitutional, legal, administrative, cultural, social and economic changes in order to eliminate all obstacles to women’s full involvement in sustainable development and in public life. Agenda 21 recognizes the importance of the knowledge and traditional practices of women, and underscores the contribution women have made to biodiversity conservation.</p>

<p><b>World Summit on Sustainable Development (WSSD).</b> The WSSD Plan of Implementation was adopted in Johannesburg in 2002.</p>	<p>Calls for mainstreaming gender perspectives in all policies and strategies, the elimination of all forms of discrimination against women and the improvement of the status, health and economic welfare of women and girls through full and equal access to economic opportunities, land, credit, education and health-care services.</p>
<p><b>Rio+20.</b> The Future We Want was adopted in Rio de Janeiro in June 2012.</p>	<p>Affirms that green economy policies in the context of sustainable development and poverty eradication should enhance the welfare of women and mobilize the full potential and ensure the equal contribution of both women and men. Resolves to unlock the potential of women as drivers of sustainable development, including through the repeal of discriminatory laws and the removal of formal barriers. Commits to actively promote the collection, analysis and use of gender sensitive indicators and sex-disaggregated data.</p>
<p><b>Millennium Development Goals</b></p>	<p>The Declaration assures equal rights and opportunities for women and men; promotes gender equality and the empowerment of women as effective ways to combat poverty, hunger and disease, and to stimulate development that is truly sustainable; and ensures that the benefits of new technologies, especially information and communication technologies... are available to all.</p>
<p><b>Commission on the Status of Women.</b> The 52nd session of the Commission on the Status of Women (2008) identified gender perspectives on climate change as its key emerging issue.</p>	<p>Urged governments to integrate a gender perspective in the design, implementation, monitoring and evaluation and reporting of national environmental policies, strengthen mechanisms and provide adequate resources to ensure women's full and equal participation in decision making at all levels on environmental issues, in particular on strategies related to climate change and the lives of women and girls.</p>
<p><b>Fourth World Conference on Women.</b> Two documents emerged from the IV World Conference on Women in 1995: the Beijing Declaration and Platform for Action.</p>	<p>Called for the active involvement of women in environmental decision making at all levels, the integration of gender concerns and perspectives in policies and program for sustainable development, and to strengthen or establish mechanisms at the national, regional and international levels to assess the impact of development and environmental policies on women.</p>

Table 1: *Key international agreements on gender, environment, and sustainable development.* (IUCN, Gender and Environment Index 2013)

IUCN was the first conservation organization to incorporate gender awareness into their policies. One of their three focal points of gender mainstreaming is the explicit intention to listen to women's voices and carry those voices to a global audience (IUCN Global Gender Office, [iucn.org/about/work/programmes/gender/](http://iucn.org/about/work/programmes/gender/)). From their dedication to gender mainstreaming in environmental work, IUCN released, in November 2013, a comprehensive report ranking 72 countries on their integration and awareness of women in environmental decisions. This pilot project, called *The Environment and Gender Index*

(EGI), “assesses the conditions for gender equality and women's empowerment in the environmental arena using 27 indicators divided into 6 categories for 72 countries. The goal of the EGI is to measure progress, improve information, enhance policy and program development, and ultimately empower countries to take steps forward for gender equality and for the environment” (IUCN *The Environment and Gender Index Report* 2013. Table 2 and Figure 1).

Category 1: Livelihood.	This category provides a base line indication of a country's abilities to meet the fundamental needs of its population.
Category 2: Ecosystem	This category focuses on presenting the specific factors related to environmental preservation, sustainability and resource use.
Category 3: Gender-based Rights and Participation	This category specifically addresses a country's commitment to gender equality as well as the ability of women to engage in leadership and decision-making roles.
Category 4: Governance	This category assesses the effectiveness of a country's fundamental institutional capacities as well as the ability of its citizens to participate freely in the political process.
Category 5: Gender-based Education and Assets	This category focuses on equal access for women to basic education and resources. Access to these fundamental resources provides women with the tools, skills and preparation to effectively engage in environmental decision-making and resource use and access.
Category 6: Country-Reported Activities	This category includes four indicators created by the EGI team that assess a country's inclusion of gender in Conference of Parties (COPs) reports as well as a country's inclusion of environmental sustainability in CEDAW (Committee on the Elimination of Discrimination against Women) reports.

Table 2: *The categories of EGI's evaluation. The score for each country is based on the weighted averages of these six categories and scaled from 0 -100, where 100 = the most favorable conditions for gender equality and women's empowerment in the environmental arena. (IUCN, The Environment and Gender Index 2013)*

STRONGEST PERFORMERS			MODERATE PERFORMERS			WEAKEST PERFORMERS		
1	Iceland	0.84	19	Costa Rica	0.69	45	Jordan	0.49
2	Netherlands	0.83	20	Argentina	0.68	46	India	0.49
3	Norway	0.81	21	Mexico	0.67	47	Burkina Faso	0.48
4	Sweden	0.81	22	Romania	0.66	48	Tajikistan	0.48
5	France	0.80	23	Jamaica	0.66	49	Morocco	0.47
6	Finland	0.80	24	Brazil	0.66	50	Kenya	0.47
7	Canada	0.79	25	Mongolia	0.66	51	Laos	0.47
8	Spain	0.79	26	Philippines	0.60	52	Egypt	0.47
9	Denmark	0.78	27	Georgia	0.60	53	Nepal	0.47
10	Australia	0.78	28	Viet Nam	0.59	54	Liberia	0.47
11	Switzerland	0.77	29	Thailand	0.59	55	Mozambique	0.45
12	Poland	0.77	30	Turkey	0.58	56	Saudi Arabia	0.45
13	Portugal	0.75	31	Moldova	0.58	57	Benin	0.44
14	USA	0.73	32	Dominican Republic	0.57	58	Madagascar	0.44
15	Greece	0.73	33	Indonesia	0.56	59	Algeria	0.44
16	Italy	0.72	34	China	0.55	60	Bangladesh	0.43
17	Panama	0.70	35	Kyrgyzstan	0.54	61	Gambia	0.42
18	South Africa	0.70	36	Malawi	0.54	62	Uganda	0.41
			37	Armenia	0.54	63	Cameroon	0.40
			38	Sri Lanka	0.53	64	Mali	0.40
			39	Uzbekistan	0.51	65	Congo	0.39
			40	Fiji	0.51	66	Ethiopia	0.38
			41	Ghana	0.51	67	Pakistan	0.38
			42	Lebanon	0.50	68	Burundi	0.37
			43	Gabon	0.50	69	Syria	0.37
			44	Tanzania	0.50	70	Mauritania	0.37
						71	Yemen	0.31
						72	Dem Rep Congo	0.27

KEY:	
Green	- OECD Countries
Light Blue	- Latin America and Caribbean
Purple	- Africa
Yellow	- Eurasia
Orange	- Asia
Red	- Middle East and North Africa (MENA)

Figure 1: *The overall ranking of 72 countries evaluated in the EGI.* (IUCN, The Environment and Gender Index 2013)

## 2. Study Area

There are many layered issues that marginalize women in developing countries and thus make them harder to reach when it comes to integrating them into conservation activities; such is the case in Uganda. At the rural level, Ugandan women struggle with access to land ownership. This is a fundamental obstacle and I address it here because it underlies all conservation activity. I continue to discuss challenges at the household level for rural women. These all tie together since they demonstrate how women are systematically marginalized at different spatial scales within Uganda, making every effort to incorporate them into conservation planning all the more important and necessary.

## 2a. Women in Uganda

Uganda ranks number 62 on the IUCN’s EGI (Figure 2), just ten countries above the very bottom (where its neighbor, the Democratic Republic of Congo, comes in last).

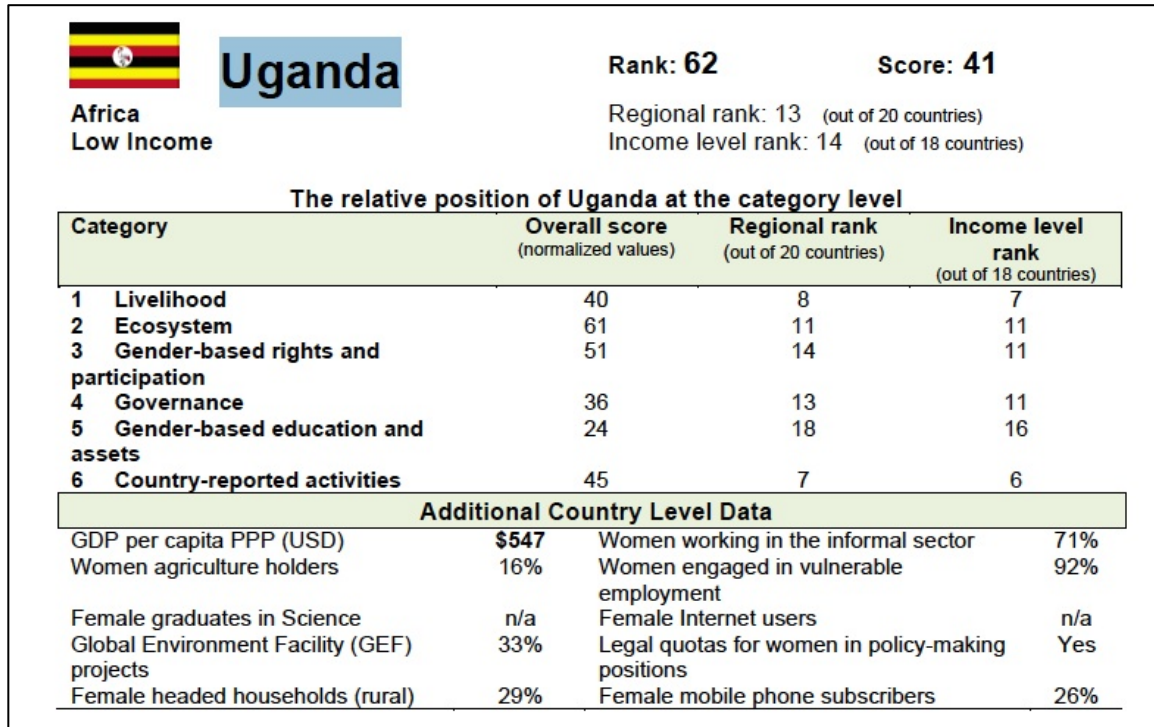


Figure 2: *EGI's assessment of Uganda.* (IUCN, The Environment and Gender Index 2013)

At first, Uganda’s poor ranking might seem surprising, since thirty-five percent (35%) of Uganda’s parliament is made up of women, and the State Minister for the Environment, Flavia Munaaba, is a woman (United Nations Country Data, Uganda). It was because of this high rate of women in political office that, in 2009, Uganda ranked 49 out of 183 countries in the Gender Empowerment Measure. Yet this impressive representation in government does not translate to the rural, household level, where women are often left out of decision-making and are trapped in chronic poverty (Rugadya, 2010). It is important to note that Uganda is a landlocked country in East Africa where only sixteen percent (16%) of the population lives in urban areas (United Nations Country Data, Uganda). This suggests a potential disconnect between urban policy and how it translates to rural practice. EGI considered Uganda to be one of the worst performers for “women’s access to property other than land” (Figure 3), which means “women have no/few/unequal legal rights to own or administer property other than land or their access is severely restricted by discriminatory practices” (IUCN EGI: 129).

