



Cooking Fuel in Nzulo and Shasha Displacement Sites and the Surrounding Village of Nzulo

An End-line Assessment Report

The Women's Refugee Commission works to improve the lives and protect the rights of women, children and youth displaced by conflict and crisis. We research their needs, identify solutions, and advocate for programs and policies to strengthen their resilience and drive change in humanitarian practice.

The International Rescue Committee helps people whose lives and livelihoods are shattered by conflict and disaster to survive, recover, and gain control of their future. IRC teams provide health care, infrastructure, learning and economic support to people in 40 countries, with special programs designed for women and children.

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Cover photo: Displaced Congolese woman using the fuel-efficient stove distributed by WRC/IRC.

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Acronyms & Abbreviations

CF	Congolese franc
DRC	Democratic Republic of Congo
FARDC	Armed Forces of DRC (Forces Armées de la République Démocratique du Congo)
FGD	Focus group discussion
IDP	Internally displaced person
IRC	International Rescue Committee
MONUSCO	United Nations Organization Stabilization Mission in the Democratic Republic of the Congo
PNC	Congolese National Police (Police Nationale Congolaise)
SAFE	Safe Access to Fuel and Energy
WPE	Women's Protection and Empowerment (IRC program)
WRC	Women's Refugee Commission

Executive Summary

Internally displaced persons (IDPs) in eastern Democratic Republic of Congo (DRC) are facing a series of obstacles as they try to access natural resources for their household energy needs. Women and girls bear the greatest burden, often risking attack, rape, robbery, and even death to gather firewood to be able to cook a simple meal for their families. They face not only gender-based violence (GBV) while collecting firewood, but they also endure time, labor, and health burdens associated with collecting, carrying, and cooking with it. Further still, without access to safer and more sustainable income generating activities, displaced communities are heavily reliant upon the collecting and selling of firewood to earn a meager income, in spite of the associated risks.

In an effort to respond to this challenge, the Women's Refugee Commission (WRC) and the International Rescue Committee (IRC) worked together to assess and reduce the exposure to these risks for two particularly vulnerable displaced populations in the province of North Kivu, home to the largest number of IDPs in DRC.

Key Findings

The findings from this end-line assessment suggest that the exposure to risk of violence faced by the IDPs decreased after the introduction of fuel-efficient stoves. This reduction is primarily evidenced by fewer firewood collection trips and less time spent collecting firewood after the distribution of the fuel-efficient stoves and at the time of the end-line. In addition, participants reported that they were spending less money on buying firewood and were earning more money overall after receiving fuel-efficient stoves.

While the introduction of fuel-efficient stoves created a number of positive outcomes, much more needs to be done to ensure the security and well-being of these communities. In particular, the lack of adequate food remains the main concern for people living in both the Nzulo and Shasha displacement sites.

Key Recommendations

Overall, the recommendations for improving safe access to cooking fuel and energy resources for the displaced communities living in the Nzulo and Shasha displacement sites are as follows:

- Implement livelihood activities for IDPs.
- Promote reforestation and the creation of woodlots for IDPs.
- Research sustainable stove and fuel options for IDPs.
- Strengthen inter-agency initiatives and stakeholder awareness through the North Kivu SAFE Working Group.

Introduction

Context

The Democratic Republic of Congo (DRC), Africa's second-largest country, has a population of 75,507,308 (July 2013 estimate) and a per capita gross domestic product (GDP) of US\$400 (2013 estimate).¹ In 2012, its human development index value was 0.304 — in the low human development category — positioning the country at 186 out of 187 countries and territories.² Despite having extraordinary agricultural and mineral resources, the vast majority of inhabitants live below the poverty line, as nearly two decades of armed conflict have stalled and hampered socio-economic development and progress. At the end of 2013, there were at least 2,963,700 internally displaced persons (IDPs) in the country.³

The provinces of North Kivu and South Kivu have both experienced a massive population increase over these years due to conflict in the region, beginning with the initial major influx from the 1994 Rwandan genocide. As of July 2013, the two provinces accounted for 65 percent of the IDPs in the entire country.⁴ The increasing population puts an enormous strain on the environment and exacerbates competition over access to natural resources.

In the fall of 2013, the M23 militia took control of Goma, the capital of North Kivu, sparking violent conflict between the militia and the Forces Armées de la République Démocratique du Congo (FARDC). This conflict led to massive displacement of the local population, with many people fleeing to IDP camps and into host communities in North Kivu.

Refugees and IDPs — particularly women and girls — face a series of obstacles as they try to cook food for their families. Although food distributed by humanitarian agencies must be cooked before it can be eaten, cooking fuel is rarely provided. Women and girls bear the greatest burden of collecting fuel, often risking attack, rape, robbery, and even death while gathering firewood, often up to 10-20 kilometers into the bush. The Women's Refugee Commission (WRC) has found that many forests in North Kivu are full of armed militias who attack women and girls with impunity. In addition, women and girls are not only at risk for gender-based violence (GBV) while collecting firewood, but they also endure time, labor, and health burdens associated with collecting, carrying, and cooking with it.

In an effort to respond to the immense risks associated with firewood collection — primarily exposure to risk of GBV, the WRC and the IRC worked together in an effort to assess and mitigate some of the challenges for particularly vulnerable displaced populations.

Previous assessments⁵ in the region have confirmed that the numerous multi-sectoral concerns relating to safe access to fuel and energy (SAFE) are clearly prevalent in DRC, including:

- protection risks associated with firewood collection, including sexual and gender-based violence;
- deforestation and environmental degradation caused by harvesting natural resources for household energy needs and income generation;
- negative health effects caused by household air pollution from cooking with traditional fuels;
- food insecurity caused by negative coping mechanisms due to a lack of cooking fuel (including skip-

ping and undercooking meals; selling and bartering food; exchanging sex for cooking fuel).

In times of crisis, communities — particularly those that have been displaced — struggle even more to safely access cooking fuel and other energy resources.

The WRC and IRC team undertook baseline assessments to better understand the needs and challenges associated with firewood collection and cooking fuel for people living in two displacement sites close to Goma: Nzulo and Shasha.⁶ The assessments confirmed that access to cooking fuel was putting women and girls at very high risk for GBV. In response to these findings, WRC and IRC implemented an emergency stove distribution⁷ in these areas in an effort to reduce exposure to risks related to firewood collection, including sexual violence.

Geographical Location

The Nzulo and Shasha displacement sites were established in North Kivu in November 2012 after the fall of Goma to the M23 militia as numerous families fled their homes to find refuge elsewhere.

The Nzulo displacement site is approximately 50 to 60 minutes northwest of Goma town by car, and a 10-minute walk from the Goma-Sake main road. Approximately 30 minutes by car from Nzulo, Sake is a small trading town with the nearest market for displaced people from the Nzulo displacement site. The site is close to Mazuku, where methane gas constitutes an imminent danger, and is also situated on top of volcanic rock, making living conditions insufferable for those living there. These environmental factors have major implications for the displaced communities, rendering it nearly impossible to undertake agricultural activities, such as subsistence farming. Furthermore, very sparse tree cover in and around the Nzulo displacement site leaves families with no choice but to collect firewood from the nearby national park, although firewood collection in the park is strictly prohibited. Armed guards monitor the park and penalize community members collecting firewood there through fines or physical forms of punishment.