<b>Access to Property</b>	
<i>Description</i>	Women's access to property other than land.
<i>Source/date</i>	OECD Gender, Institutions, and Development Database (GID), 2012
<i>Rationale</i>	Women's equal access to resources such as property affects her abilities to engage in decision-making and impact the environmental arena.
<i>Highest value</i>	1 (Thailand, Indonesia, Madagascar, etc.) – best performers
<i>Lowest value</i>	0 (Uganda, Kenya, Egypt, etc.) – worst performers
<i>Data notes</i>	Data from country specific sources provided in the OECD SIGI country profiles for 2011. Score is based on women's legal and de facto access to property other than land. This is a 3 point variable based on the following scale: <ul style="list-style-type: none"> <li>• 1 = Women have equal legal rights to own and administer property other than land as men</li> <li>• 0.5 = Women only have rights to own and administer some kinds of property (i.e. goods they received from their parents such as inheritance or dowry) or they have equal legal rights but in practice they face socio-cultural discrimination to owning and administering property</li> <li>• 0 = Women have no/few/unequal legal rights to own or administer <u>property other than land or their access is severely restricted by discriminatory practices</u></li> </ul> <p>Missing values for 18 developed countries estimated via internet search of OECD databases.</p>

Figure 3: EGI's "access to property" indicator. (IUCN, The Environment and Gender Index 2013)

Though the EGI here focuses on the "lack of property other than land," lack of land ownership is a tremendous factor in rural women's disadvantage in Uganda. Margaret Rugadya—Executive Director of Associates Research Uganda and Program Officer with the Ford Foundation, Nairobi—described in her 2010 report "Women's Land Rights in Uganda" a significant powerlessness experienced by rural women in Uganda due to their lack of access to land, income, and education, and compounded by gender discrimination. Though Uganda's 1998 Constitution granted women equality to men—including in the ownership of land—in rural areas, traditional practices have not mirrored the rights granted nationally (Rugadya 2010, Women's Land Link Africa 2010). Identified as a "pattern of exclusion" (Women's Land Link Africa 2010) rural women in Uganda not only lack education and awareness of their rights, they also face customary practices that discriminate against women land ownership. At the household and community level, a patriarchal system remains whereby women are deprived of decision-making power (Rugadya 2010, Women Land Link Africa 2010, Adoko et al. 2009). In rural regions, many widows—though they possess the right to own land they shared with their husband—are generally stripped of this right by neighbors or relatives who ultimately take ownership of the land (Adoko et al. 2009). Additionally, it is common for the brothers of separated and single women to take over land that would otherwise belong to the woman (Adoko et al. 2009). For a rural Ugandan woman, living as a subsistence farmer, having no access to or ownership of land can directly lead to severe malnutrition for herself and her family. In other words, lack of land ownership means a woman is powerless to control her own life.

As of 2010, women made up eighty-three percent (83%) of the agricultural work force yet only sixteen percent (16%) are reported as owning land independently, and only seven percent (7%) of registered land is linked to women owners (Rugadya 2010, ICRW 2011). Due to their lack of access to land and other income-generating resources in rural areas of Uganda women are severely limited in their ability to rise above subsistence agriculture. Rugadya (2010, 2) declares that land use and ownership in Uganda “cannot be understood without reference to colonialism.” The British colonizers of Uganda established a multi-tier system of land ownership and one that excluded women at every tier (Rugadya 2010); the legacy of this system has significant impact today. Uganda’s National Development Plan (NDP) of 2010 acknowledged that “discrimination against women through traditional rules and practices that explicitly exclude [women] or give preference to men is recognized as a key constraint to women’s empowerment and economic practice” (Rugadya 2010, 12). Rugadya cites that despite this acknowledgement, the NDP utterly fails in addressing *how* to ameliorate the discrimination.

Women’s status as (non)land owners provides insight into why it remains difficult to account for their voices in conservation practice. 1) The structure of land rights, which may be considered one of the most fundamental needs in rural Uganda, is inherently stacked against women. This structural silencing may prevent conservation practitioners from even seeing women as they develop rules and practices. 2) Without assurances to land, women’s livelihoods are more tenuous. This indicates that non-land based resources – like forest products – are more crucial to women than to men (Rocheleau 2001, Wan 2011, Agarwal 1992). Cutting off access to such resources may be devastating for Ugandan women. 3) It may seem to female rural inhabitants that protected area managers are prioritizing the rights of wildlife in protected areas over their own rights, since they remain systematically disadvantaged vis-à-vis male counterparts. This could result in ill will or apathy toward park management on the side of women. For these reasons, land tenure becomes a central component of conservation success. If women had more assurance that they had constant access to land from which to grow crops, collect wood, and gather water, they may 1) have more time to participate in conservation management activities and 2) feel more encouraged to value protected area conservation objectives.

## 2b. Bwindi, Uganda

I focused on these issues in one particular place in Uganda: Bwindi Impenetrable National Park (BINP). BINP is particularly interesting because women struggle with the aforementioned challenges in relation to a prominent charismatic species. BINP is located in the southwestern corner of Uganda (Figure 4) and lies on the western edge of the Rift Valley. It is made up of 128 square miles (331 km) of Afromontane forest (Korbee 2007, Blomley 2003) – the same ecosystem that constitutes the more well-known Virunga National Park in the Democratic Republic of Congo. BINP is a biodiversity hotspot; in 1994 it received World Heritage status from the United Nations Educational, Scientific and Cultural Organization (UNESCO). It has Category II park rating from the IUCN, which defines such areas as “typically large and conserve[ing] a functioning ecosystem”

(IUCN, Protected Areas 2014). BINP is a highly significant water catchment area—it is the origin of five major rivers that flow into Lake Edward—and it has great effect on local climate (Korbee 2007, Blomley 2003). BINP (Figure 5) is home to over 95 different species of mammals and 160 different tree species, many of which are endemic and endangered species (Byaruhanga 2008, UNESCO 2013).



Figure 4: *Bwindi is located in southwestern Uganda.*

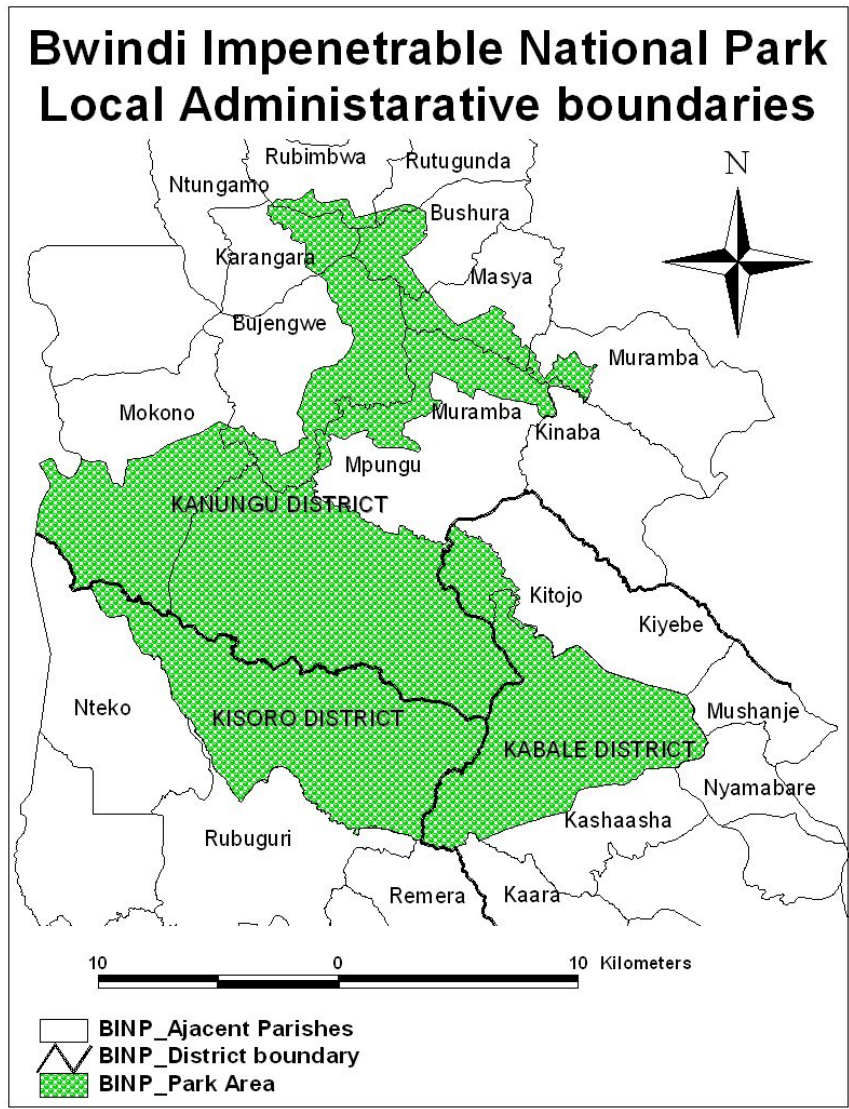


Figure 5: BINP depicted in green.

As was the case in most of Africa, protected areas were originally created in Uganda under colonial rule, for colonialist desires (Byaruhanga 2008, Miller et al. 2010). In 1891 the king of Uganda signed all forests and wildlife to the British Queen (Byaruhanga 2008) and in 1932 BINP was designated as the “Crown Forest Reserve.” Twenty-nine years later BINP became a game reserve, but it was not until 1991 that BINP officially became a national park, in no small part due to pressure from international organizations, especially USAID (Tumusiime et al. 2012). The designation of national park status led to an established law enforcement unit for patrolling the park and stricter regulations, such as removing people who were living in the park (Byaruhanga 2008, Korbee 2007, Tumusiime et al. 2012). Gathering resources in the park, such as firewood and food, became illegal and strictly enforced. BINP was divided into four zones: a tourism zone (for gorilla trekking), an administrative zone, wilderness zone (no people allowed), and multiuse zone. Uganda Wildlife Authority, known as UWA, manages BINP and in the case of the multiuse zones, UWA approves of specific individuals whom they allow to

gather medicine and other plants from the forest under their strict supervision (Byaruhanga 2008, Blomley 2003). Establishing BINP as a national park had a great deal to do with the fact that approximately half of the world's remaining mountain gorillas live in the forest and that, because of this, ecotourism to see gorillas is a very lucrative business (Byaruhanga 2008, Korbee 2007, Tumusiime et al. 2012).

Since 1998, mountain gorillas (*Gorilla beringei beringei*) have been listed on the IUCN Red List for Endangered Species as an endangered species. All of the world's remaining mountain gorillas exist either in BINP, or in the neighboring Virunga forest in the Democratic Republic of Congo (DRC) and Rwanda. Mountain gorillas are endangered for several reasons, primarily because of habit loss or being hunted, and as casualties of civil war. It is estimated that in the last four decades their population has declined by fifty percent (50%). There are approximately 680 mountain gorillas remaining in the world, with half the population in BINP (IUCN Red List 2008).

Gorilla conservation in BINP faces a considerable challenge in the fact that the area around BINP is home to one of Uganda's highest population densities and highest rates of poverty (Byaruhanga 2008, UNESCO 2013, Blomley 2003, Tumusiime et al. 2012). There are more than 300 people per square kilometer (Tumusiime et al. 2012) and over ninety percent (90%) of them are subsistence farmers (Korbee 2008). This means that human-wildlife conflict is a very real and frequent issue. Gorillas and other animals such as baboons come out of the park to eat crops in the farms along the park edge. Uganda has no compensation policy for crop destruction. Wildlife conflict, compounded by the fact that the natural resources of BINP are strictly inaccessible, creates tension and resentment felt by the local people toward BINP and the gorilla (Tumusiime et al. 2012, Korbee 2008, Blomley 2003).