Nzulo displacement shelters self-made by IDPs on volcanic rock site. (© Megan Gerrard, WRC 2014)



Shasha displacement site. (© Megan Gerrard, WRC 2014)

Displacement Site Populations

At the time of the baseline assessment, the Nzulo displacement site had 8,116 residents living in 1,981 households. The surrounding village had about 420 households and comprised members of the Hutu, Hunde, Tembo, and Pygmy communities. At the time of end-line assessment, the numbers in the Nzulo displacement site had decreased to 7,534 people living in 1,834 house-

holds. The reasons given for the population decrease include death and attempts to return to native villages; however, WRC was unable to confirm the number of those who died and those who returned home. The population of the surrounding village reportedly did not change from the time of the baseline to the end-line.

Much smaller than Nzulo, the Shasha displacement site had 201 households composed of members of the

Pygmy community at the time of the baseline assessment. The number of households remained the same at the end-line assessment.

Site Management

Despite living in spontaneous displacement sites (settlements established by the displaced people themselves, as opposed to being formally established by the government or humanitarian community), the inhabitants of both Nzulo and Shasha displacement sites are well organized. The settlements are grouped in blocks, where each block is supervised by a block leader. Moreover, both settlements have a supervisory leadership structure that includes a president, vice president, secretary, and committee of elders. Nzulo and Shasha have leadership groups that are made up of 15 and seven members, respectively.

Living Conditions

The baseline reports for Nzulo and Shasha displacement sites revealed that the IDPs in the two sites were in dire need of basic survival resources, including food, water, and shelter. They were also desperate for livelihood activities. At the time of the end-line assessment, these needs had still not been met. In fact, both camps had received very little humanitarian assistance, and the state of the displaced communities living within them was still extremely poor.

In June 2013, the World Food Programme (WFP) agreed to distribute food to the Nzulo displacement site inhabitants prior to the IRC/WRC fuel-efficient stove distribution. Given the bleak living conditions and lack of basic resources, it was important to ensure that beneficiaries had food to cook and eat. Due to a WFP food shortage and other agency priorities, Shasha displacement site inhabitants did not receive a food distribution before the stove distribution. Unfortunately, neither Nzulo nor Shasha displacement site inhabitants received food distributions between the time of the baseline and end-line assessments, and there was no indication at the time of the end-line that WFP would provide future support to these communities.

At the time of the end-line assessment, as during the

baseline, the Nzulo displacement site was in the vicinity of deployments by the Armed Forces of DRC (FARDC) and the Congolese National Police (PNC). Furthermore, there was still contact between the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO), the Nzulo displacement site committee, and the PNC on security issues.

Unlike in Nzulo, Shasha had only limited military and police support. While there was an FARDC and PNC position approximately 500 meters from the displacement site at the time of the end-line assessment, regular contact with MONUSCO regarding security issues in Shasha reportedly did not occur. Purportedly, intervention only occurred when conflict arose between IDPs and host villagers.

In both Nzulo and Shasha displacement sites, the most obvious tensions were between the host village communities and the site residents over access to income-generating activities and opportunities, many of which were related to firewood and access to natural resources.

Assessment Objective

The main objective of the end-line assessment was to evaluate the changes in IDPs' living conditions in Nzulo and Shasha displacement sites and the surrounding village of Nzulo after the emergency distribution of fuel-efficient stoves.

Specifically, the end-line assessment sought to:

- compare reported fuel consumption before and after the fuel-efficient stove distribution;
- compare reported risks and challenges related to firewood and charcoal access before and after the fuel-efficient stove distribution;
- determine the impact of the distributed fuel-efficient stoves on the security, safety, and well-being of the beneficiaries;
- document lessons and gaps in the pilot project in order to improve future project design and implementation.

Assessment Methodology

The end-line assessment was conducted from December 15-21, 2013, and covered Nzulo displacement site, Nzulo village, and Shasha displacement site. Information was collected from the Nzulo displacement site inhabitants through an individual survey questionnaire and focus group discussions (FGDs). In the surrounding village, only the individual survey questionnaire was used. In Shasha displacement site, only FGDs were conducted; the individual survey questionnaire was not used in Shasha.

WRC and IRC conducted 10 FGDs in both sites for a total of 102 participants; verbal consent was obtained from all participants. The end-line survey targeted the same population from whom the baseline information was collected. The aim of drawing the same sample size from the same population of inhabitants of the Nzulo displacement site and Nzulo village was to measure the level of change in the lives of these populations following the distribution of fuel-efficient stoves. Participants in Nzulo suggested adding a group of young men to the FGDs in order to collect information from them, including their opinions and perceptions.

In Nzulo, a total of 250 people completed the individual survey questionnaire — 200 of whom inhabited the Nzulo displacement site (149 females and 51 males; 80 percent of all interviews) and 50 of whom lived in the village (42 females and 8 males; 20 percent of all interviews). As with the baseline, three-quarters of the interviews were with females and one quarter was with males.

Five FGDs were conducted in the Nzulo displacement site — four groups with 13 members each and one group with 10 members, for a total of 62 participants. Participants were systematically selected from every fourth household in the 32 blocks of the Nzulo displacement site. The five FGDs were classified by the following criteria: married women (20-50 years old); young women/adolescent girls (14-26 years); older women (50 years +); married men (20-50 years); and young men/adolescent boys (14-26 years). The average household size did not change from the baseline to the end-line,

and varied from two to seven people. Women and/or their daughters were still responsible for cooking and collecting firewood for household cooking fuel at the time of the end-line survey.

In Shasha displacement site, five FGDs with eight participants each were conducted for a total of 40 participants. Participants were selected from every third household in the 12 blocks. The five FGDs were classified by the following criteria: married women (20-50 years old); young women/adolescent girls (14-26 years); older women (50 years +); single women; and men (18-50 years). The average household size in Shasha camp did not change from the baseline to the end-line, and varied from two to five people. As in Nzulo, the baseline and end-line assessments in Shasha revealed that women and/or their daughters are responsible for cooking and collecting firewood for household cooking fuel.

The same survey questionnaire and FGD questions were used for the baseline and the end-line to be able to measure change as accurately as possible. The assessment questions primarily focused on:

- general cooking-related information
- stove and fuel types used
- access to cooking fuel needs and challenges
- protection and security risks
- woodfuel-related livelihoods.

See Annex I (p. 22) for more information on survey results.

Findings

Focus Group Discussions

General Cooking Information

Nzulo displacement site and village

The main foods for the Nzulo population were reported to be unchanged since before displacement and since the time of the baseline. These foods include cassava or corn paste, silver fish, sweet potatoes, and beans. Overall, reported average cooking time and fuel consumption for preparing staple foods decreased from the baseline to the end-line. Given that the food and fuel types largely remained the same from the baseline to the end-line, the decrease in cooking time is likely attributable to the use of the distributed fuel-efficient stoves.

Most FGD respondents consistently reported cooking and eating once per day due to a lack of food. Out of respect for tradition, women still preferred cooking themselves or training their daughters to cook. Firewood and charcoal were also used for heating the house. Most women and girls reported washing food to prepare it prior to cooking. Furthermore, most participants reported soaking beans and maize prior to cooking. The method of cooking did not change from baseline to end-line, apart from single mothers who reported that they stopped covering their food with plastic to make it cook more quickly as a result of IRC and WRC awareness-raising on the negative impact of this method. Because of the reduced cooking time thanks to the distributed fuel-efficient stoves, these women were more easily able to shift away from using plastic and other harmful materials as lids.

Shasha displacement site

The main foods for the Shasha camp did not change from the baseline to the end-line as reported by FGD participants. These foods include vegetables, *foufou* (a starchy dough or paste made with a cassava or corn base that accompanies most meals), potatoes, and beans. At the end-line, participants reported that

cooking took from one to two hours, compared to one to three hours at baseline. The reported average use of firewood per week in Shasha was two to six bundles per week at the end-line, compared to three to nine bundles at baseline. Focus group participants in Shasha reported cooking in their tents after receiving the stoves, whereas they had reported cooking outdoors at the time of the baseline assessment.

At both the baseline and end-line, participants in Shasha reported that finding food is a challenge, so they only cook and eat once per day. However, they would prefer to eat three times a day, as they did prior to displacement. Most women in Shasha said that they wash food in preparation for cooking and soak the beans and maize for easier cooking. Their cooking method did not change from the baseline.

Cooking Technologies

Nzulo displacement site and village

At the time of the end-line assessment, no agency had distributed firewood or other cooking fuel in the Nzulo displacement site. Internally displaced women and girls in Nzulo site reported predominantly using firewood and charcoal, the former of which they reported collecting in groups of three to five people, as compared to three to 15 in the baseline. They reported collecting firewood from Virunga National Park mainly for cooking, lighting, and heating, but also for selling to generate income.

At the time of the baseline assessment, respondents said that the collection of firewood in Virunga National Park was illegal but it was not monitored closely. At the time of the end-line, participants said that soldiers were posted at all entry points of the park to enforce the restriction. However, participants reported having no choice but to venture into the park for firewood collection. According to respondents, it is easier for a small group to hide or run in case they are caught by park guards or police. Women and girls reported selling 60 percent of the firewood they collected, compared to 50 percent at baseline; single women and girls reported selling up to 80 percent of the firewood they collect, compared to 50 percent at baseline. Women reported that the increase

in selling is due to the fact that the fuel-efficient stoves consume less wood than the three-stone fires, which allows them to sell a larger part of their collection.

Women and girls also reported collecting firewood three times per week at the end-line, compared to every day at the baseline, since the stoves consume less fuel than the traditional three-stone fires; older women reported collecting firewood one to two times per week, compared to two to three times a week at the baseline. Due to their vulnerability, they could not collect firewood every day at baseline; they relied on relatives to supplement their fuel. They reported not relying on them any more since the stoves had consistently reduced the consumption of fuel. The group of men interviewed reported that they saw that their wives were going to the park less frequently to collect firewood since receiving the fuel-efficient stoves.

The reported average number of hours per day spent collecting firewood was three to six hours at the end-line, compared to three to 12 hours at the time of the baseline. Participants said that the introduction of the fuel-efficient stoves reduced the time spent per day in collecting firewood. They specifically said that the fuel-efficient stoves use less fuel than the three-stone fires they were using before. This strongly suggests that the introduction of the fuel-efficient stoves had an impact on the need for firewood collection due to a reduction in household fuel consumption.

In the Nzulo displacement site, women reported that they rarely buy firewood and charcoal, except when they are unable to collect it due to hindrances such as rain or when they are informed that there is intensive monitoring by the guards in the park. Those who usually buy firewood are women from the surrounding village. The reported cost of firewood is 200 Congolese francs (CFs) per batch, which was the same at baseline. Women and girls reported spending 600-1,000 CFs per week on cooking fuel at end-line, compared to 1,000-2,000 CFs at baseline if they have to buy. At baseline, the respondents said that one bundle was not enough for one day, whereas at end-line, they said that one bundle would last three days if they were cooking small fish. Women reported that they do not supplement the cooking fuel

with leaves, old clothing, shoes, and plastics any more, as was the case before receiving fuel-efficient stoves. However, they reported that since the restrictions in the park had been put in place, getting firewood for cooking had become more and more challenging. Men said that no one would skip or undercook meals due to lack of fuel; rather, skipping meals is frequent in Nzulo due to lack of food. Women and girls also said that they work as casual laborers on villagers' farms — weeding gardens, for example — to obtain money to purchase food and firewood (if necessary) and to pick vegetables from the farms. Women reported selling household items such as clothes and dishes to get food or other basic necessities. When asked about whether women are forced to trade favors for food, fuel, or other goods, all FGDs reported at the time of baseline as well as at end-line that some women in the camp offer sex in exchange for food, but not for fuel.

Participants in Nzulo reported using the fuel-efficient stoves that they received through the WRC and IRC intervention and a locally made clay stove. Some respondents reported still using three-stone stoves, because they had either sold the distributed fuel-efficient stove or the stove had been stolen. Thirty-nine participants said that their stove had been stolen, while 40 sold their stoves in order to purchase food, medicine, or other more immediate necessities.

Shasha displacement site

As in the Nzulo displacement site, no agency has distributed firewood in Shasha. Displaced women and girls reported using firewood and charcoal for their energy and cooking fuel needs. They further stated that they primarily collected firewood in groups of two to three people at the time of the end-line, as compared to three-person groups at baseline. They reported collecting from private woodlots in the host village primarily for cooking and heating needs. Women and girls in Shasha site reported that they do not sell firewood, because they do not have enough for their household needs. As one participant said, "We cannot find firewood to sell when we collect illegally from private woodlots."

Most women and girls reported collecting firewood three

times per week at the end-line versus daily at the baseline. They also reported spending an average of two to three hours collecting wood at end-line, compared to three to five hours at baseline. Most women in Shasha reported that the time spent collecting firewood had decreased since receiving and using the fuel-efficient stoves.

Men reported that the fuel-efficient stoves made a big difference in the lives of their families in terms of reducing the frequency of firewood collection trips and the time required for cooking. However, they reported that they still needed support with income-generating activities to be able to feed their families.

In Shasha, displaced women reported that they do not buy firewood and charcoal. Since receiving the fuel-efficient stove, they can manage to find enough firewood for cooking. Most women in Shasha do not supplement the cooking fuel with other items. Respondents in Shasha said that no one skips or undercooks meals due to lack of cooking fuel since receiving the fuel-efficient stoves. They said that skipping meals is due to a lack of food. Women and girls also said that they work as casual laborers on villagers' farms with men — weeding gardens, for example — to obtain money to purchase food and to pick vegetables from the farms. All women in the groups reported that they do not trade food for fuel because they do not have enough food. When asked about whether women are forced to trade favors for food, fuel, or other goods in Shasha, FGD participants reported that no one in their community had done so.