Figure 6: *A visual example of the stark difference between BINP on the right and deforested, agricultural land on the left. (Photograph taken by author)*

## 2c. BINP management & the revenue sharing program

Aside from managing BINP, UWA controls the ecotourism sector of gorilla trekking. Tumusiime et al. (2012, 17) point out that BINP “generates more revenues than most other protected areas in Africa.” Tourists pay 500.00 USD per gorilla trekking visit. Gorilla trekking makes up 26% of tourism in Uganda and overall, tourism accounts for 38% of exports of the GDP (2012) and 5.6% of the GDP (The World Bank 2013). UWA’s main outreach strategy to the local community around BINP is to demonstrate the importance of the park—and the gorilla—based on the money coming in from tourism (Tumusiime et al. 2012, Korbee 2008, Blomley 2003). This happens not only through direct communication from UWA, but also through the policy of revenue sharing.

In 1995, Uganda National Parks (UNP) instituted a national policy of revenue sharing—a system in which the income generated by national parks through tourism is distributed to park-edge communities for various projects such as building schools or improving roads. Originally UNP determined to give 12% of park entry fees to local communities, but a year later changed it to 20% (Tumusiime et al. 2012). It is important to note that the park entry fee is *not* the equivalent of a gorilla trekking fee. As Tumusiime et al. (2012)

clarify, a park entry fee is 30.00 USD, which is very different than the 500.00 USD paid to see gorillas. This discrepancy led Cooperative for Assistance and Relief Everywhere (CARE) to advocate for a more equitable distribution of revenue to local people and in 2006, UWA in Bwindi created a gorilla levy fund whereby 10.00 USD of each gorilla levy fee is collected for distribution to local communities (Tumusiime et al. 2012).

Revenue-sharing as a concept is, as Tumusiime et al. (2012, 15) declare, “at the heart of the win-win narrative that combines concerns of the environment with those of local development... however evidence shows that the effectiveness of such policies is mixed.” Revenue sharing is perceived as a strategy to combine biodiversity conservation with poverty reduction. In the case of BINP, though UWA reported distributing 157,642 USD to local park-edge communities from the gorilla levy fee, UWA collected the funding from August 2006-July 2008 but did not begin distribution until July 2010. As of January 2011 Tumusiime et al. (2012) reported that several villages were still without their portion. Part of this has to do with UWA’s attempt to consolidate funding by alternating the years it distributes money so that it can distribute a larger amount, but a weakness to this strategy is the mistrust and resentment communities feel in perceiving a denial of income and in the inconsistent nature of the giving (Tumusiime et al. 2012). This has a great deal to do with local communities’ lack of information about how the revenue system works. All of this breeds “feelings of helplessness, apathy, and anger which strongly influences attitudes toward park management” (Tumusiime et al. 2012).

The case of BINP demonstrates not only the good intentions behind the concept of revenue sharing but also the murky reality of how it actually functions. In managing BINP, UWA attempts to appease park-edge people with the promise—if not the actual—distribution of funds. In this system of revenue sharing, there is only a small portion of funds that actually reaches the local people living beside BINP.

Another challenge in revenue sharing is the very nature of distribution. Uganda’s Local Government Act of 1997 demands that UWA work directly with local village governments in the distribution of revenue sharing funds. However, the Local Government Act acknowledges only the top two tiers—the sub-country and district level—of what is a five-tier system of local government, making it so that UWA distributes funds to either the sub-county or district level with the expectation these tiers will then distribute it to lower levels, and to the community (Tumusiime et al. 2012). Though eighty percent (80%) of funds received by local communities are reported to be used in community projects, local people did not readily associate these projects as outcomes of conservation and because of this, UWA in 2006 began to change its distribution practice from the community level to the individual household level by distributing goats (Blomley 2003, Tumusiime et al. 2012). Tumusiime et al. (2012) state that goats were considered by UWA an appropriate substitution because they provide meat and manure, supposedly therefore increasing soil fertility. In practice, only 9 goats are given out to individuals each year in each village. As Tumusiime et al. (2012) calculate, a household could wait 11-17 years to receive their goat (and an individual goat is about 20.00 USD). Additionally, in Tumusiime et al.’s study (2012) they received many statements of corruption in the distribution of goats, with some families receiving multiple goats while others had none. Nowhere in the literature I reviewed is there any

discussion about the distribution of goats with a gender analysis, though if goats are distributed to land-owning households, it follows that women are not specifically receiving goats outside of their relationship to their husband.

This inequitable reality of revenue sharing is all the more stark given UNESCO's World Heritage declaration that BINP is: "a model for integration of community sustainable resource management in the country and possibly in the East African Region" (UNESCO, <http://whc.unesco.org/en/list/682>). UWA's own official website states:

*UWA recognizes the local community as a key stakeholder in ensuring the protection of wildlife both inside and outside Uganda's protected areas. Traditional conservation approaches largely excluded the communities from protected area management. In contrast, community conservation, which has been employed since the 1990s, aims to harmonize the relationship between park managers and neighboring communities, allowing these communities access to protected area resources. It also encourages dialogue and local community participation in planning for and management of these resources. (Author's emphasis)*

Yet, Tumusiime et al. (2012, 25) write of BINP, "Neither local people nor their leaders have any liberty to make (final) decisions on how local tourism revenues should be shared." Tom Blomley, Uganda Conservation and Development Coordinator at CARE (2003) states in his report "Natural resource conflict management: the case of Bwindi Impenetrable and Mgahinga Gorilla National Parks, southwestern Uganda:"

*National and international concerns for biodiversity conservation, watershed catchment functions and generation of foreign exchange earnings through tourism appear to have superseded and significantly displaced local interests in increased agricultural production, utilization of biodiversity resources and securing sustainable livelihoods. (239)*

Thus, through this literature review, it is apparent that there is a gap between the declaration of local people's involvement in conservation decision-making in BINP and what is really happening on the ground. Additionally, as in other developing countries, rural women in Uganda—the main agents in the natural world and those with most to lose from deforestation, wildlife conflict, and lack of access to resources—are significantly disadvantaged because of their gender. Listening to the needs and concerns of BINP park-edge women is vital to conservation efforts, not only because their voices have not been heard, but also because of Sodhi et al.'s (2010) threefold importance of women in conservation: they are better sharing wisdom and information with other women, they have unique perspectives to offer new understandings, and they can act as role models and leaders to inspire other women in Bwindi.

It is my attempt to show that land tenure disadvantage and BINP gorilla conservation practices created a compounded marginalization of Bwindi women. I wanted to investigate the interconnections between rural women's lack of land ownership, their dependence on natural resources, their lack of access to BINP resources, their lack of integration into BINP decision making, and the uneven revenue-tenure system. I wanted as well to investigate the ways in which BINP conservation may also be beneficial to

park-edge women and to acknowledge how these women can contribute to conservation agendas moving forward.

### 3. Methods & Analysis

#### 3a. Detail of Methods

In country, I was hosted by the Ugandan nonprofit *Conservation through Public Health* (CTPH). Founded and directed by Dr. Gladys Kalema-Zikusoka, CTPH focuses on conservation education outreach, particularly around the spread of diseases between human beings and gorillas. Their outreach concentrates on sanitation, hygiene, family planning, and gorilla education; they also conduct gorilla research and veterinary care. Two staff members from CTPH acted as community facilitators and translators for my research. I was based in Mokono parish, at CTPH's base camp.

I collected my data for this study during a two-month field season from mid-July to mid-September 2013. I conducted semi-structured interviews with 36 women in 11 villages bordering BINP within Mokono and Bujengwe parishes, in the district of Kanungu. I digitally recorded each interview. In some villages, CTPH had trained women as outreach volunteers and if we [my translator and I] could find them, we interviewed them. In all other cases, we opportunistically selected women to interview. Sometimes this meant wandering away from a village center into hillside farms in order to find women to talk with.

Villages were selected based on their ability to be accessed within a day. With the exception of Nwkenda, all villages were visited only once. Some villages required 4 hours of walking on foot after a 2 hour motorcycle ride and thus, the study was limited by the geography of the location and the limited transportation options.

I also conducted participant observations and gathered understanding of the interconnected stories of conservation in Bwindi through informal conversation. Newing (2011, 86) defines participant observation as “a relatively unstructured interactive method for studying people as they go about their daily routines and activities.” I additionally conducted a formal video interview with UWA Community Conservation Warden Olivia Biira.

#### 3b. Positionality

Sophia Villenas (2000) writes in her essay “The Colonizer/Colonized Chicana Ethnographer: Identity, Marginalization, and Co-optation in the Field” about her awareness of the role of researcher and that of the “other.” She declares, “As researchers, we are also like colonizers when we fail to question our own identities and privileges” (Villenas 2000, 76). In country I was very aware of my privilege and my separateness. As *another* white researcher from a developed country trying to speak for and about rural African women, I wish to embody what Professor George Noblit said while lecturing on qualitative research: “I try not to make the vulnerable more vulnerable” (March 26,

2014). It is my intention, as well, to not make the vulnerable more vulnerable. I attempt this by providing direct quotations from my respondents, by having their voices influence and inform my discussion and recommendations, and by not taking for granted the dominant conservation narrative about BINP that is presented globally—that local people are well recognized as stakeholders in protected area decision making.

### 3c. Semi-structured questionnaire

I designed a semi-structured questionnaire based on gathering three components: demographic information, activity mapping and livelihood, and value assessing. Due to the nature of the semi-structured questionnaire—the presence of open-ended questions—and due to time constraints for some respondents, not all questions were asked to each respondent. As such, all percentages reported in my findings are calculated out of total number of responses to the specific question, not total number of respondents. As I began to conceptualize the questions for my research, I designed a schematic (Figure 7)—which I refer to as the octopus map—to aid me in visualizing the interwoven pieces of the story of women and conservation in BINP. I distilled three central themes of interest:

- *Environmental Value*: How do women living along BINP value the gorilla, value BINP itself, and value conservation in general? How do they describe their relationship to conservation? What are the positive and negative impacts they feel from conservation in BINP?
- *Hope and Motivation*: What do women hope for their lives, their future, their community and for other women? What are the things most important to them? What are the challenges and barriers stopping them from achieving their goals?
- *Gender Roles*: How is a woman's life affected by her gender? How does gender manifest in a woman's labor and time in her day? Do women living in this area feel empowered or disempowered?