The most commonly reported stove in use in Shasha is the Envirofit fuel-efficient stove that participants received. However, most respondents also reported that it is difficult to find dry wood in the rainy season. Since the distributed fuel-efficient stove cannot use wet firewood, participants said that some women go back to using three-stone fires during the rainy season. The men's group reported that they use three-stone fires when gathering or meeting for cultural reasons.

Protection and Security

Nzulo displacement site and village

Respondents in all five FGDs in Nzulo reported theft and rape as the two things they fear the most inside the displacement site. However, during the seven months of the project, they did not experience rape inside the site. Women's most commonly mentioned fears outside the site were rape and gas hole leaks. Bee stings, snakes, and poisonous plants were also mentioned. When asked about what or who makes them feel unsafe, women and girls reported rebels, soldiers, and rangers. They also said that they feel safer inside the camp, despite some cases of theft. Women in four FGDs also said that if they had a safety concern, they would talk to the PNC, which was also the case at baseline. Women in two FGDs said they still trust the police, although single girls reported that they still do not completely trust them. MONUSCO was mentioned in all five of the FGDs as more trustworthy than other groups. The respondents in all five FGDs indicated an awareness of the IRC's psychosocial center in the site and hospital services outside of the site.

Almost all respondents reported that even though security problems still exist, they feel much safer than before because the frequency of firewood collection trips has been substantially reduced thanks to the introduction of the fuel-efficient stoves.

Shasha displacement site

Participants in all five FGDs in Shasha reported kidnapping and rape as the two things they fear the most outside the site. In the forest nearby, there are militias who attack people and sometimes kidnap them for forced labor. The respondents said that while they have not experienced those attacks themselves, they are fearful of them. Women and men in all the FGDs reported that they feel safer inside the site. Women most commonly mentioned being afraid of things outside the camp, including bee stings, snakes, and poisonous plants. When asked about what or who makes them feel unsafe, participants reported militias

and soldiers.

Women in four FGDs said that they would talk to their site leader if they had a security concern. If the case is difficult, the site leader would talk to the police posted in the village; however, the women mentioned that they do not expect support from the police. In fact, both women and men in the five focus groups reported not trusting any group external to their community, such as police or FARDC. They said that their options are generally limited to just reporting cases, because they do not have money for treatment. However, participants in all five FGDs reported that a new health center had recently been established near the site where they could be treated with lower fees.

Individual Survey Questionnaires

To match the baseline assessment, household surveys were only conducted in the Nzulo displacement site and the surrounding village, not in Shasha camp.

Household Information

The WRC and IRC research team used the same population for the baseline and end-line assessments for comparison purposes. Two hundred individual surveys were conducted in the Nzulo displacement site and 50 surveys in the village. Just over half (51%) of respondents were aged 14-35 years.

Ages of Respondents at Baseline and End-line		
Age of Respondents	Number of respondents	Percentage
14-25	63	25%
26-35	66	26%
36-45	49	20%
46- 55	23	9%
55- 65	37	15%
66 +	12	5%
Total	250	100

Livelihoods and Income

The majority (78%) of end-line survey respondents reported earning US\$1.00-\$50.00 per month compared to 88 percent who earned that much at baseline. Twenty-two percent of respondents reported earning \$51.00-\$150.00 at the end-line, compared to 10 percent who earned that much at baseline. Overall, 12 percent of the population reported that their income had increased due to the reduction of their fuel expenses. Others said that, due to the fuel-efficient stoves, they were able to sell a larger part of their collected firewood than before.

Average Income at Baseline		
US\$	Number of respondents	Percentage
None	5	2.0
1 to 50	221	88.4
51 to 150	24	9.6
Total	250	100

Average Income at End-line		
US\$	Number of respondents	Percentage
1 to 50	196	78.4
51 to 150	24	9.6
Total	250	100.0

Among those who were earning an income, the most commonly cited means to do so included casual labor (38% at end-line vs. 43% at baseline), farming (32% at end-line vs. 28% at baseline), fishing (7% at end-line vs. 4% at baseline), and as shop owners (1% at baseline); 24% had multiples sources of income, which remained the same between the baseline and end-line.

Source of Livelihoods at Baseline		
	Number of respondents	Percentage
Farming	69	69
Fishing	9	9
Shop owners	2	2
Casual labor	106	106
Multiple sources	59	59
None	5	5
Total	250	100

Source of Livelihoods at End-line		
	Number of respondents	Percentage
Farming	79	31.6
Fishing	14	5.6
Shop owners	2	0.8
Casual labor	96	38.4
Multiple sources	59	23.6
None	0	0
Total	250	100

It is possible to posit that with the reduction in firewood consumption thanks to regular use of the distributed fuel-efficient stoves, time spent collecting firewood decreased, thereby giving families — especially women and girls — more time for income-generating activities. Moreover, respondents said that given that the fuel-efficient stoves consume less firewood, they can sell a larger part of their firewood harvest.

Cooking Fuel Access and Usage

The tables below show that the use of firewood as a combustible reduced from the baseline to the end-line. At the baseline, 84.8 percent of respondents reported using firewood and 15.2 percent reported using charcoal as the main fuel source. At the end-line, these figures changed quite drastically with 60.4 percent of people using firewood and 39.6 percent using charcoal as their main fuel source.

Primary Fuel Used at Baseline		
	Number of respondents	Percentage
Firewood	212	84.8
Charcoal	38	15.2
Total	250	100

Primary Fuel Used at End-line		
	Number of respondents	Percentage
Firewood	151	60.4
Charcoal	99	39.6
Total	250	100

This information indicates that the distributed fuel-efficient stoves contributed to a reduction in firewood consumption. Given that charcoal is the preferred fuel type when IDPs are able to procure it, it is not surprising that there was an increase in its usage as the figures for firewood decreased. In the end-line survey, respondents reported being able to use much less firewood thanks to the efficiency of the distributed stoves. They also reported that they were able to collect firewood less often, but sell more of it to help generate income. The rise in reported charcoal use may be attributed to an increase in income thanks to the fuel-efficient stoves.

While the distributed fuel-efficient stoves are designed and meant for firewood fuel only, some beneficiaries found a way to use charcoal in the stoves. They reported that the stoves were using less charcoal than the other fuel-efficient stoves that they could access locally. Using charcoal in the firewood stove is harmful to the stove and will shorten its lifespan. For these reasons, among others, the practice of using charcoal or other fuel types in these stoves is highly discouraged. It is important to communicate this message effectively during the distribution and training period.

The tables below reveal that participants continued to prefer charcoal at the time of the end-line assessment. They reported that charcoal is easy to use and does not smoke, whereas firewood is only used out of habit and because it is available. A few people reported that they prefer kerosene because it is quick for cooking.