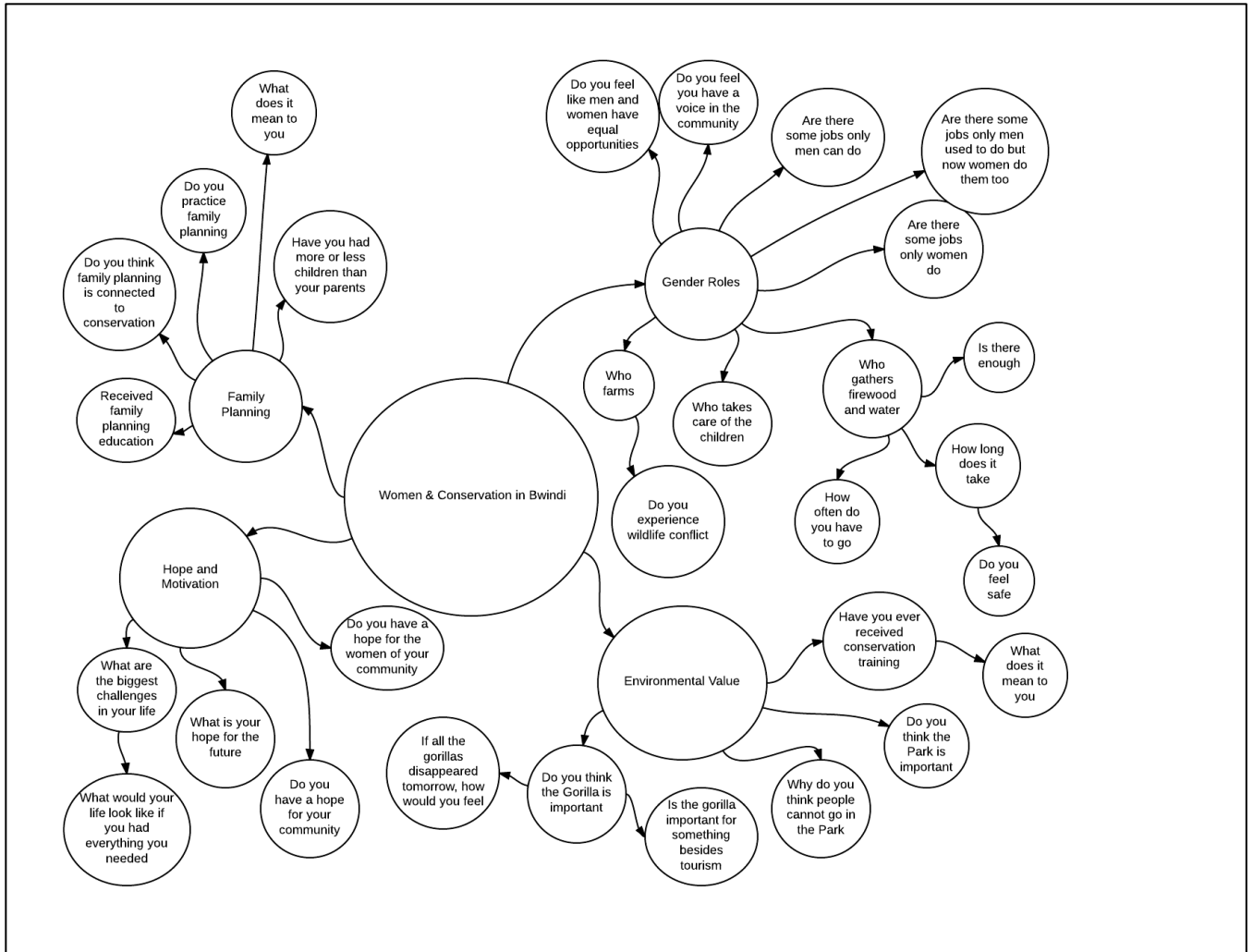


Figure 7: The “octopus map” I created as a conceptual flow chart illustrating the most central themes of my study and how they relate to the questions I wanted to ask in my questionnaire.

After creating a list of questions that supported my central themes, I organized the study into four sections:

1. *Demographic information*—to gather the individual details of the woman I was interviewing.
  - How old are you?
  - How many children do you have?
  - How long have you lived in this area?
  - Did you go to school?
  - Why did you have to leave school?
  - Would you go back to school if you could?
2. *Activity mapping & livelihood*—activity mapping is a qualitative method to investigate the division of labor within households, at the family level; livelihood questions sought to understand how a woman survives day to day.

- Who gathers firewood/water?
  - How often in a week/day do you gather firewood/water?
  - How long does it take you?
  - Do you have enough firewood/water?
  - Do you have enough food to eat?
  - What is the biggest challenge you face?
  - Do you make any income?
  - Do you experience wildlife conflict?
  - How does wildlife conflict make you feel?
3. *Value-assessing*—the weight of my questionnaire was assessing the value women gave to the gorilla, the park, and to conservation in general. Value assessment attempts to understand the worth of conservation to an individual and/or community in order to understand how people choose to approach and participate in it. The dominant approach in biodiversity conservation is intrinsic value. Intrinsic value represents value that is independent of a market, the value of something in and of itself, not for what it can be priced at. In this example, tourists come to see the gorilla because of their belief in the gorilla’s intrinsic value. Yet frequently intrinsic value is not meaningful at a local level to park-edge communities. There are other values, such as political, economic, social, and cultural value that a community may place on conservation. Understanding the value local communities place on conservation is critical to successful, community-integrated conservation. That is, if you can know why someone cares about something, you can better understand how to integrate their needs for mutual gains:
- Do you find value in the gorilla?
  - Do you find value in the gorilla beyond bringing tourists?
  - Do you find value in the Park?
  - If all the gorillas disappeared tomorrow, how would that make you feel?
  - Do you benefit from conservation? Does your community?
4. *Hope and Motivation*—to understand the desires and goals of women in the Bwindi area:
- If you had all the money you needed, what is your dream for your life?
  - What is the biggest challenge you face in your life?
  - What is your hope for the future—for yourself? For your family? For your community? For the women of this area?

### 3d. Limitations of the Study

There are two limitations to address as they relate to this study.

#### 1. *Translators*

Because I worked with two translators, depending on their time availability, my translations are not standardized across individuals. Both men that served as translators

were employed by CTPH and this could potentially bias answers if local women felt like they needed to answer a certain way in relation to the perceived authority of CTPH.

Most importantly, I did not have a female translator. Due to the potentially sensitive nature of some questions and real or perceived gender power dynamics, my results would have been more robust if I was able to employ a female translator. This would have served greatly to make female respondents more comfortable.

## 2. *Outsider researcher*

As an outsider to the Bwindi community—and of a different race—I am aware of the potential for respondents providing what they may feel are socially acceptable answers.

In order to address the limitations of my study, I triangulated my data. In using my interviews, my literature review, and my participant observations, my findings do not rely on any one source of data but rather the sum of multiple methods.

## 3e. Analysis

Upon my return from Uganda, I transcribed the digital recordings and analyzed the answers using a combination of manual coding and NVivo<sup>1</sup> to identify patterns and themes across individuals. Qualitative analysis, as defined by Newing (2011, 241), “involves building in depth description and interpretation of a situation or topic.” My findings are informed by the data from my interviews, my participant observations, and my literature review for a comprehensive analysis. I also used quantitative analysis to further understand and present my findings.

## 4. Findings

From my analysis of the data, six central findings emerged: 1) women are acutely dependent on natural resources; 2) women value the gorilla in economic terms and BINP in ecological terms; 3) women perceive the benefits of BINP as economic; 4) women perceive many costs from BINP; 5) women want above all else for their children to go to school; and 6) women feel intrinsically disadvantaged by gender. Below I discuss each finding in greater detail.

### 4a. Women are acutely dependent on natural resources

The analysis of my demographic data and activity mapping and livelihood data shows that women living along BINP match the trend of women in developing countries: they spend their day as water-gatherers, firewood-collectors, family caretakers, and farmers. Women reported spending an average of 2-hours per day gathering firewood. They reported needing an average of 1-hour per day for gathering water, but they make an average of 3 trips per day. All women reported growing food to feed themselves and their

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<sup>1</sup> NVivo is a software that facilitates the analysis of qualitative data.

families. Sixty percent (60%) said they made no income. Of those who reported receiving an income, they spoke of occasionally selling surplus food, selling crafts to the tourist market, or having a family member engaged in tourism work. Every single woman either dropped out of school, predominantly from a lack of school fees, or never went to school (12%). Additionally twelve percent (12%) never went beyond first grade. All women in this study, except for two, were married or had been married.

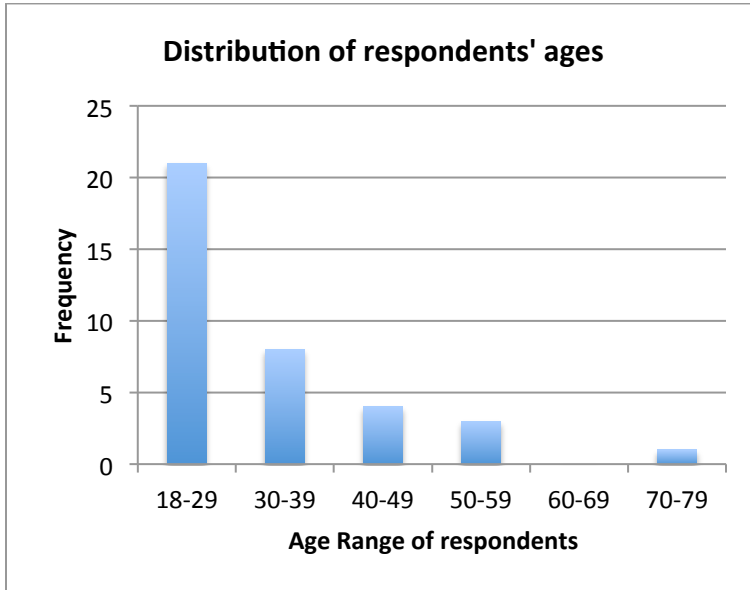


Figure 8: *Distribution of ages of respondents.*

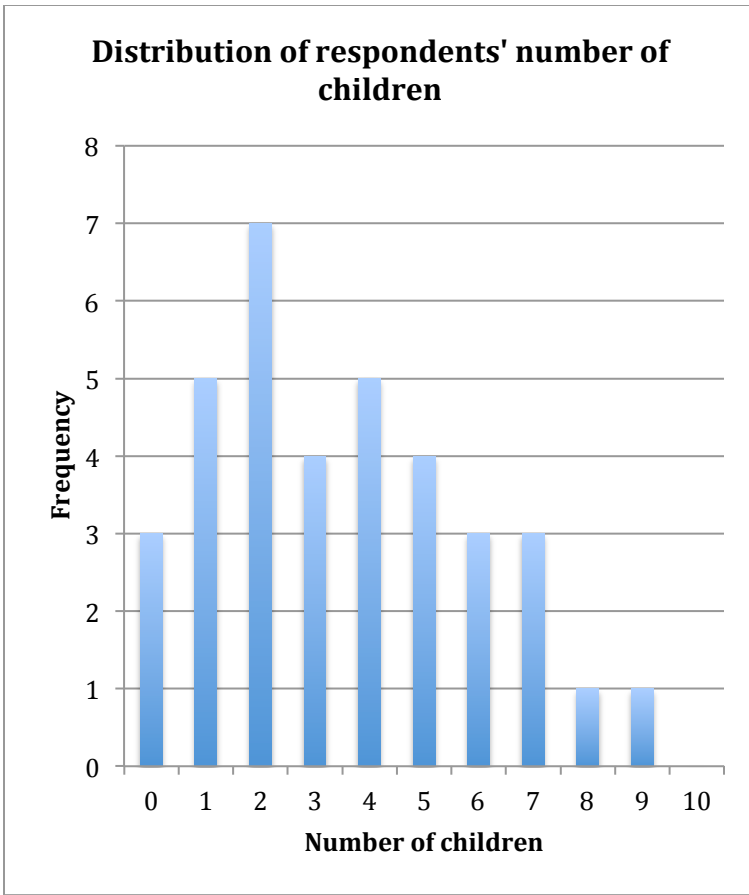


Figure 9: *Distribution of number of children of respondents.*

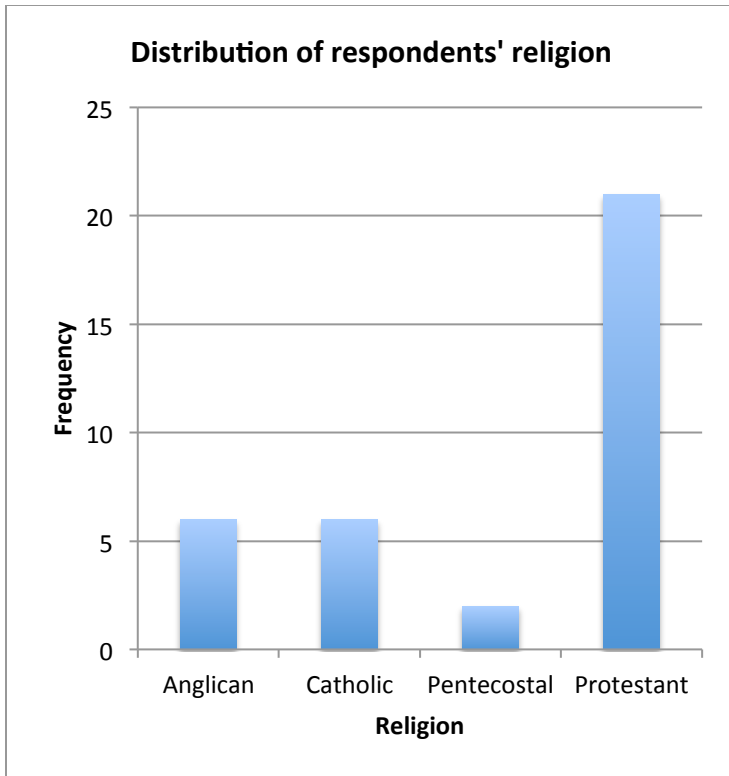


Figure 10: *Distribution of respondents' religion.*

#### 4b. Women value the gorilla in economic terms and BINP in ecological terms

Ninety-seven percent (97%) of respondents valued the gorilla as an economic resource to bring tourists. For example, one woman (F20) stated, *“Gorillas are to be respected and not beaten. [Why?] Because white people come to see them.”* Another women (F18) declared, *“They attract tourists who give us money.”*

Eighty-eight (88%) reported the gorilla is *only* valuable for this reason. When I asked: “If all the gorillas suddenly disappeared, how would this make you feel,” most women answered in emotional terms of sadness and anger of income loss:

*“They attract tourist. If they are gone, the tourists will not come. Tourists have been sponsoring other people's children, I want them to sponsor mine.”* (F34)

*“I would not be happy because tourists would leave and we would lose money.”* (F8)

I theorized that women who received conservation education would be more likely to value the gorilla for its intrinsic value, that is, for some reason other than economic value only. I believed this may be the case, hypothesizing that conservation outreach would, by

its nature, focus on explaining the importance of the park and thereby women who had received conservation education would integrate that teaching. I asked in my interviews if women had received conservation education, and if so, from where. The most common answers cited CTPH and UWA; there are other NGOs in the Bwindi area that lead workshops and trainings on conservation education. In the CTPH model, representatives from different villages are trained as conservation-educationvolunteers and return to their villages to, in theory, educate their fellow villagers about conservation. Of the women who said they had received conservation education, thirty-eight percent (38%) reported not knowing from where they had received conservation education.

In my findings, there is no difference between women who reported receiving conservation education and those who reported receiving no conservation education in valuing the gorilla as more than an economic-only value (Figure 11).

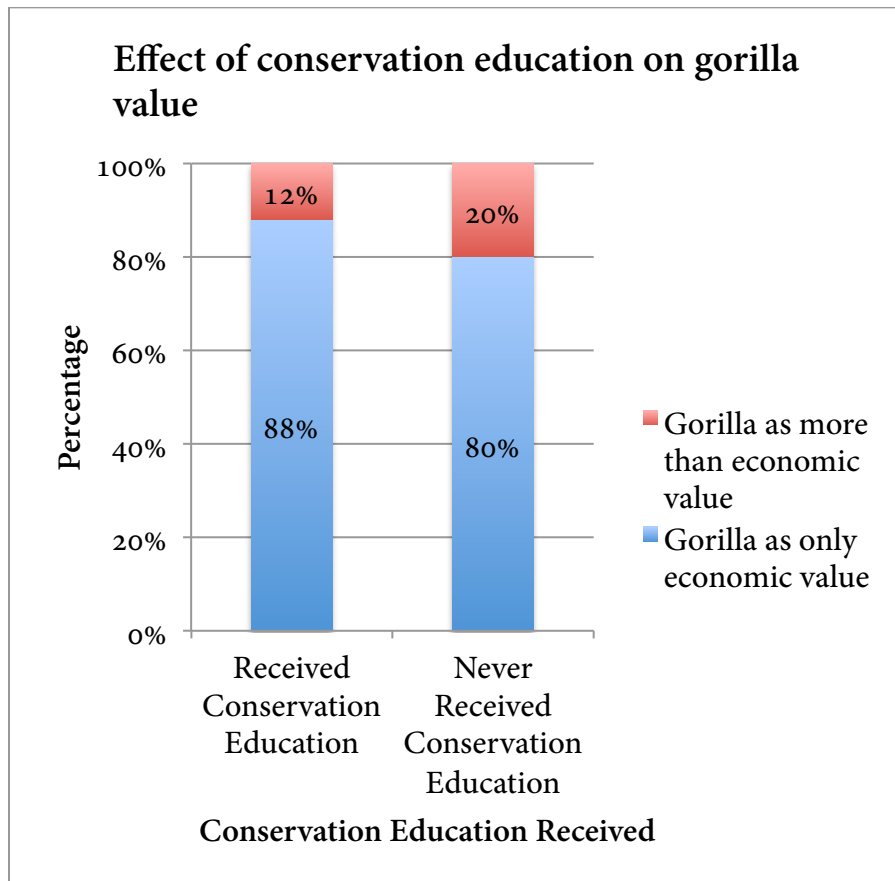


Figure 11: Comparison of conservation education to no-conservation education as it relates to valuing of the gorilla.

Twenty percent (20%) of women reported that they did not know why they were not allowed in the park.

After asking about value found in the gorilla, I asked if BINP itself held any value independent of the gorilla and tourism-generation. I wanted to understand if the gorilla and BINP were valued for the same reason (e.g. for tourism) or if they were considered separate entities of conservation. Eighty percent (80%) reported finding value in the Park and listed three reasons for that value (Table 3).

Reasons the Park is valuable that did not have to do with the gorilla & tourism	Percentage from those who answered “yes” *respondents could give more than one answer
Rain	66%
Weather (“ <i>good warmness and coldness</i> ”)	17%
Wind / Air	17%

Table 3: *Reasons women gave for the Park being important.*

In the case of the placing value on the gorilla, conservation education did not have an impact on its worth beyond an economic only value. Yet, in the case of valuing BINP itself, it appears that conservation education does have an impact on the park being important for reasons other than economic value (Figure 12).

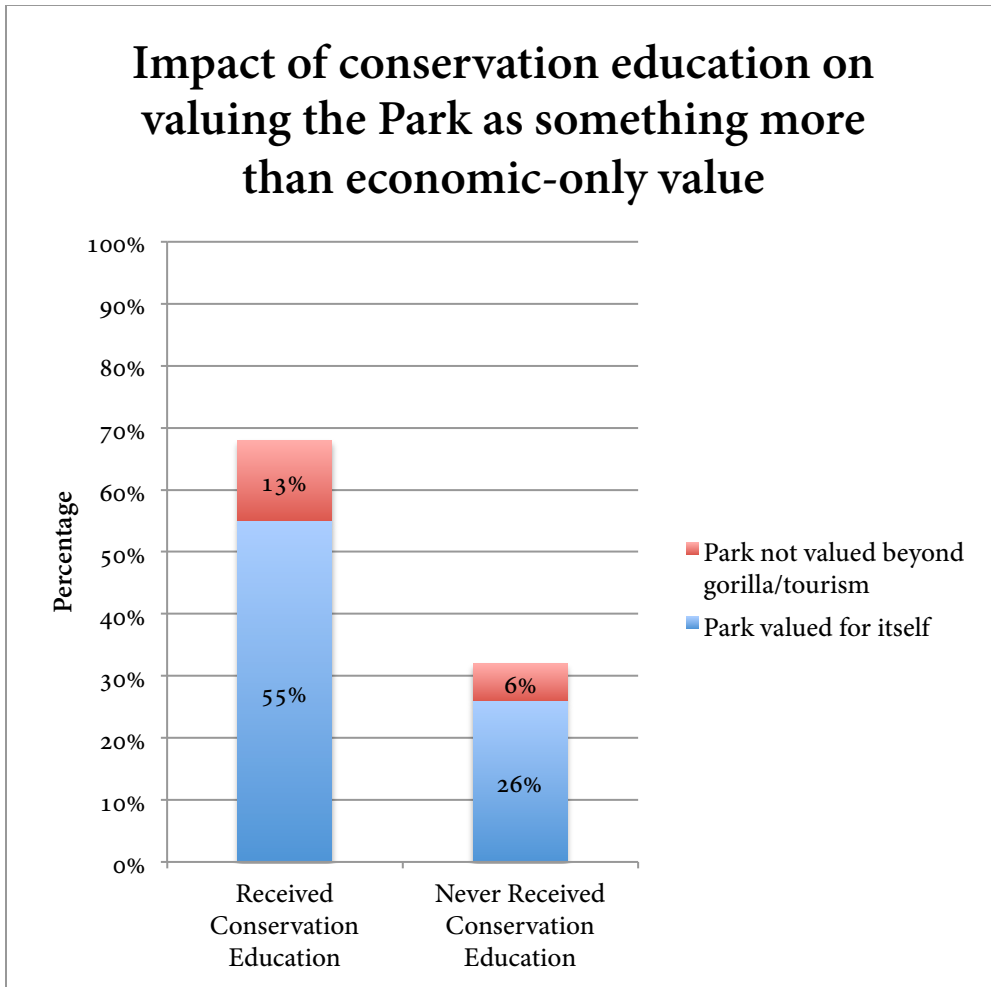


Figure 12: *A comparison of conservation education vs. no-conservation education on valuing of BINP as something more than economic-only value.*

#### 4c. Women perceive the benefits of BINP as economic

Women listed both direct benefits, such as receiving a goat through the revenue sharing program, and indirect benefits, such as having better roads from conservation activities in BINP (Table 4). In the example of roads, many roads are improved for tourists’ vehicles to access gorilla trekking, yet a community will indirectly benefit from these roads even if they were not intended as the principal beneficiary. Benefits were spoken of both in personal terms and in terms of community gain. One woman (F25) said, “*People who work in the Park sometimes give me money and a nice school was built where my children go.*”

Access to markets and/or family members' access to markets	29%
Receiving a goat from revenue sharing	17%
Schools and hospitals	11%
Water	6%
Sponsorship for children	6%
Better roads	3%

Table 4: Responses to “What are benefits you have received from conservation in BINP.”