However, it is not accessible. An even smaller number of participants (2) said that they prefer electric power because it is clean. However, since Nzulo is in a rural area, there is no electricity, meaning that electric power is not available.

Preferred Type of Cooking Fuel at Baseline					
	Type of combustible				
Reason for preference	Fire-wood	Char-coal	Kero-sene	Electric power	TOTAL
Easy to use	0	178	0	0	178
Available	14	0	0	0	14
Habit	4	0	0	0	4
Does not smoke	0	46	0	0	46
Quick	0	0	6	0	6
Clean	0	0	0	2	2
TOTAL	18	224	6	2	250

Preferred Type of Cooking Fuel at End-line					
	Type of combustible				
Reason for preference	Fire-wood	Char-coal	Kero-sene	Electric power	TOTAL
Easy to use	0	182	0	0	182
Available	10	0	0	0	10
Habit	4	0	0	0	4
Does not smoke	0	46	0	0	46
Quick	0	0	6	0	6
Clean	0	0	0	2	2
TOTAL	14	228	6	2	250

Of note, only two percent of participants reported using alternatives such as farming waste, dry leaves, clothing, shoes, or plastic for cooking fuel at the time of the end-line. This is in contrast to the baseline assessment, at which 38 percent of participants reported using such materials due to a lack of sufficient firewood and charcoal. These results suggest that the introduction

of the fuel-efficient stove had a positive effect in terms of reducing the use of unconventional and unhealthy materials for cooking fuel. It is especially important that communities do not use plastics, clothes, and shoes, as the smoke produced from burning these items can be especially harmful. Moreover, communities should not have to sacrifice basic necessities like clothing and shoes due to a lack of cooking fuel.

Combining Energy Resources at Baseline			
	Do you combine energy sources?		
Energy source	YES	NO	TOTAL
Farm waste	44	0	44
Dry leaves	40	0	40
Used plastics, clothes and shoes	12	0	12
Do not combine	0	154	154
TOTAL	96	154	250

Combining Energy Resources at Baseline			
	Do you combine energy sources?		
Energy source	YES	NO	TOTAL
Farm waste	0	0	0
Dry leaves	5	0	5
Used plastics, clothes and shoes	0	0	0
Do not combine	0	245	245
TOTAL	5	245	250

Cooking Fuel Consumption

At the baseline, the vast majority (97%) of IDPs reported that they were consuming between 7 and 21 bundles of firewood per week at a cost equivalent ranging from US\$1.40 to US\$4.20. Just over half (55%) were consuming 14 bundles of firewood at a cost equivalent of US\$2.80 per day. It is evident that the introduction of the fuel-efficient stove has had an impact on the quantity of firewood consumed, as well as on the money spent on cooking fuel. Respondents said that the fuel-efficient stoves that they received were saving them money.

Average Number of Bundles Consumed at End-line					
Average number of bundles consumed	Unit price	Total price	Number of respondents	Total number of bundles	%
3	200CF/ \$0.2	600CF/ \$0.6	151	453	31.6
6	200CF/ \$0.2	1,200CF/ \$1.2	20	120	8
12	200CF/ \$0.2	2,400CF/ \$2.4	79	948	60.4
TOTAL			250	1521	100

Average Number of Bundles Consumed at Baseline					
Average number of bundles consumed	Unit price	Total price	Number of respondents	Total number of bundles	%
6	200CF/ \$0.2	1,200CF/ \$1.2	4	24	1.6
7	200CF/ \$0.2	1,400CF/ \$1.4	49	343	19.6
9	200CF/ \$0.2	1,800CF/ \$1.8	1	9	0.4
14	200CF/ \$0.2	2,800CF/ \$2.8	138	1,932	55.2
16	200CF/ \$0.2	3,200CF/ \$3.2	1	16	0.4
17	200CF/ \$0.2	3,400CF/ \$3.4	1	17	0.4
21	200CF/ \$0.2	4,200CF/ \$4.2	52	1092	20.8
24	200CF/ \$0.2	4,800CF/ \$4.8	1	24	0.4
28	200CF/ \$0.2	5,600CF/ \$5.6	1	28	0.4
35	200CF/ \$0.2	7,000CF/ \$7	2	70	0.8
TOTAL			250	3,555	100

Collecting Firewood

In both the baseline and end-line, the main collectors of combustible materials are reported to be women, but men, girls, and boys collect to some extent as well.

Collectors of Combustible Materials at Baseline and End-line		
	Number of respondents	Percentage
Women	172	68.8
Men	24	9.6
Girl children	19	7.6
Boy children	3	1.6
Others	32	12.8
Total	250	100

The two tables below reveal that most firewood collectors do their collecting at noon or in the early morning. This behavior has remained mostly unchanged from the baseline to the end-line and suggests that daylight is a priority for collectors. The baseline and end-line figures also reveal that the frequency of firewood collection per week went down drastically from the baseline to the end-line. More specifically, the number of people collecting firewood every day decreased from 117 to 39, a remarkable difference that may be attributed to the distribution and regular use of the fuel-efficient stoves.

Frequency of Firewood Collection at Baseline					
	Departure time for collection				
Frequency	Early morning	At noon	After-noon	Evening	TOTAL
1 to 3 times per week	18	37	8	0	63
4 to 5 times per week	16	47	2	1	66
Every day	47	49	20	1	117
TOTAL	81	133	30	2	246

Frequency of Firewood Collection at End-line					
	Departure time for collection				
Frequency	Early morning	At noon	After-noon	Evening	TOTAL
1 to 3 times per week	48	74	17	0	139
4 to 5 times per week	25	40	2	1	68
Every day	15	12	11	1	39
TOTAL	88	126	30	2	246

At the time of the baseline, the majority of the respondents reported spending seven or more hours per firewood collection trip, whereas at the end-line, nearly 95 percent of all respondents reported spending six hours or less on firewood collection. On average, participants reportedly spent approximately six hours per fire-

wood collection trip at the time of end-line, as compared to four hours per trip at the end-line. The reduction in average number of hours per trip spent collecting firewood strongly suggests that the introduction and regular use of the fuel-efficient stoves had an impact on the need for firewood collection.

Time Spent Per Trip Collecting Firewood at Baseline		
Hours per trip	Number of respondents	Percentage
3	14	5.6
4	31	12.4
5	39	15.6
6	45	18.0
7	19	7.6
8	48	19.2
9	23	9.2
10	7	2.8
12	2	0.8
No fixed time	22	8.8
Total	250	100

Time Spent Per Day Collecting Firewood at End-line		
Hours per trip	Number of respondents	Percentage
3	106	42.4
4	54	21.6
5	47	18.8
6	30	12
No fixed time	13	5.2
Total	250	100

The overwhelming majority (91%) of respondents reported a preference for charcoal over other fuel types including firewood, kerosene, or electricity for the following reasons: charcoal is easy to use (79%), and it does not create smoke (21%). Far fewer (7%) reported a preference for firewood over charcoal, kerosene, or electric power, but those who did cited availability and familiarity as the two primary reasons why.