When asked how the community benefits from conservation, seventeen women mentioned goats. Only three women mentioned goats when listing personal benefit from conservation. One woman said she received no benefit from conservation, yet later revealed that she had received a goat through revenue sharing, which speaks to the lack of connection and transparency as to who is responsible for goat-giving. Of the seventeen women who mentioned goats as a community benefit of conservation, three of them declared that they have not received goats while watching others around them benefit and one woman (F8) stated, “*Local leaders here are corrupt and get twice as many [goats] and some people get none. I have never received a goat.*”

#### 4d. Women perceive many costs from BINP

Eighty percent (80%) of respondents reported dealing with wildlife conflict. When I asked how this made them feel—given that there is no compensation and the women’s great dependence on the food they grow for survival—most women responded in the language of frustration, helplessness, and despair:

*“There is nothing I can do, and there is no compensation.”* (F7)

*“Once wildlife destroys my crops, it takes time away from other tasks.”* (F1)

*“It is my only source of food and I depend on it, of course I become angry.”* (F12)

*“I get angry, I depend on the food for my survival.”* (F36)

*“They come out of the forest to raid my crops but I cannot go into the forest.”* (F29)

When asking women about the biggest challenges they faced in their life, sixty-one percent (61%) reported poverty and secondarily, lack of food (16%).<sup>2</sup> Lack of firewood also arose as a significant challenge and concern in the lives of park-edge women. Sixty-six percent (66%) reported not having enough firewood for their needs. Of the twenty-six

<sup>2</sup> Respondents could state more than one thing as a challenge.

percent (26%) who reported having enough for their own needs, when asked if they perceived enough for their community, they said no—which means 92% of respondents perceived a diminishing, unsustainable source of firewood. Women either reported accessing firewood from personal land, or gathering it from communal land. One woman (F36) said, *“I take it anywhere I can find it.”* Two women reported fearing for their safety when gathering firewood because they were taking it from other people’s personal tree stands and had fear of being caught.

Firewood is essential to women’s daily survival and to their health—firewood is necessary for cooking food, and it is also necessary for boiling drinking water in order to protect against water borne disease such as typhoid, which is a serious threat in this area of Uganda. Bwindi Community Hospital workers anecdotally reported that because of deforestation and the lack of trees, women were having to go much greater distances to gather enough firewood and sometimes could not collect enough. Thus they were not always boiling their water and, consequently, their children were contracting water-borne diseases. Wan et al. (2011) identify that fuelwood scarcity has a strong negative effect on women’s health, in that she must walk further to find fuel, she may carry a heavier load which leads to physical problems, and that she may choose to not boil her water and cook her food. Related to deforestation is the reality of soil erosion and soil infertility in Bwindi. Six women reported soil infertility as one of their greatest challenges and some said famine was a central challenge.

Nineteen percent (19%) of respondents reported knowing of people going into the park to gather firewood and twenty-two percent (22%) reported knowing of people who still poach wildlife in the park. This number is most likely underreported, possibly from respondents’ mistrust of me as an outsider and/or because of the presence of my translator as a member of CTPH. Regardless, those that did respond, demonstrate that there is continued unauthorized use of BINP by the park-edge communities.

#### 4e. Women want above all else for their children to go to school

I asked this open-ended question to my respondents: If you could have everything you needed, what would your most happy life look like? Some of the answers are:

*“I would educate my children, buy more land, plant more trees, bring water nearer to my compound, and build a better house.”* (F3)

*“I want to educate my children, build good house, eat well, buy good clothes, sleep well.”* [She begins laughing very hard. I ask why she is laughing so hard and she says] *“I’m trying to figure all of them [the things I dream of] out.”* (F9)

*“I would educate my children, have them graduate, buy so many animals, buy enough land to graze the animals, and plant more trees.”* (F12)

*“I would buy my own land and construct a very nice house.”* (F18)

*“I would go back to school, then after getting my diploma, construct a very good house and educate all my children.”* (F24)

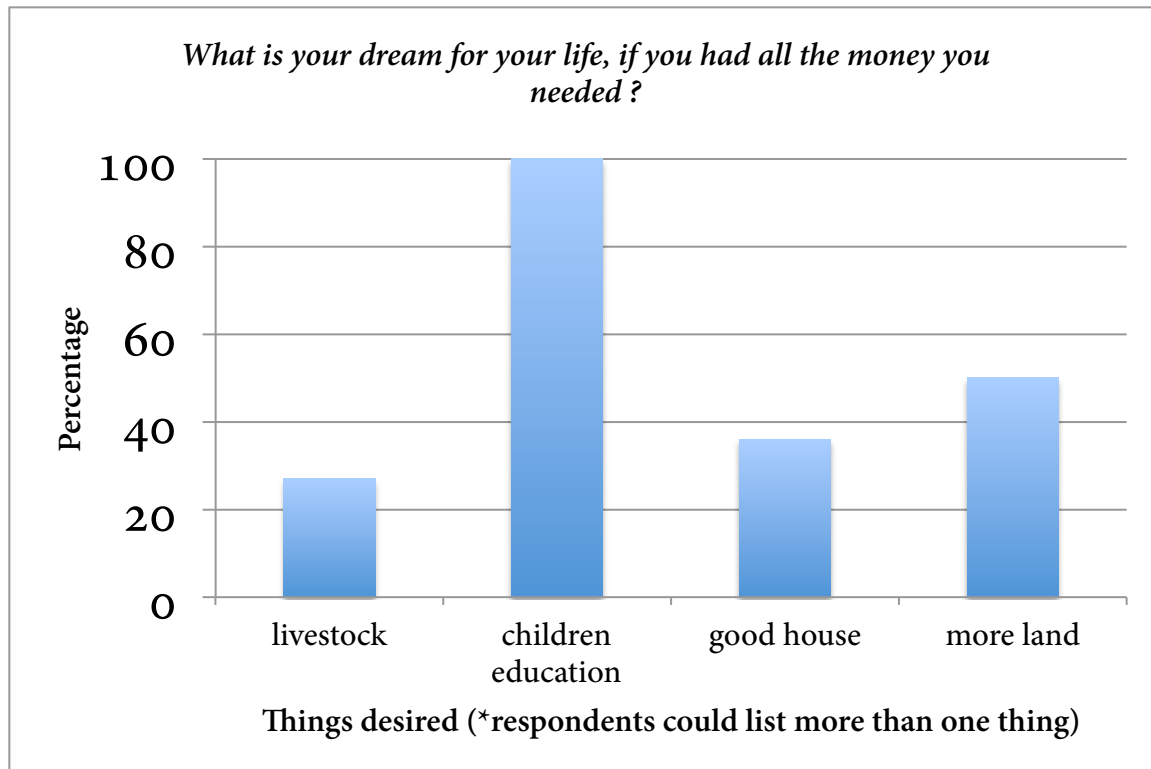


Figure 13: *The top-four things answered when asked, “If you had everything you needed, what does your most happy life look like?”*

Though women unanimously want their children to go to school (Figure 13), some of them wished to go back to school themselves. As I presented early in my findings, not a single woman interviewed was able to complete school and when asked if they would go back if they could, seventy-four percent (74%) answered that they would. When asked what they would study, they listed: Nursing (2), Geography, Science (2), English, to be a teacher (2), Math, Tailoring, and to be a Park Ranger. One woman (F32), when explaining what she would like to go back to school for, said, *“I’d like to know how to read and write, to read sign posts, the names of places, and to know directions.”*

#### 4f. Women feel intrinsically disadvantaged by gender

I asked women: do you feel like you have a voice in your community? That is, do you feel like you can present your needs and concerns to your community and you will be listened to. Eighty percent (80%) reported affirmatively—that they do feel like they have a voice in their community. Sixty-four percent (64%) reported attending community meetings in their village and said that this was something both a woman and a man in a household could do. However, thirty-six percent (36%) identified community meetings as a man’s role alone.

When I asked if women have opportunities equal to men, ninety-one percent (91%) reported that women do not have opportunities equal to men and eighty-four percent (84%) reported that this situation is *not* possible to change in the future. One woman (F8) said, *“It’s not possible. Man has to remain with the power.”* One of my older

respondents—a sixty year old woman (F28)— answered that it was not possible for this to change in the future, and she continued to say, “*I’ve noticed some changes but it depends on the family where woman is coming from. Some men are very complicated and don’t want changes, and some men do.*”

Of the five women who said it was possible for things to change toward more gender equality in the future they listed three central ideas: the need for women to be involved in politics on a local and national level, the need to have women as role models, and the need for women to access education and financial capital:

*“These days women can be in politics, in some villages women are the chairperson.”* (F5)

*“Women need to be more involved with meetings.”* (F10)

*“If we were all employed and earning, we would be equal.”* (F13)

*“Women need more education. [Do you feel like it might be possible for your daughters?] Yes.”* (F18)

*“Women are now good leaders so I think when they continue like that they will at one time have equal opportunities with men.”* (F31)

When asked if it is possible for women to own land without a man, sixty-nine percent (69%) reported that this was not possible.

## 5. Discussion & Recommendations

### 5a. Bwindi women’s valuation of conservation

Towards the end of my questionnaire, I asked women a series of open-ended questions about their hope for the future for multiple elements including “what is your hope for the future for the environment”<sup>3</sup> and there was a range of answers, from wanting gorillas to exist for continued tourism to a desire for more conservation education to an understanding of the interconnectedness between human beings and the ecosystem. Though several women said things similar to this: “*Gorillas should be as many as there can be so to keep tourists coming*” (F3), many women, when asked what their hope for their environment was, declared a desire to learn more about conservation and an desire to protect the environment:

*“I wish the community to be educated and practice what has been lectured to us as to promote the environment since we live closely with the environment.”* (F1)

*“I’d like the environment to keep on as it is now, and the young trees to grow tall and keep giving fresh air.”* (F25)

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<sup>3</sup> I made sure that they knew they did not have to state one, if they did not perceive a hope.

*“I’d like the community to continue to receive conservation messages.” (F15)*

*“I want [the environment] to continue in a healthy state because we are all dependent on each other.” (F33)*

Women have an abstract understanding of BINP’s importance as a water catchment system and its significance on local climate. They reported rain, wind, and weather as valuable elements coming from BINP. They understand and value conservation from a systems-approach, not a charismatic megafauna approach. An opportunity exists to reframe the *story* of conservation so that it is meaningful at a local level and so that it integrates what local women already perceive as important. Though the dominant conservation narrative of protecting BINP for economic gain through tourism *is* getting through—with women citing benefits received from conservation in predominantly economic terms—it is a narrative that fails to incorporate more fully the benefits BINP has as an ecosystem. It is also a dangerous, and potentially unstable narrative because it values BINP only within a system—tourism—that could potentially disappear.

If women in Bwindi care about gorillas only in terms of its economic incentive to bring in tourists, what happens if tourists stop visiting? In 1999 Hutu fighters from Rwanda killed eight tourists trekking gorillas. Gorilla trekking tourism plummeted and BINP was closed for four months, resulting, of course, in a great loss of revenue (New Vision 2010). If tourism plummets in BINP, given that there is such desperation around firewood and natural resources, I believe there is currently little incentive to protect BINP, since the dominant value—and message being encouraged—is its existence for gorilla protection and for the tourist economy. Earlier this year, 2014, an Ebola outbreak in the African country of Guinea occurred, and, depending on the consequences and spread of this disease, this could equally have the potential to limit Ugandan gorilla tourism. The dependence on tourism to generate conservation in BINP seems a tenuous connection. The sustainability of BINP would be strengthened by integrating what local women are expressing as an ecological value to the park, beyond tourism.

## 5b. Improving UWA community engagement

In findings consistent with Tumusiime et al. (2012), the communication around BINP conservation is inconsistent and somewhat ineffective in its current state and the benefits perceived by local women coming from UWA are unclear and uneven. Twenty percent (20%) reported they did not know why they were not allowed in the park. This is a disaster in conservation outreach and in the integration of local people into inclusive conservation practices if the people living along BINP know only that they are barred from accessing resources in that space, but do not know why. These data challenge UWA’s claim to “recognize the local community as a key stakeholder... and [to have] local community participation in planning for and management of these resources” (UWA, “Communities and Conservation”). Additionally, as noted earlier, thirty-eight percent (38%) of respondents did not know from where they had received conservation education, which further reveals the lack of consistency in the approach of integrating local people into conservation awareness.

In consonance again with the Tumusiime et al. (2012) study, goats are an inconsistent benefit associated with conservation. One woman in my sample (F8) reported corruption and several spoke of uneven, unfair distribution (if they mentioned goats as a benefit of conservation at all). Yet all thirty-six women reported education for their children as their primary hope and a majority (92%) reported great concern for firewood. These responses indicate that the strategy of providing goats to individuals is not what would most benefit the women living along BINP. Rather, UWA's revenue sharing program and gorilla levy tax should seek to support community forestry projects or provide education stipends. This change would serve the dual purpose of integrating local women's concerns into conservation plans *and* directly address the ways conservation development can aid in poverty reduction for local communities. Additionally, corruption would be more difficult since an education provision is a transparent service; everyone knows who gets to attend school, not everyone knows who gets a goat. Listening to what the women of the Bwindi area desire, and acting on those concerns and recommendations, would additionally build trust in the community towards UWA. What exists right now—giving a limited number of individuals goats—is *not* a model of inclusive conservation management, despite what UWA and UNESCO currently promote.

There is juxtaposition in the fact that women do not have a high economic benefit from BINP conservation yet report benefits in mainly economic terms. There are three central reasons why this may be happening: 1) the dominant conservation message that these women are receiving is one that links BINP with economic gain, thus that is the primary benefit they perceive, even though when asked specifically of the park itself they cite rain and weather as values; 2) women *do* see that there is economic benefit to protected area conservation, they want to participate in those benefits, and thus it is important to make sure the benefits are equitably reaching park-edge women; and 3) the perception of future benefit is powerful, such that women may not have personal benefit from BINP conservation currently but see economic benefits reaching other women or other communities, and thus their hope of a future benefit underlies their response of finding economic benefit in conservation.

I spoke in a video interview with Olivia Biira, the Community Conservation Warden for UWA at BINP. Biira is an intelligent and thoughtful woman who is passionate about conservation and its success with local communities. In our interview she stated that women have been left out of conservation policy decision-making and that it is vital to include them because of their relationship to natural resources and the environment. In speaking of the relationship between BINP and women, Biira said:

*Women have been left out of decision-making and policy development... They need to be implementers and to be empowered to decision-making. That's when we shall have good results... and it should happen through local counsels, from village to district. At all levels there should be women... Women need to be given a chance to speak at those debates, it would be very important. They interact with nature, they have first hand information... They have more experience in all issues in the wild. They have an interest in protecting nature because of benefits accrued to them.*

*Women are the head of families. They do everything in the home, they are responsible for everything, and some have big families, one woman with nine*

*children, so many children to look after. They are torn apart, they don't know what to do. They engage in very many things and it is a very big load... They spend all their time on household activities, and at end of day there is nothing to put in their pockets. We are telling them please make groups, get in development activities, interact with others, get skills, so you can have an income and manage your families. [Biira, August 11, 2013]*

In speaking of UWA's interaction with the local community, Biira spoke to the need to better engage the community in BINP conservation:

*Communities must cooperate and appreciate conservation and also participate in that activity. Or else UWA alone cannot manage. We need community support. We are working with partners to empower communities but also to create awareness to help conserve the mountain gorilla. We need a joint effort.*

*Whereas conservation is important to have wildlife, people must also exist and they need resources....People must appreciate [BINP], must know why it's important. People must cooperate. Because it takes very little time to put down this forest if people not supporting it. We need peoples' support. They must benefit if they going to appreciate and conserve. There is a great job ahead of us. [Biira, August 11, 2013]*

Though Biira acknowledges the need to engage women in conservation discussions, her language for integrating communities into BINP conservation decision-making is still one that promotes a gorilla-centric message and a vague declaration of "joint effort." She declares that the community must perceive benefit in order to accept conservation, but this still promotes a local-people-as-passive-beneficiaries model of participatory conservation, rather than local people as active stakeholders, as UWA's website suggests. There *is* a great job ahead of UWA for incorporating local people and I recommend, based on the voices of these thirty-six women, to engage in a conservation message that promotes more than just the mountain gorilla and allows local women to be heard, thus cultivating their sense of agency. Additionally, if UWA were to adopt a revenue sharing program whereby instead of goats an education stipend was offered, this would allow more female students to complete school and this would directly lead to positive gains in establishing gender equality.

I would caution that reaching out to women should be done in such a way that acknowledges the limitation on their time. Conservation outreach or participatory meetings fail in addressing women's concerns if they act as another burden on her time (Ray 2007). In the interest of integrating conservation education and targeting women voices, I recommend going to where women are already gathering, such a church groups and local village savings and loan groups.<sup>4</sup> In this way, there would be greater opportunity for women to be receptive to new information and would have time dedicated to give their thoughts and opinions.

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<sup>4</sup> This is a practice where village women consolidate their money together in order to share on joint projects or to distribute to individuals as needed.

### 5c. Toward female empowerment

That ninety-one percent (91%) of respondents felt unequal opportunities to men and that eighty-four (84%) of them—from women as young as 18 to as old as 76—feel this cannot change in the future speaks to an internalized sense of disempowerment. These findings are consistent with ones from Rugadya (2010) and IUCN's EGI (2013). The rural women living along BINP perceive and experience disadvantages in their lives because of their gender. The fact that sixty-nine percent (69%) of respondents believed that women could not own land speaks to a serious lack of awareness of the basic rights entitled to women and potentially explains why such a majority of women feel that things cannot become more gender-equitable in the future. If women in rural areas lack understanding of their basic rights then they will remain in a cycle of gender inequality.

The one woman (F31) who declared that there could be a more equitable situation in the future because “now [women are] good leaders” speaks to the need for female role models at a rural level. In rural regions—where women are not always aware of their basic rights—presenting female role models may inspire other women to see that gender equality is something attainable in their lifetime or in their daughters' lifetime. There needs to be a greater understanding in rural areas of Uganda's proud rank of having a third of its parliament made up of women. I believe if more women knew of this—like F5 and F31 declared—then they could feel the possibilities of obtaining equal opportunities to those of men.

The findings presented here are each threads in the story of rural Uganda women living next to BINP. They are marginalized for numerous reasons. Only two woman had control of their own land and sixty-nine percent (69%) did not know that a woman could own land independently. They lack education and access to financial capital. Though many of them want to go back to school, the majority of their day is spent acquiring natural resources to ensure their survival and that of their family. Most of them feel inherently disadvantaged when compared to their male counterparts, and most of them do not believe the situation will get better in the future for themselves or their daughters. Wildlife conflict is a frequent threat and they have, currently, no voice in the conservation agenda of BINP or on how it impacts their lives. Their voices here—dreaming for their children to go to school and desperate for trees—suggest as-yet untapped ideas for a revised revenue-sharing program that would be more inclusive and with a greater potential to address issues of transparency, fairness, and equality.

### 5d. Of note: Family Planning in Conservation Outreach

Several organizations in Bwindi, including CTPH and the Bwindi Community Hospital have, at various times, conducted family planning education workshops and distributed family planning materials and resources to the villages around BINP. In CTPH's case, they explicitly link conservation messages with family planning, discussing a reduced pressure on the environment from having less people need resources, and also encouraging this as a benefit to women and men's lives. The idea of impoverished people having less children—that is, the threat to biodiversity conservation because of human overpopulation—is a sensitive matter given that this discussion has been historically

dominated by developed countries directed at developing countries. However, as I approach the issue of family planning within conservation, I believe family planning education is a powerful tool to allow women, and men, to be empowered to make their own decisions about their bodies and their practices as it relates to more people living along BINP. Ignorance around birth control methods and ignorance about access to family planning materials is another form of disempowering local people.

Biira spoke in our interview about family planning as it relates to conservation:

*Family planning is very related to conservation. More people put more pressure on resources. The population here... is very very high. Everyone needs to eat, drink, and use resources... We are working with partners because [family planning] is not our direct mandate. People are being educated about manageable families. When there are very many people with no quality of life, they look at the forest as a resource. But to go to school and have jobs, then pressure on the forest is reduced. [Biira, August 11, 2013]*

Though family planning as it relates to conservation was not the focus of this study, I incorporated a few questions into my research. I asked women if they had ever received family planning education. Out of the thirty-six women, twenty-five (25) had and eleven (11) had not. I decided that family planning was too sensitive and deeply personal a topic for an outside-researcher to be asking, compounded by the fact I had a male translator. I did however ask those women who had reported receiving family planning education, if they felt there was a connection between family planning and conservation. Eighty percent (80%) said yes and predominantly described the connection as an understanding that having fewer children puts less pressure on natural resource use, as it also allows you to “manage” your children wisely.

*“If you produce too many children you cannot look after them and they will be unruly and do what they want and go hunt.” (F3)*

*“Many children means pressure on the park.” (F5)*

*“If you produce a few [children] you can dig a little land, and not have to dig all of it, and next season you dig another part.” (F9)*

*“If you have a manageable number of children, then you have enough food for them, so they will not destroy resources, like fruits in forest, because there is enough food at home.” (F24)*

*“They are teaching us if you have a manageable number of children you will use less firewood and less water, and therefore children not go into the forest to destroy it.” (F25)*

One woman (F30) reported that yes, she feels there is a link between family planning and conservation, but *“only because family planning people also teach conservation so they must be connected.”*

In the open-ended section of my questionnaire where I asked women about their hopes for the future for other women, either in their community or in Uganda in general, eight

women (8) responded specifically that family planning and having less children were their hopes for the future for the betterment of women in their community.

One woman (F5) stressed after the interview that I needed to know that men were also wanting to adopt family planning practices, because they too understand that having fewer children means that you can invest more (e.g. school fees, food, time) in each child and thereby have greater success per child.

I recommend a continued or renewed effort in family planning education outreach as part of conservation education efforts. However, it is principal that family planning education does not happen for the sake of the environment, but rather for the sake of offering education to rural communities who may not be aware of their health options. Since women are keenly aware of the time it takes them to gather firewood and water and food, they are absolutely able to understand the relationship of having less children on their own wellbeing, as well as on the environment.