Purchasing Firewood

Among respondents who purchased firewood, 27 percent reported doing so 30 minutes or more away from their homes in the end-line, as compared to 57 percent at baseline. In the end-line, 37 percent said the distance was less than 30 minutes, which was an increase of approximately 10 percent. Thirty-five percent of respondents reported that they do not buy firewood versus 16 percent in the baseline. These results suggest that the introduction of the fuel-efficient stove reduced the need to purchase firewood. However, it is important to note that researchers observed that firewood and charcoal were still being sold in the camp at the time of the end-line.

Average Time Traveled Per Trip to Purchase Firewood at Baseline		
Time per trip	Number of respondents	Percentage
30 minutes	143	57.2
1 hour	2	0.8
Less than 30 minutes	65	26.0
Do not buy	36	16.0
TOTAL	250	100.0

Average Time Traveled Per Trip to Purchase Firewood at End-line		
Time per trip	Number of respondents	Percentage
30 minutes	68	27.2
1 hour	2	0.8
Less than 30 minutes	92	36.8
Do not buy	88	35.2
TOTAL	250	100.0

Stove Information

At the time of the end-line, the distributed fuel-efficient stove was the most commonly used stove by respondents in the Nzulo displacement site (60%), and the

proportion of respondents using the three-stone fire decreased from 87.2 percent at the baseline to 31.6 percent at the end-line.

At the end-line, 32 percent of respondents reported using a three-stone fire because their Envirofit fuel-efficient stove had either been sold or stolen. A small percentage reported using a metallic stove (6%) or clay stove (2%). Note that the metallic and clay stoves are locally made and sold in the market, but it is difficult for community members to purchase them due to a lack of financial means. Moreover, the metallic and clay stoves were designed for charcoal and not firewood, the primary fuel used by IDPs.

In FGDs, women and men alike reported that those who had sold their stoves were remorseful, but had done so in order to buy food and other vital necessities. It was clear that the inhabitants of the Nzulo displacement site were desperate for food and water, and so it was not surprising that some had to resort to selling their most valuable possession — the fuel-efficient stove — out of desperation.

Type of Stove Used at Baseline		
	Number of respondents	Percentage
Three-stone fire	218	87.2
Charcoal metallic stove	28	11.2
Clay stove	4	1.6
TOTAL	250	100.0

Type of Stove Used at End-line		
	Number of respondents	Percentage
Three-stone fire	79	31.6
Charcoal metallic stove	16	6.4
Clay stove	4	1.6
Distributed fuel-efficient stove	151	60.4
TOTAL	250	100.0



Three-stone fire (© Nadia Tabaro/WRC)



Fuel-efficient stove distributed in Nzulo and Shasha (© Nadia Tabaro/WRC)

Protection and Security

During both the baseline and end-line assessments, an overwhelming majority of respondents — 92 percent and 82 percent respectively — reported that there are risks associated with firewood collection. These figures indicate that communities need support to first protect them during firewood collection and then ultimately help shift them away from the need for unsafe and unsustainable resources, including firewood.

Respondents said that despite the cessation of conflict between the FARDC and the M23, security threats in relation to firewood collection remained almost the same. The presence of armed groups in the forest remained a threat to the security of people. Furthermore, nearly 35 percent and 40 percent of respondents at the time of the baseline and end-line, respectively, reported that they risk rape during firewood collection; indeed, it is the top risk.

Risks Associated with Firewood Collection at Baseline			
Do you perceive risks associated with collection? Which risks?			
Risks	YES	NO	TOTAL
Rape	86	0	86
Attack	71	0	71
Gas holes	55	0	55
Insects & animals	16	0	16
Kidnap	1	0	1
Murder	1	0	1
Perceived risks	0	20	20
TOTAL	230	20	250

Risks Associated with Firewood Collection at End-line			
Do you perceive risks associated with collection? Which risks?			
Risks	YES	NO	TOTAL
Rape	97	0	97
Attack	60	0	60
Gas holes	59	0	59
Insects & animals	15	0	15
Kidnap	1	0	1
Murder	1	0	1
Perceived risks	0	17	17
TOTAL	233	17	250

Perception of Capacity of Authorities to Manage Firewood Collection Problems at Baseline		
	Frequency	Percentage
Never	126	50.4
Rarely	28	11.2
Sometimes	56	22.4
Often	11	4.4
Always	1	.4
Do not know	28	11.2
TOTAL	250	100.0

Perception of Capacity of Authorities to Manage Firewood Collection Problems at Baseline		
	Frequency	Percentage
Never	194	77.6
Rarely	28	11.2
Sometimes	0	0
Often	0	0
Always	0	0
Do not know	28	11.2
TOTAL	250	100.0

At the baseline, more than half of participants said that authorities, such as the police, governmental representatives, and park managers, never have enough capacity to manage problems related to fuel collection. This number rose to 78 percent at the end-line. Overall, communities clearly communicated to WRC and IRC that they do not trust and cannot rely on authorities. Furthermore, they were especially disappointed that the governmental authorities imposed a total ban on firewood collection in Virunga National Park and then did not offer any alternatives for displaced people to obtain firewood. Due a lack of alternatives, women and girls try to more subversively collect firewood in the park, such as moving in smaller groups, which may actually make them more vulnerable to sexual and physical violence and theft.

When incidents do occur, it is clear that these displaced communities are not accessing adequate healthcare and support for a number of reasons. Fear of stigma and negative repercussions, lack of confidence in or knowledge about the existing health centers, and distrust of authorities are all key factors preventing survivors and their families from getting the support they need. In terms of why and to whom interviewees report incidents of violence, the results remained the same from the baseline to the end-line survey. As reflected in the table on p. 17 (“Reporting Incidents of Violence”), only about 39 percent of respondents said that they go to the health center when someone is attacked, while a meager 6.4 percent said that they report incidents to others, such as police. Nearly a fifth of respondents said that they do not report the incidents in order to avoid stigma.

When asked to provide recommendations for improving security, participants most commonly cited fuel distributions as a top priority. Having armed escorts during fuel collection was cited as the second most important recommendation at baseline, while allowing access to the park took the second place spot at end-line due to the restrictions on park access. The fact that communities are willing to risk the dangers associated with collecting firewood in the park further demonstrates how essential firewood is for their survival. Last, but not least, communities also recommended income-generating activities and collecting in groups as ways to improve security. (See “Recommendations” tables p. 17.)

Reporting Incidents of Violence at Baseline and End-line						
	To whom do you report the incident if someone is attacked?					
Why	Head of Household	Health center	NGOs	Do not report	Others	TOTAL
Resource for advice and more information	30	-	-	-	24	54
Access health care and prevent disease	-	98	-	-	-	98
Identify perpetrators	-	-	-	-	16	16
Avoid stigma	-	-	-	48	-	48
Material and psychological support	-	-	34	-	--	34
TOTAL	30	98	34	48	40	250

Recommendations to Improve Security Relating to Fuel Collection at Baseline		
Recommendations	Frequency	Percentage
Distribute fuel	81	32.4
Income-generating activities	25	10.0
Improve the country security	15	6.0
Collect in a group	31	12.4
Distribute fuel-efficient stoves	19	7.6
Escort during collection	67	26.8
Allow park access	6	2.4
Do not know	6	2.4
TOTAL	250	100.0

Recommendations to Improve Security Relating to Fuel Collection at End-line		
Recommendations	Frequency	Percentage
Distribute fuel	81	32.4
Income-generating activities	25	10.0
Improve the country security	15	6.0
Collect in a group	21	8.4
Distribute fuel-efficient stoves	0	0
Escort during collection	30	12
Allow park access	72	28.8
Do not know	6	2.4
TOTAL	250	100.0

NB: Given that participants received fuel-efficient stoves between the baseline and end-line, it is logical that they would not cite fuel-efficient stove distributions as a recommendation for improving security relating to fuel collection at the time of the end-line.

Fuel Resource Management

At the time of the end-line assessment, the demand for combustibles highly exceeded the environmental capacity. Environmental resources were very scarce at the time of the baseline and continued to be scarce at the time of the end-line due to the high demand and lack of reforestation efforts.

Unfortunately, no sustainable reforestation project has been initiated in the Nzulo displacement site. Respondents reported that the government has restricted firewood collection in the park, but they had no choice but to enter anyway. If they are caught by park guards, they could be beaten or have their tools taken away. If caught by the police, they might have to pay a fine that they cannot afford.

Fifty-two percent of interviewees suggested reforestation to improve cooking fuel sources. Other recommendations were to improve income-generating activities (18%), security in the country (14%), alternative energy (9%), and tree management in the park (2%). Three percent did not know how to improve cooking fuel sources. The recommendations provided to improve the cooking fuel sources did not change from the baseline.

As in the baseline, the end-line assessment asked interviewees about their preferred tree species and the rationale for their choice (availability, combustibility, speed of growth, and potential for good quality charcoal). The result remained the same at end-line assessment. A tree referred to as *munzenze* was named most often as the preferred species (34%) due to its availability, combustibility, and quick growth. The second most preferred tree was the *mishebere* tree. The table (below left) provides a breakdown of respondent preferences by tree species. Preferences did not change from the baseline to end-line.

At both the baseline and end-line, more than half of the participants cited reforestation as their top recommendation for addressing the need for sustainable fuel resources. The second most commonly cited recommendation was to support income-generating activities (see table next page).

Tree Preferences at Baseline and End-line					
	Reason for preference				
Tree species	Avail-ability	Combus-tibility	Fast-growing	Makes good quality charcoal	TOTAL
Munzenze	48	20	18	-	86
Misengesi	6	-	3	-	9
Mishikiri	12	3	1	-	16
Misasa	8	-	-	-	8
Mishebere	27	11	9	13	60
Greverie	9	4	-	2	15
Acasia	10	-	8	-	18
Eucalyptus	15	10	6	7	36
TOTAL	135	48	45	22	250

Recommendations to Improve Sustainable Cooking Fuel Resources at Baseline and End-line		
Recommendations	Frequency	Percentage
Reforestation	130	52
Security in the country	35	14
Alternative energy	23	9.2
Government implication	2	0.8
Forest management in the park	6	2.4
Income-generating activity	45	18
Do not know	9	3.6
TOTAL	250	100

Conclusion

The findings from this end-line study suggest that with the introduction of the fuel-efficient stoves, the exposure to risk of violence faced by IDPs decreased, as seen by the reduction in frequency of firewood collection trips and time spent on firewood collection. In particular, only 16 percent of participants reported collecting firewood every day at the time of the end-line, as compared to 47 percent at the baseline. Furthermore, approximately 74 percent of participants reported collecting firewood four to seven times per week at the baseline, while approximately 84 percent reported collecting firewood one to five times per week at the end-line.

On average, participants reportedly spent approximately six hours per firewood collection trip at the time of end-line, as compared to four hours per trip at the end-line, further suggesting that the fuel-efficient stoves had a positive effect in terms of exposure to risk of violence.

Furthermore, IDPs reported that they were spending less money on buying firewood after receiving the fuel-

efficient stoves (US\$1.2-\$7 at baseline to US\$0.6-\$2.4 at end-line) and were earning more money overall. It is possible to deduce that not only did the fuel-efficient stoves help families to save money by reducing household fuel consumption, but they also helped to free up time for other productive, income-generating activities — hence, the reports that families were earning more money overall at the time of the end-line.

Even though some of the distributed fuel-efficient stoves had been sold or stolen, respondents still reported that the distributed stoves were the most commonly used cooking devices in the two sites at the time of the end-line. In focus group discussions in both Nzulo and Shasha, participants reported that they were very happy with the stoves because they reduce fuel consumption, firewood collection trips, and smoke. Participants also stated that the new stoves are much safer than the other local and traditional options — no burns or fires were reported to have occurred since communities received the fuel-efficient stoves.

The fact that some beneficiaries in Nzulo were still using three-stone fires was largely attributable to the fact that families were desperate for food and water. Some beneficiaries had to sell or exchange their stove for more immediate needs (primarily food, water, and medicine); however, focus group discussions revealed that people were remorseful for selling their stoves, but had no choice. This information strongly confirms the need for more support in livelihoods activities for IDPs. Moreover, it also provides an important lesson: affected populations must, first and foremost, have food and water. A stove is of no use without food and water to be cooked and boiled. It was clear that the community living in the Nzulo displacement site is living in extreme hardship conditions and is in desperate need of humanitarian assistance.

Lack of adequate food remains the main concern in the two sites. Additionally, cooking fuel is still not provided and women remain the main fuel collectors, meaning that women are most exposed to risks related to fuel collection, such as attacks, rape, and methane gas holes, among others. Women in FGDs reported selling 60-80 percent of the firewood they collect at end-line as compared to

50-70 percent at baseline, showing that despite the reduction of fuel used in the household, the demand for income-generating activities means that women will and do continue to collect firewood to sell.

It is clear that the introduction of fuel-efficient stoves is a step forward in improving the situation, but they are certainly not enough. More integrated actions need to be taken to meet household energy needs with safe and sustainable solutions.

Recognizing the cross-cutting nature of energy, the Safe Access to Fuel and Energy (SAFE) initiative promotes a comprehensive approach to addressing energy needs and challenges in humanitarian settings. This approach promotes a combination of appropriate technology and fuel interventions, along with livelihoods and environmental activities to help ensure that communities are able to access and use energy resources in a safe and sustainable way.

Recommendations

Implement livelihood activities for IDPs

IDPs living in the Nzulo and Shasha displacement sites are in desperate need of income-generating activities to be able to meet their most basic needs, including food, water, medicine, and shelter. Without support from the humanitarian community, the IDPs in these locations are struggling to survive. Giving them the opportunity to generate income will not only improve their health and well-being through improved access to basic needs, but will also contribute to improved dignity and self-reliance. Further still, providing displaced communities with knowledge and skills-based training will also give them a better chance of supporting themselves should they be forced to move again.