#### 5e. Of note: Potential changes in crops along BINP and its possible gender impact

In certain areas adjacent to BINP there are wide expanses of tea plantations, and coffee is another cash-crop that is frequently grown in the areas around the park. In speaking with Biira, she declared that UWA is beginning to promote the planting of coffee and tea along the borders of the park as a means of dissuading wildlife conflict, since gorillas and baboons do not eat coffee and tea:

*We are looking at changing land use practices to reduce conflict and increase community support. We need land use practices to be compatible with conservation but also beneficial to the people around here. For example, you look at tea. Tea is a cash crop, and in this highland, tea is very good, and not eaten by any wild animals. We encourage communities around here to change their land use. Instead of planting bananas which are going to be raided by gorillas, plant tea... We are educating people around here, working with them to get income and reduce [wildlife] conflict.*  
[Biira, August 11, 2013]

What is greatly important if this land use change is to happen is gender awareness of how this would affect men and women differently. Cash crops—such as tea, coffee, and timber—are the domain of men (Agarwal 1992, Rocheleau 2001) and when land is converted from food crops into cash crops, women are not the beneficiaries. In Agrawal's well-known study of the Chipko Movement (1992) in northwest India, she speaks of women protesting against men's desire to sell trees for timber because it would mean loss of their food sources and would require them to travel greater distances for firewood. Agrawal writes:

*Time and again, women have clear-sightedly opted for saving forests and the environment over the short-term gains of development projects with high environmental costs... In their choice of trees the priorities of women and men don't*

*always coincide—women typically prefer trees that provide fuel, fodder, and daily needs, the men prefer commercially profitable ones. Once again this points to the association between gendered responsibility for providing a family's subsistence needs and gendered responses to threats against the resources that fulfill those needs. (147-8)*

Likewise, Rocheleau (2001) conducting research with communities in the Zambrana-Chacuey, Dominican Republic documented that timber plots—as cash crops—were solely men's realm. Rocheleau (483) notes, “The uneven balance of power between men and women over land and trees has been tipped further in favor of men's control over both.” Women living along BINP are already disadvantaged in not owning land and the potential of this new land use policy to displace women's food growing areas is very concerning.

Though a possible solution for wildlife conflict may be growing tea and coffee at park borders, it could also mean the continued disempowerment of women and intensify their struggle to access to food and fertile land. I recommend before UWA push forward this new land use policy, they conduct a gender assessment into how this may adversely impact women and to investigate ways to integrate women into this change rather than further push them into poverty and land-dispossession.

However, if women can be equal owners—and be empowered to do so through access to education and capital—then the planting of tea may honor the dual objectives of raising up women toward land ownership and earning power as well as mitigate wildlife conflict. In the last village I visited the very last woman I interviewed (F36) owned her own land. She was one of only two women in my study to have her own land:

*My husband first bought a small piece of land together with me, but when he left I had to expand it by buying another part. [You are first woman I've met who owns land, can you explain to me?] I sold tea, I picked tea and then sold it, then the little money from selling tea, I kept it. Also I'm in an association with some other ladies, I put money in the association of village saving and loan and when we share the dividends, I got much more money and decided to expand my land. [Are there other women in Kacherere who own their own land?] Yes. [How many?] Four. [Are you treated differently that you are a woman running the land?] The women that own their own land are respected. (F36)*

Based on her story, there is the potential to empower women through their ownership of tea if they are the direct beneficiaries of income from growing tea. As F36 mentioned, there is also the potential for this to present role models so that women in a community can witness other women attaining equal opportunities to men and it can inspire them to shift their internalized attitude on women's disadvantage. However, if this land use change fails to address gender and fails to be aware of the negative impact it may have on women by denying them land for to grow their food, it has the dangerous potential to further marginalize women and become another example of protected area conservation costing local women much more than they gain.

## 6. Conclusion

Rocheleau et al. (2001, 487) write, “The intricate workings of trees and people in the landscape demand a nuanced understanding by both political and biological ecology. We must address the interplay of both conflict and affinity within and between... rural households and... with complex biological systems.” In this paper, I have attempted to offer up the *story* of the intricate interconnection between tree *and* gorilla and people—though in this case, unraveling “people” and looking at those voices historically disregarded—the female ones. American poet and activist Muriel Rukeyser wrote, “The Universe is made of stories, not of atoms” and I fundamentally believe that for people to care about the environment and conservation work in general, they must feel a connection to it. It is through stories that we, as human beings, make connections—connection to mountain gorillas in distant forests, connection to changing weather patterns and rain and wind, connection to a woman on the other side of the planet who right this moment may be walking four hours to gather firewood from a diminishing supply.

## 7. Acknowledgements

This research would not have been possible without funding from the Nicholas School International Internship Fund, the Duke Human Rights Center Summer Research Fund, and the Kuzmier-Lee-Nikitine Endowment Fund. I am *tremendously* grateful to Erika Weinthal, Dean Urban, McKenzie Johnson, Liz Shapiro, Meg Perry, Rachel Litche, Lisa Campbell, Betsy Albright, Dr. Gladys Kalema-Zikusoka, the staff of CTPH, Olivia Biira, Jamie Bechtel, and the 36 Ugandan women who gave me their time. I am also so grateful to my family and friends who are—in the simplest words—awesome, and they inspire me and support me all the time.

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## 9. Appendix

- The Questionnaire
- Receipts of Permission of Research in Uganda
- Waiver of UWA Community Conservation Warden

Individual: Date:
<b>Demographics</b>
Parish: Village :
Distance reported from the park:
Are they a CTPH volunteer: yes/no
Do you have children?
How many?
How many boys / how many girls?
How old are you?
What is your religion?
Are you currently in school?
Why did you stop school?
Do you hope to join/rejoin school?
What would you like to study if you could go back?
Are your children in school?
<b>Family Planning</b>
Have you ever received education about family planning?
What did you learn?

Do you practice family planning?

Have you had more/less children than your parents?.

How many children total would you like to have?

Why would you like that many?

How old were you when you first became pregnant?

Who do you live with?

How long have you lived in this community? Why did you move?

**Activity Mapping**

Task	<u>Who does the work?</u>		Frequency (hrs) /daily/ weekly
	Woman	Man	
Cleaning & making meals			
Washing clothes			
Taking care of children			
House construction & maintenance			
Collecting water			
Collect firewood, other fuel			
Farming crops: digging &			

cultivation			
Caring for livestock			
Dealing with wildlife conflict			
Community meetings			

### **Living Conditions**

Are there some things that only men do in your community?

Are there some things that only women do in your community?

Are there roles in the community that used to be men only, but now women are doing them too?

How do you make decisions in your household / what is the decision making process in your household?

Do you feel like you have a voice/power in community decision making?

Do you feel like women have opportunities equal to those of men?

### **Food**

How often do you eat in a day?

Does your husband eat the same as you? Do your children eat the same as you?

Do you feel like you & your family have enough to eat?

### **Land & Farm & Income**

Does your family own land?

How do you own the land? (title, inherited)

Besides your own land, do you share land with other people? If yes, what do you use that shared land for?

Do you farm your land?

What types of crops do you grow?

Have you ever conflict with wildlife on your farm? How did you cope with it? How did it make you feel?
Do you sell what you grow or is it mostly for yourself and your family?
Are there ways you make income?
Can women own or inherit land without a man?
What would you say is biggest challenge in your life, that stops you from having what you want?
<b>Firewood</b>
Do you gather firewood?
From where do you gather firewood?
Is this a communal source? Do other people gather from here?
How long does it take you to walk there and back? How long does it take to gather firewood?
How often do you go?
Do you feel safe going?
Do you feel there is enough for your family?
If answered yes, then ask: do you feel there is enough for everybody?
Even though it is not allowed, have you heard of people who get firewood from inside the Park?
Do you gather other types of fuel? What types?
If they reported not enough firewood, ask: what do you think needs to change so there is enough for everybody?
<b>Water</b>
Do you gather water?
Where do you go to gather water?.
Is this a communal source? Do other people gather from here?.

How long does it take you to walk there and back?.
Do you feel safe?
How often do you go?
Are there other water sources you use?
Do you feel there is enough water for your family?
If they said yes, then ask: For everybody?
<b>WILDLIFE &amp; ENVIRONMENT VALUE</b>
Have you ever received education about environmental conservation? If yes, who taught you?
Can you describe to me what conservation means to you.
Were you around when the Park become gazetted? How did the community react, you react, your parents react?
Why do you think the government wants to keep people out of the Park?
Have you personally benefitted from conservation? How?
Do you find value in the gorilla?
Besides having tourists come is there other value you feel about the gorilla, another reason why it is important? Why?
If the gorillas did not exist tomorrow, how would that affect you personally?
Besides the gorilla, do you find other value in the Park?
Do you feel like you compete with wildlife for your survival?
Have you heard of / Do you know of people who hunt in the park?

Do you feel your community benefits from conservation? How?
Do you know of any other conservation activities in your community?
Do you think there is a connection between family planning and conservation? How?
<b>Hope &amp; motivation for the future</b>
How is your life now different than your parents?
What would make your life better? What do you want/need in your life that you don't have now?
What do you hope for the future?
• For your children / family?
• For your community?
• For the environment?
• For the women of your community/ of Uganda?
Anything else you like to tell me that I have not asked you?



## Uganda National Council for Science and Technology

(Established by Act of Parliament of the Republic of Uganda)

12/09/2013

Our Ref: SS 3196

Ms. Blair Alexander Talitha Lowrey  
Conservation Through Public Health  
P.O Box 75298  
Kampala

**Re: Research Approval: Women and the Environment: A Case Study from Bwindi Impenetrable National Park**

I am pleased to inform you that on **12/07/2013**, the Uganda National Council for Science and Technology (UNCST) approved the above referenced research project. The Approval of the research project is for the period of **12/07/2013 to 12/07/2014**.

Your research registration number with the UNCST is **SS 3196**. Please, cite this number in all your future correspondences with UNCST in respect of the above research project.

As Principal Investigator of the research project, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and addenda to the research protocol or the consent form (where applicable) must be submitted to the designated local Institutional Review Committee (IRC) or Lead Agency for re-review and approval **prior** to the activation of the changes. UNCST must be notified of the approved changes within five working days.
3. For clinical trials, all serious adverse events must be reported promptly to the designated local IRC for review with copies to the National Drug Authority.
4. Unanticipated problems involving risks to research subjects/participants or other must be reported promptly to the UNCST. New information that becomes available which could change the risk/benefit ratio must be submitted promptly for UNCST review.
5. Only approved study procedures are to be implemented. The UNCST may conduct impromptu audits of all study records.
6. A progress report must be submitted electronically to UNCST within four weeks after every 12 months. Failure to do so may result in termination of the research project.

Below is a list of documents approved with this application:

Document Title	Language	Version	Version Date
1 Research proposal	English	N/A	N/A

Yours sincerely,

Leah Nawegulo  
for: Executive Secretary  
**UGANDA NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY**

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THE REPUBLIC OF UGANDA

## OFFICE OF THE PRESIDENT

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Email: secretary@op.go.ug, Website: www.officeofthepresident.go.ug

**ADM 154/212/01**

September 2, 2013

The Resident District Commissioner  
Kanungu District

This is to introduce to you **Blair Alexandra Talitha Lowrey** a Researcher who will be carrying out a research entitled **“WOMEN AND THE ENVIRONMENT: A CASE STUDY FROM BWINDI IMPENETRABLE NATIONAL PARK WITH CONSERVATION THROUGH PUBLIC HEALTH”** for a period of **07 (seven) months** in your district.

She has undergone the necessary clearance to carry out the said project.

Please render her the necessary assistance.

By copy of this letter **Blair Alexandra Talitha Lowrey** is requested to report to the Resident District Commissioner of the above district before proceeding with the Research.

Alenga Rose  
**FOR: SECRETARY, OFFICE OF THE PRESIDENT**

Copy to: Blair Alexandra Talitha Lowrey



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