Where possible and appropriate, livelihood activities should involve developing, producing, and maintaining cooking fuel resources (e.g. fuel-efficient stoves and alternative fuels), as well as environmental activities (e.g. selling of tree seedlings and fruit from trees) to ensure that communities are able to meet their household energy needs in a safe and sustainable way.

Promote reforestation and the creation of woodlots for IDPs

IDPs in North Kivu struggle to access cooking fuel for their household energy needs and face tremendous risks while collecting firewood in dangerous and forbidden areas. They urgently need other options, particularly now that firewood collection is strictly prohibited in Virunga National Park. The promotion of woodlots (sustainably managed firewood/timber harvesting areas, typically planted with fast-growing trees) can help to increase the supply of firewood and timber available to displaced and host populations, reverse the trend of deforestation, and reduce tensions between communities. It will also help to support the development of environmental management skills among the population and facilitate employment and income-generating opportunities. Additional research should be undertaken to confirm the most appropriate species of trees for the location. Further to this point, it is recommended that diverse species are incorporated into the tree-planting activities — for example, fruit trees can improve nutrition by providing much-needed nutrients to communities and serve to generate income.

Research sustainable stove and fuel options for IDPs

While the distributed Envirofit fuel-efficient stoves were well received by the beneficiaries, even the most successfully maintained stove cannot last forever. For this reason, communities must have access to more sustainable options. Furthermore, even within the same community, there are numerous criteria that can create different needs and preferences for different technologies. For example, a larger family size may mean that a larger pot and larger stove top are needed or that a second and third stove are needed. Some community members may be more willing, likely, or able to maintain and repair mud or clay stoves. Some may prefer to cook indoors, while others prefer to cook outdoors.

Moreover, access to woodfuel is a major challenge in eastern DRC due to insecurity, legal restrictions, and increasing deforestation from overexploitation of natural resources. In order to protect both people and

the environment, it is essential to explore alternatives to woodfuel, such as briquettes, ethanol, solar energy, kerosene, LPG, biogas, and biodiesel. The nature and use of each fuel type is different and must be considered when designing fuel interventions and promoting a fuel shift.

Strengthen inter-agency initiatives and stakeholder awareness through the North Kivu SAFE Working Group

The newly formed SAFE Working Group in Goma North Kivu is best positioned to ensure interagency collaboration and effective implementation of multi-sectoral SAFE programs. Given the cross-cutting nature of SAFE, it is especially important that humanitarian staff collaborate and coordinate across sectors (including protection, food security, livelihoods, environment, health, shelter, and camp management) on SAFE activities and strategies.

There is an incredible need for safe and sustainable energy access for IDP populations in DRC, particularly in the eastern part of the country. Recognizing the implications in terms of protection, food security, health, livelihoods, and the environment, the SAFE Working Group should ramp up its advocacy with donors, other humanitarians, the government, and other relevant stakeholders to ensure that this issue is no longer overlooked. Moreover, many humanitarian organizations in DRC remain stretched in terms of funding and capacity — the SAFE Working Group can play a critical role for joint fundraising and strategy development to ensure effective programming for those most in need.

Notes

1. CIA Fact Book: https://www.cia.gov/library/publications/the-world-factbook/geos/countrytemplate_cg.html
2. <http://hdr.undp.org/en/countries/profiles/COD>
3. Democratic Republic of Congo: Internal displacement in brief (31 December 2013). www.internal-displacement.org/sub-saharan-africa/democratic-republic-of-the-congo/summary/
4. UN OCHA. <http://reliefweb.int/report/democratic-republic-congo/democratic-republic-congo-internally-displaced-people-and-returnees>
5. For example, *We Have No Choice: Safe Access to Firewood and alternative Energy in Eastern Democratic Republic of Congo, An Appraisal Report*. Women's Refugee Commission, 2011.
6. The baseline assessments in Nzulo and Shasha were conducted in April 2013 and September 2013, respectively.
7. WRC and IRC selected the Envirofit M-5000 wood burning stove for its efficiency, cost, ease and speed of procurement, and high user uptake in similar settings. More information on the stove model can be found on the Envirofit website: <http://www.envirofit.org/products/?sub=cookstoves&pid=4>

Annex I. Focus Group Discussion Results

	Group 1		Group 2		Group 3		Group 4		Group 5	
	Nzulo	Shasha	Nzulo	Shasha	Nzulo	Shasha	Nzulo	Shasha	Nzulo	Shasha
Category of individuals	Married Women	Married Women (20-50)	Girls	Young Women/ Adolescent Girls (14-26)	Older women (50 years +)	Older women (50 years +)	Single parents	Married men (20-50)	Men and Boys	Young men/ Adolescent boys (14-26)
Number of individuals	13	8	13	8	13	8	10	8	10	8
What is your staple food?	Small fish called "Sambaza," cassava leaves, and beans	Foufou, vegetables, beans, and potatoes	Small fish called "Sambaza," cassava leaves, and beans	Foufou, vegetables, potatoes, and beans	Small fish called "Sambaza," cassava leaves, and beans	Foufou, vegetables, and beans	Small fish called "Sambaza," cassava leaves, and beans	Foufou, vegetables, and beans	Small fish called "Sambaza," cassava leaves, and beans	Foufou, vegetables, potatoes, and beans
How many meals do you cook per day? How many meals were you cooking before displacement? How many meals would you like to cook?	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.	1 meal per day. Before displacement, 3 meals. We would like to cook 3 meals.
Where do you cook? (Indoors, outdoors, both?) Where do you prefer cooking and why?	We cook outdoors. We would prefer indoors because it is secure from dust.	We cook outdoors and indoors. We prefer indoors because it is secure from rain.	We cook outdoors. We prefer indoors because it is secure from dust.	We cook outdoors and indoors. We prefer indoors because it is secure from rain.	We cook outdoors. We prefer indoors because it is secure from dust.	We cook outdoors and indoors. We prefer indoors because it is secure from rain.	We cook outdoors. We prefer indoors because it is secure from dust.	We cook outdoors and indoors. We prefer indoors because it is secure from rain.	We cook outdoors. We prefer indoors because it is secure from dust.	We cook outdoors and indoors. We prefer indoors because it is secure from rain.
How do you prepare the food before you cook it? Are there ways that you prepare food for easy cooking?	We wash food and boil beans.	We wash food before cooking.	We wash food and boil beans.	We wash food before cooking.	We wash food and boil beans.	We wash food before cooking.	We wash food before cooking and boil beans.	We think our wives wash food before cooking.	We wash food before cooking (it is our mothers and sisters who cook.	Women wash food before cooking.
For what other purposes, if any, do you use fire-wood of fuel?	Lighting and heating.	Lighting and heating.	Lighting and heating.	Lighting and heating.	Lighting and heating.	Lighting and heating.	Lighting and heating. We also use firewood to gather around when meeting.	Lighting, heating and meeting around the fire, such as for the camp committee meetings.	Meeting with friends around the fire. Lighting and heating.	Lighting, heating, roasting potatoes or maize, and meeting with friends.



**WOMEN'S
REFUGEE
COMMISSION**

